Philosophie der Informationsgesellschaft

Philosophy of the Information Society

Herbert Hrachovec
Alois Pichler
Joseph Wang
Hrsg.

Beiträge
Papers

30. Internationales Wittgenstein Symposium
30th International Wittgenstein Symposium

Kirchberg am Wechsel
5. - 11. August 2007

30

Philosophie der Informationsgesellschaft
Philosophy of the Information Society

Beiträge der Österreichischen Ludwig Wittgenstein Gesellschaft

Contributions of the Austrian Ludwig Wittgenstein Society

Philosophie der Informationsgesellschaft

Beiträge des 30. Internationalen
Wittgenstein Symposiums

5. – 11. August 2007
Kirchberg am Wechsel

Band XV

Herausgeber

Herbert Hrachovec
Alois Pichler
Joseph Wang

Philosophy of the Information Society

Papers of the 30th International
Wittgenstein Symposium

August 5 – 11, 2007
Kirchberg am Wechsel

Inhalt / Contents

The Semantic Web in a philosophical perspective

Terje Aaberge, Sogndal, Norway

The semantic web is a proposal to make a more efficient web. By endowing the computer 'language' with a semantic structure defined by ontologies extracted from natural language, one hopes to facilitate the communication between human operators and computers and between computers. An ontology is a set of definitions that relate the terms and predicates of the vocabulary of the description language for a domain. It imposes a semantic structure that fix the meaning of terms and predicates that are polysemic in natural language and it serves as a basis for making inferences. Abstracted from the domain it limits the possible interpretations of the vocabulary. The extraction of ontologies from the semantic of a description language leans on Wittgenstein's metaphysics and picture theory from *Tractatus*, and language games from *Investigations*.

1. Introduction

A metaphor for the world wide web is that of a market place where each of the providers is represented by a web site by means of which he communicates with his customers. The web sites are linked or appear in the same result lists of queries in search engines, such that sites with similar offers are loosely grouped together. The most direct access to the different offers is given by the search engines that partially map the marketplace.

A customer looking for a particular item has to find the possible providers and then retrieve the item. Both of these tasks involves communication and might be arduous due to the lack of a common language shared by the providers, the computers and the customers. First of all, the maps established by the search engines give an incomplete account of the offers. Each offer is described by an index card that is established by agents on the basis of a purely syntactic analysis. In general, the relevance of results of a query that follows from looking through the index cards is thus lacking. Secondly, even if the customer finds a provider he might have difficulties of getting into agreement because the communication mediated by the computer is incomplete or unclear.

The semantic web is proposed as a solution to the problem of communication by defining computer 'languages' that may serve as interfaces between the human operators and the computers and between the computers (Daconta et al. 2003). It is not expected that it will be possible to create a unique language that will cover the content of the whole web, but that communities will create computer 'languages' for their domains of interest. To be understandable by the human operators they must be based on the informal description language that the community possesses and uses to describe the objects of the domain.

The means to do this is to extract the semantic of the informal description languages as ontologies. Ontologies endow computer 'languages' with semantic structures. Supplemented with logical rules they provide the computers with the ability to make inferences. A computer does not perceive the systems of a domain. It therefore has no semantic. However, the human operators can apply the semantic of the informal description language and thus conduct a meaningful communication with the computers possessing a 'language' based on the ontologies extracted from the informal description language of the community. Moreover, the index cards produced by the agents employing the same formal 'language' will contain real information about the items associated with the domain. This information can be exploited by the search engine that will return more relevant answers to queries.

This paper presents an effort to put the semantic web into a philosophical setting and to show the relevance of some of Wittgenstein's ideas on language for its justification and the task of extracting ontologies from the semantic of the description language. First however, I will introduce some notions, define the framework and exemplify the tasks.

2. Description Languages and Theories

The notions considered in this paragraph are those of formal description language, theory, ontology, model, metamodel and computer 'language'.

The necessity to apply first order predicate logic as the syntax for the formal description language for a domain makes it appear as the juxtaposition of two languages an object language and a property language. Their vocabularies consist of the logical constants and three kinds of words, the names, variables and predicates, each kind having a particular syntactic role. A name refers to a unique object, a predicate to a property (predicate of the first kind) or a category of objects (predicate of the second kind) or a relation between objects. A variable refers to any of the objects in a category. As exemplified by the sentences "the water in bottle 3 is 5°C" and "5°C is a temperature", a predicate of the first kind in the object language is a name in the property language. The object language serves to describe the systems of the domain and the property language serves to describe the properties of the systems. This separation of the description language in two juxtaposed languages makes it possible to quantify over the properties also, not only the systems.

A theory is a formal description language endowed with ontologies defining semantic structures for the object and property languages. The ontologies are sets of implicit definitions of the predicates needed to describe the systems of the domain and their properties. They provide a formal representation of the semantic. However, they do not define a full semantic but limit the scope of possible interpretations.

A model of a system is a representation of the system in the property language. The model depicts the system such that literate interpreters knowing the system recognise its referent. A metamodel, on the other hand, is a set of rules of interpretation expressed in the metalanguage; these rules must be known to understand the ontology and the model. From the model we can extract a description of the system modeled. The degree of correspondence between the empirical description in the object language and the theoretical description in the property language determines the correctness of the model.

The different languages referred to above and the theory is languages in the sense that they possess a se-

mantic inherited from the informal description language. Abstracting the theory from the domain however produces a formal system that serves as a computer 'language'. It has no complete semantics but possesses a semantic structure defined by the ontologies.

3. Ontologies for the Object Languages

A domain consists of a set of (physical) systems that possess properties and relations. A system is uniquely identified and described by the properties it possesses. This is done by means of the atomic sentences that attach properties to the system, i.e. they are concatenations of the name of the system and the predicates that refer to the properties of the system. The basis for such a description is logical atomism. Each atomic sentence stands for an atomic fact. The conjunction of atomic sentences that applies to a system provides a *picture* of the system and serves to distinguish it from other systems.

Some properties are mutually exclusive in the sense that they cannot be possessed by a system at the same time; for example, a system cannot at the same time be red and green. This relation of exclusiveness of properties serves to categorise the predicates of the first kind. Each such category is then the range of a map from the set of systems of the domain to the predicates of the first kind. The map, called an observable, relates properties of the category to the system. Colour is thus an observable. Other examples of observables are form, temperature, position in space, mass, velocity etc.

It is necessary to distinguish between two kinds of observables. This is a result of the problem encountered when one wants to describe change and it is illustrated by the following statement:

> change does not exist, because if something *changes* than it is no longer the *same* and we cannot say that anything has changed.

This semantic problem was a central theme in Greek philosophy. One of their solutions, which have become a basis for physics, is to distinguish between two kinds of properties, properties that do not change in time and thus serves to identify the system and properties that change. The latter are called state properties. The properties of the systems are thus categorised as identification and state properties and the corresponding observables as identification and state observables respectively. The state properties form a space called the state space of the systems.

The systems can be classified with respect to the identification observables. One starts with one of the observables and uses its values to distinguish between the systems and construct classes, one for each value. The procedure can be continued until the set of observables is exhausted. The result is a hierarchy of classes with respect to the set inclusion relation.

The classes are referred to by predicates of the second kind which thus are ordered naturally in a taxonomy that constitute a linguistic representation of the classification. The taxonomy together with the definitions of the classes is an ontology for the object language. The class definitions impose a semantic structure that mirrors the class inclusion relations and create semantic relations between the predicates.

In the object language the meaning of a name is the object it refer to, the meaning of a predicate is given either by an operational definition or the extension.

4. Ontologies for the Property Languages

The construction of an ontology for the property language can be illustrated by the development of Euclidean geometry. The domain is here the set of two-dimensional systems. The only interesting property of a system is its form. We assume that the observed forms are described by figures that can be constructed by ruler and compass and traced on a piece of paper by a pencil. These are the points, lines, and the figures that enclose a finite area, i.e. the circles, triangles and higher order polygons. Each of the corresponding categories are represented by a predicate (of the first kind), Point, Line etc. The corresponding property is denoted by the names point, line etc. (in the property language). They are associated with (operational) definitions leading to their construction by compass and ruler.

These categories can again be divided. Thus, the category Circle may be divided into categories of circles with given radius, the category of Triangle may be divided into categories of equilateral triangles and non-equilateral triangles etc. Each of the subdivisions introduces new predicates that are accompanied by a definition that serves to distinguish between the systems that are elements of the category and those that are not.

By studying the figures and the way they are constructed we may discover relations between them that can be expressed as sentences. These sentences are then 'categorised' as definitions and theorems; all the theorems can be proved from the definitions. The separation is partly based on convenience and tradition; the proofs should be as simple and direct as possible. The set of definitions constitute an ontology for the domain of plane geometry. *Abstracted* from the domain they define a semantic structure that limits the scope of possible interpretations.

An interpretation is determined by the relation of some of the names and predicates of the ontology to external 'objects'. The other terms and predicates are then given meaning by the definitions. Terms and predicates whose interpretation is a sufficient basis for the semantic of a theory are said to be primary. All the other terms and predicates are defined in terms of the primary terms and predicates by means of the definitions. The definitions that only contain primary terms and predicates are called axioms (Blanché 1999).

The axiom system constitutes a foundation for a mathematical theory. From this foundation the whole structure can be constructed. However, to do so we need to introduce additional concepts. Thus, considering for example the Euclid axiom system,

> any two points lie on a straight line;

> two lines meet in at most one point;

> any finite line element can be produced as far as you wish;

> it is possible describe a circle with any centre and any radius;

> all right angles are equal;

> given any line, and any point not on the line, then there exists *exactly one* line parallel to the first line passing through the given point;

we see that there is no mention of the concept of triangle. This secondary concept must be introduced by a separate and thus secondary definition. The introduction of new

concepts is not automatic but the result of conscious choices.

The construction of ontologies for more complicated domains is based on this kind of analysis. The vocabulary established through such a construction is taken from natural language and the interpretation thus obtained will be the intended interpretation of the theory. The ontology will then fix the meaning of the words that in a natural language context are polysemic.

5. Method

The semantic of natural language represent the mental pictures humans possess of the external reality. To establish human understandable ontologies for a domain these pictures must be specified. There are several complementary methods to do this. The most important methods are dialogs, group tests, user tests and thought experiments (Speel et al.). They are all examples of ways of analysing language games.

It is the linguistic representations of the mental pictures that are investigated by these methods. The task of the analyst is to design language games that will uncover discrepancies with the mental pictures by means of dialogs, group tests and user tests which help us to *see* how words are used and thus apprehend their meaning from the context created. The thought experiments test the semantic coherency between the empirical descriptions in the object language and the theoretical descriptions in the property language. Prominent examples are the Zeno paradoxes.

6. Relevance of Wittgenstein's Ideas

Consider the case of a community possessing an informal language for the description of a (restricted) domain of interest. It serves as a medium for the recording of information about elements of the domain and as a vehicle for the communication of this information.

In *Investigations* Wittgenstein considers the application of a language as a set of games. As any game, each of them is associated with a set of rules that can be divided into syntactic and logical rules, and rules of application of words. His idea is that the meaning of words follows from their use in language games. To apply words correctly, the speaker must thus master the rules.

To be admitted to the community any potential member must learn the language, i.e. he must learn the rules of the language games. For a computer to be admitted as a member it must be endowed with the corresponding formal system (computer 'language'). This must be based on syntactic and logical rules that are a subset of those of first order predicate logic. Assuming this to be the case the problem left is to endow the computer with a semantic structure satisfying the rules of application of the words. This problem is "solved, not by giving new information but by arranging what we have always known" (PI, 109). One has to look at how words are used to determine their relative meaning in order to establish the definitions that constitute the ontology which thus represents the semantic structure of the informal description language. However, meaning is not given by definitions alone. It must be *grounded*. Such grounding is the reference to external objects provided by Wittgenstein's logical atomism and picture theory from *Tractatus*: a sentence is *true* if it pictures an existing state of affairs. It provides the ontology of the object language with a semantic (by correspondence).

The complete semantic of the description language is given by the relation between the object language and the property language. By this construction the semantic of the theory mirrors that of the informal language. It provides the semantic human operators apply in their communication with the computers.

7. Concluding remark

Humans use natural language to describe record and communicate. And we mostly manage to overcome the problems due to imprecise syntax and semantic by our knowledge of the possible meanings of the terms and the contexts in which they are used. The construction of a theory for a domain introduces ontologies that fix the meaning of the polysemic terms of natural language and make possible precise statements and inferences. Abstracted from the domain a theory becomes a formal system with a semantic structure defined by the ontologies.

A formal system can serve as a computer 'language' by means of which human operators communicate with a computer. A computer does not perceive the systems of a domain. It thus has no semantic. However, the human operators can apply the semantic of the theory and conduct a meaningful communication with the computer. Moreover, computers possessing the same ontologies can communicate among each others in a way that is meaningful for the operators.

Literature

Blanché, Robert 1999: L'axiomatique. Paris: Presses Universitaires de France.

Daconta, Michael C., Obrst, Leo J. and Smith, Kevin B. 2003: The Semantic Web: A Guide to the Future of XML, Web Services and Knowledge Management, Boston: Wiley Publishing Company.

Speel, P-H, Schreiber, A. Th., van Joolingen, W., van Heijst, G., Beijer, GJ.: Conceptual Modelling for Knowledge-Based Systems, http://www.cs.vu.nl/~guus/papers/Speel01a.pdf.

Wittgenstein, Ludwig 1961: Tractatus logico-philosophicus. London: Routledge and Kegan Paul.

Wittgenstein, Ludwig 1968: Philosophical Investigations. Oxford: Basil Blackwell.

Email: terje.aaberge@vestforsk.no

The balloon effect.
Eight problems related to philosophy tyrannized by information

Krzysztof Abriszewski, Torun, Poland

Let me pose a pretty modest thesis: the inflation of information, which itself is a part of the information society, is not neutral for the philosophical practice. The situation can be described with the metaphor of an expanding balloon. Using the balloon model, I point out eight problems.

We need to begin with a certain model of philosophical activity. The good beginning for that is Herbert Schnädelbach's (1994) remark saying that the modern philosophy, in order to survive, had to adopt itself to the academic world, its rules, and its division of labor. It means that philosophy had become a research area like other research areas. From that moment on, philosophical practice includes writing texts, reading texts, analyzing texts, getting research funds, discussions, conferences, speeches, formal rituals, formal titles, official progress reports etc.

Research activity has been well described by the science and technology studies. Thus we can view philosophical studies using Bruno Latour's notion of the circulating reference (1999). The circulating reference emerges wherever there is a series of translations that bind together an object of research and a result of research, through successive steps. Those steps, called "translations" or "transformations" enable switching from ignorance to certainty, from flood of information to short theoretical grasp, from the various to the standardized, from a research object hard to move to a paper text or a computer file easy to spread, from the local to the universal.

Thus the problem no. 1 is: how to handle the texts to study? And, more importantly, *what to do when having to many texts to study?*

Philosophy has developed a number of mechanisms for handling texts. Usually, a circulating reference in philosophy emerges in this way: you start with Classic's texts. You read them, you make marks, highlights and take notes. But still, in the end of the day, you have to many notes, marks, and highlighted paragraphs to a have a general perspective. So you take the next step, and construct main Classic's conceptual structures out of your notes. When you analyze and explain them, you will get home, having your article finished.

But that is oversimplified. Normally, we study both a Classic and her Commentators. So the chain of translations becomes longer, you need to add others' results of studying Classic to yours. The number of notes increases, and you need to compare your final conceptual structures with those done by Commentators. So far so good.

But what can you do, when the number of Commentators' works is that big, that they are no longer a reasonable object of studies? Some time ago, a colleague of mine found, in a library search, 7000 texts on Wittgenstein's philosophy. Assume modestly, that it meant 100 books (200 pages each) and 6900 articles (10 pages each). Total amount of pages equals 71000. Assume generously, that you are able to study 50 pages a day, which results in 1420 days of work. That is almost four years of permanent studying. Is any individual able to handle that?

Where is the ultimate border of individual talent and ability to cope with such large amount of information?

But it's not over, since having so many philosophers nowadays, we have more and more comments.

1. The Balloon Effect

The described processes generates the balloon effect. Paint a couple of small dots on a balloon. The more you inflate the balloon, the bigger the inter-dot space will be. A small individual standing on one of them can see them all in the beginning. Then they turn into bigger stains and some of them disappear behind the horizon. The multiplication of Classics and Commentators stimulates the balloon effect.

Being socialized in a certain philosophical school, and having given the balloon effect, you and all the others can see less and less. You also have to reject or pass more and more. The balloon effect makes it easier to find unstudied Classic, or one that is hardly known. It also stimulates institutional conflicts and inconsistencies. There are many examples of arguing against somebody (during conference, doctoral examination, habilitation *colloquium* or in a journal) for not mentioning, or analyzing a certain philosophical school, or a tradition, or a Commentator. Even if you studied for last five years a problem for fifteen hours a day, you have no excuse. It would sound highly unprofessional, saying that you had no time, no possibility or no need.

But there is another consequence. Inconsistency between the ideal and the real features of the social role of a reviewer (e. g. of a doctoral thesis or a habilitation) is another result of the balloon effect. The ideal says, a reviewer is a person who knows the problems of a work she reviews, up one side and down another. However, in fact, it is utterly possible, that she barely knows them. By the way, this conflict may stimulate the emerging of some new features of a social role. Thus, for instance, one may say, that a reviewer should only evaluate the form, methodology, and not the contents.

The balloon effect also forces us to reformulate the methodological requirements of doing studies. Since one cannot refer to all the comments to a studied Classic, and read every single book in the field, one has to abandon the present ideal of studying a subject. The question thus is – and that's the problem no. 2 – *what the conditions of this methodological capitulation should be?*

2. The body of knowledge

The balloon effect also influences our concept of the body of knowledge. Shortly speaking, it falls apart, unless we use some arbitrary criterion for deciding what counts as proper knowledge. *The balloon effect makes it futile to try to unite knowledge as a whole*, which is the problem no. 3. Therefore, the knowledge progress is impossible, for the knowledge itself expands sideways, horizontally, so to speak, instead of vertically.

Thus a Commentator is forced to be a partial expert, only inside a school of interpretation. Such a situation is conductive to the obtaining simultaneously the same results in different times and places. Thus the balloon effect carries multiplicity even further. Is it possible then to find any "external" referee to judge what in philosophy is progressive, and what is regressive?

The balloon effect employs those who prefer to compare and confront. Necessarily, instead of developing any account, an inter-account wandering, and compiling is more valuable.

3. Structural malfunction

Let me use a different perspective, coming from the organizational studies. View philosophy as an institutional structure aiming at processing information. Its main task is to process input data in such a way, as to produce their brief synthesis with a cognitive surplus information as output.

The core of the organizational theories says that there is a crucial relation between a structure of an organization and its effectiveness in processing data. Thus, the horizontal structures are much more effective in processing information than the hierarchical, vertical ones. Nonetheless the latter are typical for academic life. And the former generate less noise, and additional inner signals essential for the very survival of the structure.

But one can also refer to Stephen Fuchs's studies on scientific knowledge (1992). There are two main variables in his model (in fact there are eleven of them): task uncertainty and mutual dependence. Philosophy is viewed as a hermeneutical field, since its mutual dependence is low, and task uncertainty is high. Such a field tends to generate plenty of metainformation, which function is to regulate the work of an institutional structure, or the very processing of information. Therefore, the balloon effect is reinforced and expanded by the vertical hermeneutical structure. It means, for example, that the processing of the information by a researcher increases the number of information to process by another one. It particularly happens when there emerges a new aim or a method, or the old ones are transformed, as a result of a research process. Thus the problem no. 4: organizational structure of philosophical activity amplifies the balloon effect. Philosophy, viewed as a way of handling information overflow, generates even more information; its troubles are partially a result of its attempts to solve them.

4. Information overload

Having the balloon effect amplified by the structural malfunction, it is reasonably to assume that philosophy as a data processing structure is overflowed by information. The metaphor of a flow suggests two options: first, improving the flow, and second, slowing it down by creating blocks.

D. Katz and R. Kahn in their remarks on communication and flow of information in organizations, refer to J. G. Miller's analysis of responses to the information overload (Katz and Kahn 1979: 357-363, Miller 1960). He describes seven types of responses:

1. Omitting, passing over some information.

2. Error, incorrect processing of information.

3. Gathering, delaying the processing with a hope for further processing.

4. Filtering, not processing the certain type of information according to a pattern of preferences.

5. Bringing various information closer, decreasing the number of differentiating categories (generality, and lack of precision).

6. Multiplication of the channels, using parallel channels, decentralization.

7. Escape from the task (Katz i Kahn 1979: 357).

In addition to the classification, Katz and Kahn try to characterize the responses as dysfunctional or adaptive. The responses no. 1, 2, and 7 are dysfunctional, all the others are context dependent. The difference between dysfunctional and adaptive response is viewed by analogy to psychological distinction defensive / offensive mechanisms. Offensive mechanisms (adaptive response) solve problems, *defensive mechanisms protect an agent, but do not solve any problems* (problem no. 5).

Consider examples from academic practice referring to seven response mentioned above. 1. We have no escape from omitting things while doing any studies, there is always something not read, not researched, or unknown. 2. Think of widely spread in philosophy accusation of unjustified criticism on the ground that the criticized account is oversimplified. 3. Libraries collect and store books for a better future, which comes very rarely. 4. Some philosophers reject the whole fields as not belonging to philosophy: feminism, psychoanalysis, belles-lettres, logics etc. 5. A tendency to operate on very general models. 6. Group research with a division of tasks. 7. An inclination to lock up in an immensely narrow subfield.

But I would say that *the main problem connected with dysfunctional / adaptive mechanisms* (no. 6) *is the shrinking of the field of philosophical investigations*, utterly visible in last three hundred years. Usually, it is said that the field of philosophical studies shrinked when empirical sciences and studies became independent. Thus, what is left as a standard subject for philosophical investigations is the history of philosophy and other texts written by fellow philosophers. Doesn't it seem too modest comparing to philosophical ambitions known from history: question of *arche*, of cognition, of right ethics? Some philosophers narrowing down their ambitions, claim that at stake is only asking questions and the very quest for answers, not the answers themselves (for definitive answers are not attainable). But even the questions themselves narrow down the research area to the philosophical tradition. Whatever the reasons, it looks like a mechanism that reduces the number of the output data, which means response no. 4. But one may also interpret it as a dysfunctional response no. 1 – omitting some information.

If there is a connection between cultural information overflow and the shrinking of philosophical ambitions, then it would make sense to work out any methods that help to handle information overflow, and bring back bigger ambitions to philosophy. The least we can to is to make the overflow the subject of philosophical investigations.

5. Rising costs

As mentioned earlier, the balloon effect stimulates the pluralization of philosophy. The balloon effect on the level of schools, Classics, and paradigms, deepens chasms among traditions, research accounts, conceptual schemes, structures of meaning, and rules of proceeding. Shortly speaking, differences among various language games

increase. *This means rising the cost of any movement from a language game to another one* (problem no. 7). It will cost more time and effort. The more language games, schools, or paradigms to comprehend, the bigger the problem.

When you want to understand a new thought style (a paradigm), first, its concepts look weird, its problems bizarre or trivial, its methods surprising, its arguments not convincing. You also need to contact new people representing the thought style, and talk to them trying to understand their perspectives. Let me stress it once more: psychological and social costs of entering a new form of philosophical life get higher, and the basic philosophical competences acquired while studying are relatively lower. Time is one of those costs. Each attempt to comprehend a new paradigm or a school needs time. But we are always short of time in the tyranny of the moment culture (Eriksen 2001). *Anything that is not instant – like slow cumulative efforts to understand other way of thinking – moves to the cultural margins* (problem no. 8).

It means that the balloon effect together with the fast time domination make "external" public uninterested in philosophy. You have time for philosophy only when you are a professional philosopher, because only then you can afford the costs of studying philosophical books.

But, whatever to say, that is an optimistic alternative. The pessimistic one says: the costs of comprehending philosophical language games are so high, that it is much easier to assume philosophy as not making any sense. It may seem absolutely nonsensical to spend a lot of your time on studying philosophical books without any view for instant gratification, especially when you look from the inside of the fast time perspective. The lack of effectiveness and slowliness clash with a need for instant effectiveness. Yet, such a clash would not be seen as a conflict between two times, but as a conflict between common sense and nonsensical, splitting hairs thinking.

Various consequences are possible, and let me point out only one. If our collective life depends on our ideas about its future shape, then philosophy (and humanities in general) will loose its prestige as a cultural capital, and will loose any influence on those ideas.

Literature

Eriksen, Thomas, Hylland 2001 *Tyranny of the Moment. Fast and Slow Time in the Information Age.*

Fuchs, Stephen. 1992. *The Professional Quest for Truth. A Asocial Theory of Science and Knowledge*, New York: State University of New York Press.

Katz, Daniel and Kahn, Robert L.. 1979. *Społeczna psychologia organizacji*, translated by Barbara Czarniawska, Warszawa: PWN.

Latour, Bruno. 1999. *Pandora's Hope. Essays on the Reality of Science Studies*, Cambridge, London: Harvard University Press.

Miller, J. G. 1960. *Information, input, overload, and psychopathology*, in: American Journal of Psychiatry, no. 116, p. 695-704.

Schnädelbach, Herbert. 1994. *Filozofia w nowoczesnej kulturze,* translated by Tadeusz Buksiński, in: *Filozofia w dobie przemian*, Tadeusz Buksiński (ed.), Poznań: Wydawnictwo Naukowe IF UAM, p. 45-64.

Email: krzabr@uni.torun.pl

Wovon man nicht sprechen kann, darüber hat Freud nicht geschwiegen

José María Ariso, Madrid, Spanien

1. Einleitung

Im Jahre 1973 erschien *The Danger of Words*, ein Band bestehend aus fünf Vorträgen, die Maurice O'Connor Drury bereits viele Jahre zuvor gehalten hatte. Im Vorwort dieses Buches bestätigt Drury, dass er sich entschieden habe, diese Vorträge zu veröffentlichen, weil sie seiner Ansicht nach den Einfluss Wittgensteins auf ihn widerspiegeln. Ich bin jedoch der Meinung, dass man in *The Danger of Words* mehr erkennen kann als Wittgensteins Einfluss auf einen seiner treuesten Anhänger. Dieses Werk macht auf einen Aspekt aufmerksam, der uns, meiner Meinung nach, hilfreich sein kann, um Wittgensteins Kritik an der Freudschen Psychoanalyse besser zu verstehen. Wie ich im folgenden Kapitel zeigen werde, begreift Drury Wittgensteins Werk als eine Warnung vor bestimmten geistigen und seelischen Gefahren. Nach der Verdeutlichung, worin diese Warnung besteht, werde ich anschließend im dritten und vierten Kapitel kurz auf die Grundideen verweisen, die in *The Danger of Words* auftauchen. Abschließend werde ich im fünften Kapitel zeigen, in welchem Sinn Freud und sein Werk ein deutliches Abbild der Gefahren darstellen, auf die uns Wittgenstein hinwies.

2. Wittgensteins Warnung

Rush Rhees berichtet, dass Drury am Anfang eines frühen Entwurfs aus dem Jahre 1966 schrieb:

> Die Zahl der Einführungen in Wittgensteins Philosophie und der Interpretationen wächst ständig. Doch als früherer Schüler Wittgensteins habe ich den Eindruck, daß im Mittelpunkt seines Denkens etwas stand, was dort nicht ausgesprochen wird.

> Vor vierzig Jahren wirkte Wittgensteins Lehre auf mich wie eine Warnung vor bestimmten geistigen und seelischen Gefahren, die ich äußerst verlockend fand. Von diesen Gefahren sind wir immer noch umgeben. Es wäre tragisch, wenn wohlmeinende Interpreten es fertigbrächten, es so hinzustellen, als könnten Wittgensteins Schriften heute ohne weiteres in ebendas geistige Milieu integriert werden, vor dem sie in hohem Maße warnen sollten. (Rhees 1989 9-10)

Drury nach verweisen alle Schriften Wittgensteins auf eine ethische Dimension, die Wittgenstein selbst in seinem *Tractatus logico-philosophicus* aufzeigte, als er schrieb: "Was sich überhaupt sagen läßt, läßt sich klar sagen; und wovon man nicht reden kann, darüber muß man schweigen" (T 11). Laut Drury besteht das Problem darin, dass alle Wissenschaften mehr sagen wollen, als sie wirklich wissen. Mit diesen Begriffen bezieht sich Drury auf die Verletzlichkeit der Grenzen der Sprache. Und es ist offensichtlich, dass diese Tendenz, die Grenzen der Sprache zu verletzen, auch in der Philosophie weit verbreitet ist. Deshalb glaubt Drury, dass die Schwierigkeit, die es zu bezwingen gilt, um Wittgensteins Werk zu verstehen, nicht nur eine intellektuelle ist: die fragliche Schwierigkeit besteht vor allem in der ethischen Forderung, unseren Willen zu besiegen, um nicht mehr zu sagen, als wir wirklich wissen oder, was dem gleichzusetzen ist, die Grenzen der Sprache nicht zu verletzen (Drury 1987 123). Meiner Ansicht nach handelt es sich hierbei um die Warnung Wittgensteins, die so oft von denen übergangen wird, die sein Werk kommentieren.

3. Drury und „das Unaussprechliche"

In *The Danger of Words* verdichtet Drury die zitierte Warnung in dem Konzept „philosophische Klarheit" (*philosophical clarity*). Nachdem er sich erinnerte, dass es laut Wittgenstein Unaussprechliches gibt, etwas, das nicht gesagt, sondern lediglich gezeigt werden kann (vgl. T §6.522), signalisiert Drury, dass er immer glaubte, in der wissenschaftlichen Forschung existiere ein unerreichbarer Bereich, den er „das Unerklärliche" (*the inexplicable*) nennt. Drury zufolge basiert jede wissenschaftliche Forschung auf dem Unerklärlichen, denn wenn man sich in besagte Forschung vertieft, kommt man zwangsläufig immer an einen Punkt, wo es keinen Raum mehr für wissenschaftliche Erklärungen gibt. Aus diesem Grund taucht die philosophische Klarheit immer dann auf, wenn wir diesen Punkt erreichen, an dem es überflüssig ware, weiter zu suchen und wissenschaftliche Erklärungen zu entwerfen (Drury 1973 ix-x). Um zu zeigen, dass es nicht für alle Fragen eine wissenschaftliche Erklärung gibt, erinnert sich Drury an ein Erlebnis während einer Prüfung. Der Prüfer sagte zu ihm folgendes: „Ich denke, es gibt zwei Arten von Menschen. Wenn sich ein Vogel auf ein Telefonkabel setzt, fragen sich einige 'Warum setzt sich der Vogel gerade dort?', während andere erwidern, 'Naja, irgendwo muss man sich ja setzen.'" Wittgenstein mochte diese Anekdote, weil sie den existierenden Unterschied zwischen philosophischer und wissenschaftlicher Klarheit enthüllt: wenn wir erkennen, dass es keinen Platz mehr für wissenschaftliche Erklärungen gibt, wenn wir uns bewusst werden, dass es nichts mehr zu rechtfertigen gibt, glänzt die philosophische Klarheit, die einen Schlussstrich unter die Fragen zieht, die einer Antwort entbehren. Ein weiterer Fall, der diesen Unterschied verdeutlicht, ist jener, in dem wir versucht sind, bestimmte Stammesriten mit Herablassung zu betrachten, so als ob sie vom wissenschaftlen Standpunkt aus die Frucht eines primitiven und falschen Glaubens wären. Statt dessen sollte man diese Riten als Sprachformen betrachten, die sich nicht aus einem Fehlglauben ableiten – diese Stämme erfreuen sich oft sogar einer großen technologischen Entwicklung – sondern einfach die Frucht der Notwendigkeit, etwas auszudrücken, sind. Das Streben Drurys, die Klarheit als Selbstzweck anzusehen, spiegelt sich in den Schriften Wittgensteins wider, der sich wie folgt ausdrückte:

> Ob ich von dem typischen westlichen Wissenschaftler verstanden oder geschätzt werde, ist mir gleichgültig, weil er den Geist, in dem ich schreibe, doch nicht versteht. Unsere Zivilisation ist durch das Wort "Fortschritt" charakterisiert. Der Fortschritt ist ihre Form, nicht eine ihrer Eigenschaften, daß sie fortschreitet. Sie ist typisch aufbauend. Ihre Tätigkeit ist es, ein immer komplizierteres Gebilde zu konstruieren. Und auch die Klarheit dient doch nur wieder diesem Zweck und ist nicht Selbstzweck. Mir dagegen ist Klarheit, die Durchsichtigkeit, Selbstzweck. (VB 21)

Wenn man die philosophische Klarheit als Selbstzweck betrachtet, kann uns das meines Erachtens helfen, eine Sichtweise anzunehmen, die es uns erlauben wird, etwas zu würdigen, das normalerweise unbeachtet bleibt: die Suche nach der philosophischen Klarheit wird unsere Sensibilität gegenüber dem animalischen und unbegreiflichen Aspekt unseres Benehmens erhöhen. Tatsächlich wollte Wittgenstein den Menschen als Tier betrachten, d.h., "als ein primitives Wesen, dem man zwar Instinkt aber nicht Raisonnement zutraut" (ÜG § 475). Es erfordert jedoch einen profunden Mentalitätswechsel, den Menschen auf diese Weise zu begreifen. Das vorrangige Ziel ist nun nicht mehr der Fortschritt, der in diesem Fall als die Suche nach den unbestimmten Erklärungen unseres Benehmens verstanden werden muss, sondern die Anschauung und Bewunderung des Unerklärlichen unseres primitiven Benehmens, welches es erfordert, jeder Versuchung zu widerstehen, weitere Erklärungen zu suchen. Schließlich fügt Wittgenstein hinzu:

"Warum verlangst du Erklärungen? Wenn diese gegeben sein werden, wirst du ja doch wieder vor einem Ende stehen. Sie können dich nicht weiterführen, als du jetzt bist." (Z § 315)

4. War Freud ein Weiser?

Wenn man diesen unbegreiflichen Aspekt, welchen jedes Wesen der Natur aufweist, nicht zu schätzen weiß, findet aus psychologischer Sicht eine schwerwiegende Verarmung statt. Um diese Frage näher zu beleuchten, befassen wir uns mit den zwei Typen der Psychologie, die Drury beschreibt. Die „Psychologie A" reflektiert eine profunde Kenntnis des menschlichen Charakters, die sich mit dem Unmessbaren beschäftigt. Bei der „Psychologie B" hingegen handelt es sich um die akademische Psychologie, die sich für die messbaren Variablen interessiert. Während die Psychologie A hauptsächlich von den großen Romanautoren, Dramaturgen und Historikern entwickelt wurde, wird die Psychologie B an den Universitäten gelehrt. Doch gerade weil diese sich mit dem Messbaren befasst, denkt Drury, dass die Entwicklung der Psychologie B, so wichtig sie auch sein mag, nie die Intuitionen der Psychologie A verbessern wird, da sich die besagten Intuitionen nicht auf Variablen reduzieren lassen – genauer gesagt, auf messbare Variablen. Zu den in der Psychologie A angesprochenen Aspekten zählt Drury die Liebe, das Glück, die Leidensfähigkeit, die Güte, den Glauben, usw. Zu diesen Qualitäten würde ich gern die Weisheit hinzufügen, die jedoch nicht mit der Gescheitheit verwechselt werden darf. Tatsächlich äußerte Wittgenstein einmal: "Weisheit ist etwas, das ich von Freud niemals erwarten würde. Gescheitheit sicherlich, aber nicht Weisheit" (ÄPR 74). Die Weisheit ist bei jenen Autoren zu finden, die die Psychologie A entwickeln – wie Lew Tolstoj oder Gottfried Keller, um es deutlicher zu formulieren, bei jenen Autoren, die in der Lage sind, die Tiefe des Unaussprechlichen zu erkennen. Wie er es Drury erzählte, glaubte Wittgenstein, dass ein äußerst gescheiter Mensch seicht sein kann, ein echter Philosoph aber ein tiefer Denker sein muss. Drury drückt diese Lehre mit folgenden Worten aus:

Der seichte Denker mag zwar imstande sein, etwas deutlich zu sagen, doch der tiefe Denker bringt uns zu der Einsicht, daß es etwas gibt, was gar nicht gesagt werden kann. (Drury 1987 122)

Daran festhaltend, glaube ich, dass man schlussfolgern kann, dass Freud, solange er seine intellektuelle Haltung nicht aufgibt, welche ihn vom wirklich Tiefen und Wichtigen, d.h., dem Unaussprechlichen, entfernt, als seichter

Denker betrachtet werden sollte. Wittgenstein geht sogar so weit, Freud nicht nur als Autor zu betrachten, der „nie groß" in seinem Schreiben war (VB 164), sondern auch als „ein Schwein oder etwas ähnliches", was seinen Charakter betrifft (Dbw §9). Ich denke, Wittgenstein kritisiert mit solcher Härte, dass Freud nicht zu jenen großen Männern gehört, die durch ihre Bescheidenheit, Tiefe, Leidensfähigkeit und Anstand charakterisiert werden können; weit davon entfernt offenbart sich Freud als eine Persönlichkeit, die, obwohl er versucht, als Person zu erscheinen, die seine Forschungen rigoros wissenschaftlich durchführt, lediglich die Menschen zu überreden versucht, damit seine Darstellungsweise als die einzige Betrachtungsweise akzeptiert wird. Im Gegensatz dazu interessiert Drury die Individualität, der einzigartige Charakter jedes Subjekts, die ihn von jeder anderen Person unterscheiden. Hinter diesem Interesse verbirgt sich eine Haltung zur Geisteskrankheit, die sich, meiner Ansicht nach, radikal der von Freud gezeigten Haltung entgegen stellt. Während dieser um jeden Preis an Ursachen und mechanische Gesetze denkend verstehen will, befürwortet es Drury, bei der Betrachtung der Patienten nicht an klinische Theorien zu denken. Meines Erachtens bedeutet diese Tatsache, dass Drury Wittgenstein, der manifestierte, dass wir über keine Kausalgesetze im Zusammenhang mit Gefühlen und Motiven verfügen, auch in diesem Punkt folgt. Nicht umsonst fügte Wittgenstein hinzu, dass ihm die Tatsache wichtig erschien, dass es solche Gesetze faktisch nicht gibt (ÄPR 74).

5. Wovon man nicht sprechen kann

Drury zufolge existiert ein unüberwindbarer Abgrund zwischen dem Physischen und dem Mentalen. Ferner glaubt er, dass dieser Abgrund immer zum Unerklärlichen gehören wird. Das zeigt sich beispielsweise darin, dass, wie sehr wir auch unsere Kenntnisse über Anatomie und Physiologie vergrößern, wir nie in der Lage sein werden zu erklären, wie es möglich ist, dass wir uns eines Bewusstseins erfreuen. Von diesem Punkt ausgehend nuanciert er, dass auch das eigene Identitätsgefühl zum Bereich des Unbegreiflichen gehört. Außerdem sagt er, dass das Ziel der psychiatrischen Arbeit schlechthin die Subjekte bilden, die von besagten Problemen betroffen sind. Dies erlaubt Drury zu schlussfolgern, dass die Geisteskrankheit, vorzugsweise verstanden als Verlust des eigenen Identitätsgefühls, das Gebiet des Unaussprechlichen betrifft. So erscheint jeder Patient wie ein Rätsel, weshalb man die Patienten nicht nur an klinische Theorien denkend betrachten sollte (Drury 1973 89). Doch es war Wittgenstein selbst, der Drury diese Haltung annehmen ließ. An einem bestimmten Punkt angelangt erkannte Drury, dass manche Patienten, die er zu Gesicht bekam, Symptome an den Tag legten, die er äußerst verwirrend fand. Wittgenstein antwortete ihm:

Geisteskrankheiten müssen Sie verwirrend finden. Wenn ich geisteskrank würde, hätte ich nichts mehr Angst, als wenn Sie sich dann die Einstellung des gesunden Menschenverstands zu eigen machen und wie selbstverständlich davon ausgehen würden, daß ich unter Illusionen litte. Manchmal frage ich mich, ob Sie das richtige Gemüt für diese Arbeit haben. Sie lassen sich zu leicht aus dem Konzept bringen, wenn die Dinge nicht nach Plan laufen. (Drury 1987a 210)

Anstelle den Wahnsinn als eine Krankheit zu betrachten, schlug Wittgenstein vor, ihn auf andere Art zu betrachten:

Den Wahnsinn muß man nicht als Krankheit ansehen. Warum nicht als eine plötzliche – mehr oder weniger plötzliche – Charakteränderung? (VB 104)

Mit diesem Vorschlag, dass der Wahnsinn nicht als Krankheit angesehen werden sollte, sondern als bloße Charakteränderung, wollte Wittgenstein, dass wir uns auf den Wahnsinn konzentrieren und jede Art von pseudowissenschaftlicher Spekulation beiseite lassen. Wie es Drury ausdrückt, sollten wir im unbegreiflichen Bereich des Geistigen nicht nach verborgenen Gesetzen suchen, vielmehr sollten wir uns auf die Einzelfälle und die Schrecken erregende Einsamkeit konzentrieren, die die Erfahrung des Wahnsinns mit sich bringt – verstanden als Verlust des eigenen Identitätsgefühls: dann können wir uns des Mysteriösen des menschlichen Wesens bewusst werden (Drury 1973 136). Drury betrachtet also jede Manifestation des Unaussprechlichen oder Unbegreiflichen als ein Wunder. Um nur eines der bereits erwähnten Beispiele anzuführen, begreift er es als Wunder, dass wir jeden Morgen beim Erwachen unser Bewusstsein wiedererlangen oder uns das eigene Identitätsgefühl erhalten. Deshalb fordert uns Drury auf, angesichts des Unaussprechlichen, dem letzten menschlichen Geheimnis, zu staunen (Drury 1973 74).

Meiner Meinung nach verkörpert sich die intellektuelle Haltung, die Wittgenstein dem „typischen westlichen Wissenschaftler" zuschreibt, deutlich in Freud. Einerseits verbrachte der Vater der Psychoanalyse sein Leben lang damit, ein immer komplizierteres Gebilde zu konstruieren, andererseits war er nie in der Lage, den Spielraum für das Staunen oder das Unbegreifliche zu erfassen, weil er den Menschen als Maschine begriff. Aus Freuds Blickwinkel versteht man etwas nicht, nicht weil es unbegreiflich ist, sondern weil die Erklärung noch nicht gefunden wurde. Doch genau diese Haltung verhindert die Entwicklung der Fähigkeit, sich angesichts des Unaussprechlichen zu wundern, eine Fähigkeit, die meiner Meinung nach eine der schönsten und wichtigsten Lehren darstellt, die wir von Wittgenstein erhalten haben.

Literaturangabe

Drury, Maurice 1973 *The Danger of Words*, London: Routledge.

Drury, Maurice 1987 "Bemerkungen zu einigen Gesprächen mit Wittgenstein", in: Rush Rhees (Hrsg.) 1987, 117-141.

Drury, Maurice 1987a "Gespräche mit Wittgenstein", in: Rush Rhees (Hrsg.), 142-235.

Rhees, Rush (Hrsg.) 1987 *Ludwig Wittgenstein: Porträts und Gespräche*, Frankfurt/M: Suhrkamp.

Wittgenstein, Ludwig 1971 *Vorlesungen und Gespräche über Ästhetik, Psychologie und Religion*, Göttingen: Vandenhoeck & Ruprecht. (ÄPR)

Wittgenstein, Ludwig 1977 *Vermischte Bemerkungen*, Oxford: Blackwell. (VB)

Wittgenstein, Ludwig 1984 *Über Gewißheit*. (Werkausgabe Band 8) Frankfurt/M, Suhrkamp. (ÜG)

Wittgenstein, Ludwig 1984 *Zettel*. (Werkausgabe Band 8) Frankfurt/M, Suhrkamp. (Z)

Wittgenstein, Ludwig 1998 *Tractatus logico-philosophicus*, Frankfurt/M: Suhrkamp. (T)

Wittgenstein, Ludwig 2000 *Denkbewegungen. Tagebücher 1930-1932, 1936-1937*, Frankfurt/M: Fischer. (Dbw)

Email: jmariso@yahoo.es

A Database for a *Prototractatus* Structural Analysis and the Hypertext Version of Wittgenstein's *Tractatus*

Luciano Bazzocchi, Pisa, Italy

In my first contribution to the Kirchberg Symposium (Bazzocchi 2005), my interpretation key was Wittgenstein's note at the beginning of the *Prototractatus*. This note helps us not only better understand the notebook's first layer, it also makes it possible to date (in relation to Wittgenstein's letter to Russell dated October 1915) the methodological turn occurring between the first 28 pages and the rest of the manuscript. My second lecture (Bazzocchi 2006), focused on the another implication of this letter to Russell, i.e. the existence of a parallel version of the *Prototractatus*, "written in pencil on scattered sheets of paper". This led to a completely original explanation of the *Prototractatus* compilation and management. I will now show, by means of a dedicated database, a method of approaching the notebook that permits a point-by-point reading of the text in its three-fold structure, as the parallel version on scattered sheets did allow to its author – combining the indexed-sequential organization of the notebook with the hypertextual technique of the loose sheets. In this paper I will only list the main results, leaving the effective database exhibition to the presentation at the Symposium. As an example, I will analyze the critical insertion of proposition 7 in the 1916 *Abhandlung* "edition".

The *Prototractatus* manuscript was recovered by von Wright in 1965 in Vienna and was published – only partially indeed – in 1971. The notebook contains the entire material of the *Tractatus* (except for the thirteen propositions that Wittgenstein added in his own hand on the definitive TS202 typescript), but with different numeration and in an order which follows completely different criteria. It ends with the "Preface", which, except for its conclusive phrase, is identical to that of the final work. Since the *Prototractatus* printed version – and also the detailed parallel later supplied by the *Kritische Edition* of the *Tractatus* (Wittgenstein 1989) – reconstructs the text by the decimal order of propositions, it results in hiding the effective progression of composition[1]; since critics were thus not able to appreciate the original *Prototractatus* text, it was substantially ignored. For a better exegesis of the *Tractatus*, it seems instead that a more careful recognition of its composition steps, as they emerge from the manuscript, is extremely meaningful, when considering the following points: 1) the *Prototractatus* notebook illustrates the detailed order with which the single propositions were inserted in the corpus of the *Abhandlung*; 2) Wittgenstein proceeds in an essentially top-down way, that is composing (and/or extracting from diaries) first the cardinal propositions, secondly first level comments, thirdly the comments to them, last the detail comments: the structural order illustrated in the note to *Tractatus* proposition 1 is thus, on the whole, the compositional order; 3) the process of drawing up, indicated by Wittgenstein in successive sections of the notebook, occupies a very wide temporal arc, that possibly runs from spring 1915 to summer 1918; the succession of its layers testifies in some cases to a progressive conceptual and methodological maturation; 4) *Tractatus* reading by structural plans, following the formal relations represented through the decimal numeration, would resume therefore the lines of thought originally suited by Wittgenstein himself.

In effect, the first page of the manuscript text,[2] after the title-page ("Logish-Philosophische Abhandlung - Ludwig Wittgenstein"), the dedication to Pinsent and the maxim, contains six of the seven cardinal propositions. The first page propositions, that correspond almost literally to those of the *Tractatus*, are precisely: 1, 1.1, 2, 2.1, 2.2, 3, 3.1, 3.2, 4, 4.1, 4.2, 4.3, 4.4, 5 and 6. They represent a consecutive line of thought that has some of its completeness prescinding from the "comments" that, by means of the numerical references, will be gradually added. Beginning from the next page, Wittgenstein systematically develops these first propositions, by annotating comments 1.11-1.13, 2.01-2.07, 2.11-2.18, 2.21-2.23, 3.01-3.02, 3.11-3.16 and so on. Although many such sequences do not always emerge immediately in order, and sometimes interfere with one another, they constitute as many horizontal developments that still do not contain, except rarely, more detailed level comments. For example, sequence 2.01-2.07 is equipped, a few lines after, by the comment 2.031, but the remaining 41 developments will only appear between page 48 and page 96 (therefore, several months or even some years after). It is obvious that Wittgenstein's thought develops along parallel lines, clearly evidenced by the decimal numeration, which tend to terminate before there came more punctual deepenings and reflections. The first layer of the notebook ends on page 28, after 283 distinct numbered propositions. It was McGuinness (2002) who introduced the term "layer" to discriminate this and other successive notebook sections, recognizable also because of the cross-sectional line traced by Wittgenstein at the end of each of them. The stratification of the notebook is indeed a constant fact, in the sense that every new proposition takes place without gaps in the pre-existent decimal frame. In some cases, when the added sentence is to be positioned in the middle, and not at the bottom, of an existing sequence, the numeration of sequence last part is every time corrected in order to make space for the new incoming one. Every new proposition, in principle, defines therefore a possible stage of development, finished and self coherent: much beloved quality by Wittgenstein, who risked the life at the front and could have died from day to day, but who had promised Russell, in the letter of 22 October 1915, that amongst his papers he would have however found "the last synthesis" of the *Abhandlung*, destined for publication.

The first layer introduces further characterizing elements: it is in fact composed of original propositions that were compiled in relation to the *Abhandlung* and not obtained (for what matters to us) from previous diaries. Moreover, they rigorously consist of a single statement, with distinct numeration: statements which only in the passage to the *Tractatus* will sometimes be merged under a

---

[1] The involuntarily operated hiding is brought to light by Verena Mayer (1993). She shows how all *Prototractatus* reviewers have been tricked by the sequential printing, that twists the methodology effectively adopted in the manuscript.

[2] The first page of text is numbered by Wittgenstein as page 3; we adhere ourselves here to his pagination, following the attached photostatic copies to the printed edition. It's surprising that one of the more authoritative critical reviewers of the volume, Rush Rhees, would gladly have eliminated just the version in facsimile in order to reduce the price, that he thinks disproportionate to the effective value of the document. He concludes that also so "only libraries and special scholars would buy the [*Tractatus*] earlier version anyway" (Rhees 1973, p. 531).

merely one decimal. Starting instead directly after the separation line on page 28, there appears about thirty consecutive steps (also by multiple statements) entirely achieved from the 1913 Notes on logic; then there are citations from 1914 and 1915 diaries, as well as possibly from the earlier notebook (that can be individuated when they correspond to the notes dictated to Moore in 1914). The citations drawn from Wittgenstein's third diary, that runs from April 1916 to January 1917, belong to a successive layer, with all 36 statements in one block. These run in chronological order regarding the source notebook and without solution of continuity from page 81 until *Prototractatus*' page 86, even if the numerals given to each obviously assign them to widely varying sections of the work. The first 28 pages therefore are constructed in a completely different way from the rest of the manuscript. They define the carrying structure of the treatise: they comprise, even excluding proposition 6 (almost surely inserted in the first page much later), five of the seven cardinal propositions and 48 of the related 52 first level comments.

Analyzing the *Prototractatus* in detail, its dating turns out to be less problematic than what one commonly thinks. The thesis to which McGuinness has converted, i.e. that *Prototractatus*' first 70 pages were composed beginning from June 1915 (McGuinness 1989), can indeed be better specified: the original layer, with all the carrying structure of the job, was already completed within October of the same year. In fact, its propositions turn out to be marked as if in relation to a systematic copy (not on a typescript, as McGuinness thought, but probably on scattered sheets), and the letter to Russell (22 October 1915) makes reference both to the *Abhandlung* notebook and to such a copy on single sheets: "I am collecting it all and writing it down in the form of a treatise. […] If I don't survive, get my people to send you all my manuscripts: among them you'll find the last summary written in pencil on loose sheets of paper".[3]

One can therefore suppose that in 1915, Wittgenstein already had the essential nucleus of the *Tractatus* in his hands, with the exclusion of branch 6 and proposition 7, and that he was in the process of systematically sifting his other notebooks to extract the best usable parts. The strategy is announced in the note at the beginning of the *Prototractatus*, in which he says that "in between these propositions will be inserted all the good sentences of my other manuscripts". We can presume that the version on scattered sheets was not in tightened numerical sequence (to which indeed a notebook or a typescript, but surely not a package of loose sheets, would be adapt), but is structured into deepening levels by dedicating every sheet to a specific line of comment. It turns out that the allocation of the right decimal number to every new proposition derives naturally from the detail sheet in which it is annotated. The notebook limits itself to recording the additions as they are accepted into the corpus in gestation – in a more and more chaotic succession of numbers, while in effect still perfectly ordered regarding the specific loose sheet to which the proposition belongs. Following the process on the *Prototractatus* notebook, that is anyway the only document we possess, it's therefore possible to track – thanks to the decimal numbers – the increasing logical structure, and also to discover the cross nexuses between the lines of reflection that Wittgenstein is conducting in parallel, on separate, but hierarchically connected sheets.[4] When also

adhering to the final text, it can be established that a sequence of comments from any level can be self-analyzed. And, because historically it was born as a simple series and since further comments have been a posteriori conceived and inserted, several days or even months later, to purposely avoid the alteration of the original linear process of thought, such first examination can be done apart from the detailed interleaving observations.

The best way to reconstruct the composition process is to bring back the single propositions on database items, so as to be able to read the *Abhandlung* in whichever stage of development, by its three carrying structures: a) the chronological order on the notebook; b) the numerical sequence of decimals; c) the recursive structure, by successive deepening plans. If a more dynamic approach is preferred, it can be shown, for each gradually added proposition, the exact point of the structure in which it was put into place, or how it was moved to compose different forms in the not infrequent event of numeration modifications. As an example, starting from the first proposition of the notebook it can be dynamically seen how the hierarchical cascade grows and is accomplished, page by page and phrase by phrase. Such a process illuminates the relative independence of branches that in the sequential printing appear in direct succession. For example, the famous proposition 7 ("Whereof one cannot speak, thereof one must be silent") is composed on page 71, after section 6.1 on logic and immediately following the proposition now numbered 6.4 ("All propositions are of equal value"), but before all the other 6.4 branch sentences (with ethical references), as well as before the 6.2's (on the mathematics), the 6.3's (on the limits of the scientific propositions) and above all before the 6.5's (with hints to the mystic, to the limits of the *Tractatus* and to the metaphor of the ladder to be thrown away after its use).

In effect, in the summer of 1916 the *Abhandlung* ended on page 70, with an observation token from the 1915 diary: "In logic process and result are of equal value" [*sind gleichwertig*]. For some time, it can be presumed, this proposition remained the last one, in a chronological sense, noted down in the *Prototractatus* notebook.[5] However, the term "*gleichwertig*" continued to dig into Wittgenstein's mind. *Gleichwertig*: of equal value. When he annotated this phrase in the diary, on April 24th 1915, he had in mind identity, equivalence in logical sense; in fact he added: "(therefore no surprises)". He had always used the word "*Wert*", value, in a technical way: the value of a variable, to assign a value. However, beginning from June, in the philosophical part of his diaries he had instead begun to write of the sense of the world, of good and evil;[6] the word "ethics", until then never noted, had appeared twice on July 21th 1916, three times on 24th, three on 30th, and three on August 2nd; and again, on August 5th, October 7th and October 9th, as well as it should have appeared in the last philosophical annotation of the diary, January 10th 1917. By now the word "*Wert*" entails other suggestions. To be of equal value can also mean: to have the same importance for us, to be of value in an identical way. Neither logic nor science are placed at the value level, of the sense of the world; for them to be of equal value in valuational sense can only signify: to be equally of no value.

---

[3] Letter cited by von Wright (Wittgenstein 1971, p. 6). Von Wright however gave of it a different interpretation.
[4] The exegetic simplification brought by the hypothesis that the flying sheets continued to operate in parallel with the note-book long after 1915, is illustrated in (Bazzocchi 2006).

[5] The last proposition by logical (that is numerical) order, and therefore at the moment the effective conclusion of the *Abhandlung*, was 6.131: "Logic is transcendental". According to McGuinness, the pause of composition would quite run from March 1916 to September of the same year.
[6] In his private diary, Wittgenstein notes: "Last month I long reflected on every possible thing, but strangely I am not able to establish a connection with my mathematical reflections" (6.7.'16). Yet the following day, he exclaims: "But the connection will be established! What cannot be said, can *not* be said!". The connection can be only negative: ethics can only be absent from the *Abhandlung*. This seems to be the proper origin of the proposition 7.

A new perspective opens. The same locution, unexceptionable from the logical-mathematical point of view, is borrowed to achieve a second meaning, that is unexceptionable too, but differently. Therefore Wittgenstein resolves to take the notebook in his hand again, alluding to logical equivalence in order to design more directly, from the inner side, the limit of what can be said. In a kind of Gödelisation, a proposition internal to the sayable can mean, by reinterpreting the *Gleichwertig*, something about the limit itself, without disregarding the impossibility to speak of it. Therefore, he modifies the last annotated proposition, sterilizing it. It becomes: "In logic process and result are equivalent" [*sind äquivalent*], by freeing the term *gleichwertig*. He traces a separation line and satisfies the debt to mathematics with operation and integer number definitions (closely connected to his more recent result, the formulation of "the general form of the proposition"). He then resolved to touch, although in a negative way, the boundary he had imposed to himself: "6.2 Ethics does not consist of propositions". Propositions and ethics are antithetic, and now Wittgenstein possesses the verbal device he needs to show why: on the concept "of equal value", now available, Wittgenstein applies an unexpected semantic shift by generalizing: "6.3 All propositions are of equal value"[7]. It is obvious that "*gleichwertig*" cannot have here the sense of the logical-mathematic equipollence: the reference is to the sense of value. And the reference cannot be other than devaluating: if any proposition is worth (in an evaluational sense) as much as any other, indeed there isn't any value in it; but the latter idea cannot be expressed, without the risk of saying what can only be shown. Up to now Wittgenstein showed it by being absolutely silent about it; the value, so to speak, shone for its absence. Here, he alludes to it in a little more reckless a way, with all the "exorcisms" of the case. He doesn't add any comment, but instead places a tombstone that wants to be definitive: "7 Whereof one cannot speak, thereof one must be silent". If then, on this small opening, later on Wittgenstein decided to proceed forward, it's a history that will be reconstructed on another occasion.

If this way of considering the *Prototractatus* is reasonable – in particular in order to illuminate the top-down process adopted by Wittgenstein in collecting his propositions, from high level sequences to the most detailed lines of thought – it becomes useful to read the *Tractatus* not throughout the strict sequence of the decimals, but by homogenous sights, by successive deepening levels. That is, the *Tractatus* reveals itself to be a hypertextual structure, that from its homepage (largely corresponding to the *Prototractatus's* first page) opens to recursively nested pages of comment, like in a gradually more detailed hierarchical fractal. It is possible in fact to coherently interpret the decimal numbers like technical specifics in order to construct hypertext pages, assembled in an architecture that one can visit in iconic modalities – analogous to those offered by a modern website. In this way, for example, comments 2.11-2.19 can be picked out at a glance, in a single sequence: more or less exactly as Wittgenstein thought and arranged them originally through the pages 4-6 of *Prototractatus* notebook. The same can be said of the sequence 2.01-2.07 (pp. 4-5), 2.021-2.027 (pp. 26-27), and in general of any other level page, if we reconstruct it exactly by the homogenous grouping that the decimal indication and the composition methodology suggest. Such reading by levels, evidences instead – beyond the independence of the line of thought regarding the subsequent

observations – the tie with the origin sentence that stimulated the deepening and supplies the right context (the correct logical place) for its profitable observation. The visit to hypertext turns out therefore to be profitable in order to relive the thought process put into existence by Wittgenstein (in order to think "the thoughts which are expressed in it – or similar thoughts", as the author wishes in the preface). The hypertext approach leads us through essential ways to formally concluded unitary pages, to homogenous sights to consider and to meditate; parallely, it reconstructs by spatial intuition and topological relations the logical shape assigned by the decimals to the entire structure. On every virtual page, we find all references and formal, expressive and aesthetic expedients that can represent its sense to us; at the same time, we perceive all around the solid architecture of the whole, that gradually we learn to recognize and to take as reference. The *Tractatus* exploration by hypertextual pages, instead of in strict decimal sequence, is no longer an obliged, uneven route, but it is similar to the immersion into one musical score for several voices, or in one rather huge architectural piece of work. At every visit, we pick up some further particular, and we make a more perspicuous image of the form, the assonances, the sense of the whole.

The two instruments – the database for a punctual inspection of *Prototractatus* strategies, and the hypertext for hermeneutical observation of *Tractatus* views – are thus in a true synergic symbiosis.

Literature

Bazzocchi, Luciano 2005, "The Strange Case of the Prototractatus Note", in *Time and History – Papers of 28. International Wittgenstein Symposium*, Kirchberg am Wechsel, 2005, pp. 24-26.

Bazzocchi, Luciano 2006, "About «die letzte Zusammenfassung»" in *Cultures: Conflict-Analysis-Dialogue – Papers of the 29th International Wittgenstein Symposium*, Kirchberg am Wechsel, pp. 36-38.

McGuinness, Brian 1989, "Wittgenstein's pre-Tractatus manuscripts", in *Grazer Philosophische Studien*, 33, pp. 33-47

McGuinness, Brian 2002, "Wittgenstein's 1916 Abhandlung", in *Wittgenstein and the Future of philosophy,* Haller, H., Puhl, K., Wien, pp. 272-282.

Mayer, Verena 1993, "The numbering system of the *Tractatus*", in *Ratio* (*New Series*), IV, Oxford, pp. 108-120.

Rhees, Rush 1973, "Review of Wittgenstein, *Prototractatus*", in *Philosophical Review*, 82, , pp. 530-531.

Wittgenstein, Ludwig 1971 1996[2], *Prototractatus*, B.F McGuinness, T.Nyberg and G.H. von Wright eds., Routledge & Kegan Paul, London.

Wittgenstein, Ludwig 1989, *Logisch-Philosophische Abhandlung*, Hrsg, B. McGuinness, J. Schulte, Frankfurt.

Email: l.bazzocchi@fls.unipi.in

---

[7] In the successive year of work, Wittgenstein will add other sections to branch 6, modifying number 6.3 in 6.4 and cancelling by rubber the over cited proposition 6.2.

Language games of literature

Ondrej Beran, Prague, Czech Republic

Language games are bound to particular contexts. An utterance (a move in the game) is made under certain input circumstances and has certain practical purpose. The use of language in a game is governed by rules. They are not explicit (they are learned practically, as a skill) – but perhaps they can be expressed explicitly *ex post.* I.e.: (almost) everyone is able to form sentences understood by others in the intended sense and to use them in such situations, in which they are usually ("correctly") used. But not everyone is able to state explicitly, how a correctly formed expression is to be recognized, and what are the rules of its correct usage. Can we – at least potentially – grasp explicitly the rules of the correct formation and the correct usage of the expressions of *any* language game? (and are there always any such rules at all? – cf. Wittgenstein 2005, p. 25)

A popular counterexample – i.e. of a game, that is no doubt meaningful, but its rules cannot be grasped explicitly (as it seems) – is literature. This is so in two senses. Firstly concerning the rules of the correct formation and the correct usage of literature (i.e.: what can be taken as literature?); secondly concerning the rules of the right usage of value judgments like "This is a beautiful poem". However, we presume that literature *can* be distinguished meaningfully from non-literature, as well as good literature from bad one.

The problem may be trivial: for there is a lot of instructions for the creative writing, and a lot of theories in aesthetics, philosophy of art, theory of literature. The difficulty lies in the abundance. The rules of the correct use of the language game of shopping in a store seem to be rather simple and uniform; whereas the existing "rules" of the right literature production and the right evaluation definitely not.

If we want to keep the view that literature nonetheless *is* a meaningful language game, we must demonstrate that it's possible to distinguish between literature and non-literature – as well as between "big" and "not big" – even if the borderline wasn't sharp. But the game of literature is not like the others. So the distinction literary/non-literary will probably differ, too.

The idea, that the language of literature differs from any other use of language, is not unusual. For example Heidegger says that whereas poetry (and art) just shows, "reveals" things in their pure existence, as they are, the ordinary language expresses and shapes the whole of the "interpretation" of this world, which is a system of *practical* connections and consequences. (Heidegger 1977 § 34; 1954, p. 190ff)

This is surely an impressive view, but also literature (and the theory of literature) has its position in the context of our practical experience (the word "literature" has a more or less *definite* meaning, that one can learn). "Practical" does not mean that the use of a literary language expression or of an esthetical judgment can bring us some immediate (physical?) benefit. This cannot be said about many linguistic activities, including the non-literary ones. "Practical" means here, that also literature and aesthetics originate in some intersubjective frame of circumstances and consequences and must obey some rough rules in order to get into this frame. What we call "literature" must

fulfill some formal necessities (it *is* a language unit, either printed on a paper, or traded orally) and is usually received in a certain manner – it is read or listened to under certain circumstances: if the recipients have time and mind for it, if they want to evoke some mood or effect, and so on. These criteria are not unlimited: in a certain mood, under certain circumstances, or in order to evoke some effect, literature is just *not* used – for example in the army, if a private asks an officer for/tells him anything, he definitely does not use a language manner that we *usually* call "literary". What we qualify as "literature", has a *restricted* use (let's say in the sense sketched above).

But if we try to understand literature this way, problems arise. For this is a sketch of the rules of the *usage* of the literary language game; and the rules of the correct formation of the expressions are not touched. "Bring me sugar" is definitely a correctly formed sentence, that can be used correctly under certain circumstances (and under some others not). "Milk me sugar" seems *not* to be a correctly formed sentence. But it can be meaningfully used, as well as the seemingly incorrect "sentence" *the slithy toves did gyre and gimble in the wabe* – namely just as literature. And this is the problem. In any other language game – as it seems – the correct formation of the expressions is a prerequisite for possible meaningful and correct usage. In the literary language game, the correct usage becomes independent from the correct formation of the expressions. Perhaps the notion of the "correct formation" loses its sense at all within literature? (cf. Wittgenstein 1958, § 498)

Literature seems to be an open and dynamic game. We cannot say in advance, what is a correctly formed literary language expression, we cannot also state easily (if at all), which language phenomena don't belong into literature. We have seen that – under normal circumstances – a correctly formed expression is one that can be used meaningfully in a language game. But imagine the most improbable expression from the most distant context (mathematics, warfare, chemistry, economy, sport, ...) – we can never say it cannot be used in the literary language game (in a literary work, even in a "good" one) – and who knows: maybe it has *already been* used... An astonishing result seems to follow from this: the language game of literature encapsulates somehow (*in potentia*?) all the other games.

We can say, in a sense, that the distinction between literary and non-literary differs from most of other distinctions between something and non-something. When something is qualified as "not big", it cannot be qualified as "big" in the same meaning. This is an idealization, too. The cellular phones in 1995 were not big in comparison with those in the year 1990, but are big in comparison with the present types. The concrete use of almost all concepts changes through time. But this process is extremely rapid in the case of "literature" – it seems to subvert over and over a possible distinction between literary and non-literary. It is noteworthy that this process does not proceed in both directions. We can state, that some language move was a non-literary one, but in the very same moment it can be incorporated in a literary work and become literary. Non-literary seems to tend steadily into literature. But not in the reversed direction. From this reason, we cannot state firmly what *is* literary – is the sentence "I like yellow

cats" a literary one? Nobody knows (whereas we can much rather state, whether it can be a "scientific" sentence or an "army" one). But once something is admitted "officially" as literary (like "To be or not to be... "), can it be non-literary anymore? So we can say what is non-literary, but not always what is literary; and literature seems to occupy more and more the position of non-literature. So: isn't there anything paradoxical in what we call "literature"? (One can say: when everything becomes literature, nothing will be literature anymore.)

As well as all the language games, literature should have its rules, too – in order to be a language game at all. The rules are established by means of a custom or institution, which is intersubjective (Wittgenstein 1958, § 199). Grammatical sentences (rules) seem to be fixed, whereas the "ordinary sentences" not. Of course, rules change, too. However, the dynamics of their change is much slower. They are almost in all cases implicit – they are often even not perfected. There can be language games that are meaningful only "more or less". And their rules are "made up (or changed) as we go along". (Wittgenstein 1958, § 83) In a sense, literature proves itself to be just this type of language game.

The non-literary language moves (like "Two pints of beer, please") also can be made under very various circumstances and for very various goals. But their use is "more correct" in certain contexts and "less correct" in other contexts. The sentence is uttered "more naturally" by someone sitting in a beer house, having a certain expected result (two pints of beer brought), than – let's say – by a student in an university lecture about mathematics. But this doesn't mean, that the latter utterance cannot be meaningful – that it cannot cause the effect, for which it was directly designed and planned by the speaker – the deportation of the speaker from the lecture hall by the university security guard, for example. The difference between meaningfulness of these two kinds is actually not qualitative, I think (not so Wittgenstein – see 1958, § 498). The first type of use is so to speak a "default" one, whereas the second is "deviant" – but both are meaningful in their appropriate way. We can talk about "default" use of literature, too. A sonnet about moonlight can be foisted into a company annual report or declaimed to the salesman in a food store (to the question, what I would like) – but this is a less "default" (and in this sense less meaningful) use of literature.

In the case of literature, there is a strong zeal to state *explicitly*, what is literature and what is not, and also what is its social purpose, so to speak. But once something is stated explicitly, the subversive nature of literature manifests itself – someone uses the definition and tries to create something that can be called "literature", but is different from the view of the theory of literature. Perhaps we can grasp the notion "literature" just by means of this criterion of its self-revaluating (hermeneutical) and rules-breaking nature. It is in a sense true; but not fully: literature cannot break all the limits, without measure – otherwise the distinction between literature and non-literature would vanish at all. On the other hand, the distinction between literature and non-literature is not like the distinction between big and not big: anything non-literary can become literary and to state what is literary is not easy.

This paradoxical nature of literature is probably what Heidegger had in mind: our non-literary language games and concepts are ruled by a certain pragmatical respect: the delimitation of the distinction big/not big can change in time, but not dramatically, it is rather fixed and sharp. This is mainly because "big" is a pragmatical concept, that we use to "cope with" pragmatical needs (cf. Rorty 1980). Literature doesn't function quite like this. Our literary language games don't "cope with" anything, at least not in the same way as the games operating with concepts like "big" or similar. Literature has a certain frame delimiting it from non-literature, and this frame is given intersubjectively, but compared to other "coping-with" games, that are rather "sports" (see Lance 1998), literature is a "pure game", its notion is given by a "pure" convention (there is a very vague "coping relation" in its case, if any). However, the limit exists.

As this limit is given conventionally, it faces two problems: firstly, the subversive, self-hermeneutical nature of literature is still trying to reinterpret (or break) this limit. This activity is made possible both by the absence of a clear pragmatical "coping-with" function, and by many explicit definitions of what (real, valuable, ...) literature is, purported by the theory of literature. And how can we explain the fact that there are many examples of "officially admitted" literature, not trying to break the definition limits at all? Most of the literary production totally lacks this ambition, and still *is* literature. This points to the second problem of the conventional definition of literature. The fact is, that there is no *one* convention on what is literature, there are many, and each one quite probably has counterexamples (including the "subversive/rules-breaking" conception sketched above). The generality of the one word "literature" proves itself to be misleading. We are tempted by our "craving for generality" to believe that there must be *one* corresponding thing, as there is *one* word. But it is neither the case of "Beauty" or "Good" (see Wittgenstein 2005, p. 17f), nor of "literature".

There is no *one*, but a plenty of games called "literature", bound with each other by the "family resemblance". However, the nature of literature is queer – literature, or rather some of the literary games behave parasitic with respect to the theory of literature. Whereas we can clear the darkness about "Good", if we try to describe all the facets of the use of the word "good" – and sometimes we can show this way that some particular uses of the word don't make sense – literature behaves contrariwise. The attempts to grasp or describe the sense of "literature" cause a multiplication and some more complications in the "family" of literary language games.

We can conclude with the following remarks: the limit between literature and non-literature exists, but is somehow "unilaterally open" – one can rather distinguish non-literature from literature than literature from non-literature. This is because some (hermeneutical) language games of literature still tend to reinterpret their own rules, or rather to extend them continuously into the realm of non-literature. Literature doesn't "cope (directly?) with" pragmatical needs like some other games, it is rather a more "purely conventional" game. So there are very many literary language games – of a very large, complicated and diversified family. The activity of the theory of literature proves to be a Sisyphus' work: it provides a material for further complication and diversification rather than a clearing.[†]

Literature

Heidegger, Martin 1954 "Dichterisch wohnet der Mensch", in *Vorträge und Aufsätze*, Pfullingen.

Heidegger, Martin 1977 *Sein und Zeit*, Frankfurt a.M.

Lance, Mark 1998 "Some Reflections on the Sport of Language", in James Tomberlin (ed.), *Philosophical Perspectives, 12: Language, Mind, and Ontology*, Oxford.

Rorty, Richard 1980 *Philosophy and the Mirror of Nature*, Princeton.

Wittgenstein, Ludwig 1958 *Philosophische Untersuchungen*, Oxford.

Wittgenstein, Ludwig 2005 *The Blue and Brown Books*, Oxford.

Email: ondrejberan@yahoo.com

Risk and Technoscience in the Information Society

Ewa Binczyk, Torun, Poland

My paper considers selected functions of science and technology in the informational, global society. Apparently, the "knowledge economy" today is driven by scientific discoveries and technological innovations. They intensify and accelerate the processes of globalization, but they also produce unpredictable side effects and risk. I will argue, that to understand those destabilizing aspects adequately, we need a more empirical description of technoscience itself. Such a description is already present within various research areas like a new history of science, empirical case studies of controversies and catastrophes, science and technology studies, and the actor-network theory. They have a relatively long (in some cases thirty years old) tradition. The results of those fields suggest that politics, as well as the ethics of the information society, cannot be built without taking into account the risky side effects of technoscience.

1. The Information Society as a Final Stage of Coordination

Before I discuss the role of science and technology today, let me present my understanding of the global society as a final stage of coordinating human behavior. I propose to view humankind as a Do-It-Yourself project, expanded throughout the centuries. This specific "project," to a great extent, consists of processes by which humans created and maintained networks of coordination, standardization and mutual interdependence. Those networks seem to be essential in understanding the growth of a civilization. They allow us to become more effective, quicker, and precise when we cope with reality. Mutual collaboration in achieving certain goals is intensified through them. Moreover, those networks were, from the beginning, materially rooted in objects. We can say that society has always been saturated with technological appliances, from road systems and wheels to assembly lines and digital infrastructure.

Those networks externalized or decontextualized phenomena that had, heretofore, been too abstract to grasp or control. For example, the innovation of money externalized abstract value, allowing the standardization of human behaviour in many contexts that had been completely incommensurable before. Notes externalized such an indefinable phenomenon as music. Literacy, due to the decontextualization of speech, externalized thinking. According to Jack Goody for example, literacy facilitated the discovery of logical and grammatical rules, criticism, rationalism, and fiction (Goody 1978).

In this context, globalization is simply an intensification of the coordinating processes described above. Even if we still remember that networks of coordination became more sophisticated, global, and complex today, their nature is still the same. They allow us to coordinate our efforts and they need to be rooted in material, technological systems. In this respect, between contemporary and previous stages of humanity, there is merely a difference in quantity not quality.

There is a deep interdependence between the phenomena of globalization and informatization of society. The informational society is usually defined as a post-industrial stage, where the distribution of information and knowledge plays a significant economic, political and cultural role. We assume that new digital technologies like computers, the Internet, and media networks caused an essential change in scale called the information revolution. But knowledge and informational technologies have always played a crucial role. According to Thomas H. Eriksen, for example, in the history of humankind we faced several interesting informational revolutions before such as the innovation of symbolic communication, literacy and mathematical calculus, printing, television. Even clocks and time zones can be seen as a new informational technology (cf. Eriksen 2001). All of those innovations, materialized in objects and spread in networks, allowed the coordination and standardization of human behavior. It can be argued, then, that globalization, informatization and technological changes support each other. The information society is a current stage of those transformations.

2. Technoscience – a Domain of Controlling and Predicting

If the human project of domesticating the environment has some innovative core, it takes form in scientific and technological efforts. I refer to technology in a quite classical way, as to *the sphere of human practice* in which artifacts and artifactual systems are creatively invented and incorporated (cf. Verbeek 2005: 3; Hughes 2005: 2-3). Technology plays an excellent niche role for the proliferation of different ways to cope with reality. But within a neopragmatic, Darwinian perspective, science also can be seen as *a set of practices* invented and maintained to control and predict things while coping with the environment. I use the term "science" as referring to a practice invented in the 17th century in England. The first English scientists tried to systematically build empirical experiments in laboratories. They tried to predict the future, while controlling all possible disturbing effects. One of those first experimenters, Robert Boyle, invented the air pump to prove the existence of a vacuum. He convinced the public that a scientific expert can speak in the name of facts because he could repeat an experiment and correctly interpret a working machine (cf. Shapin, Schaffer 1985; Latour 1993). If we focus on an empirical, laboratory-centered dimension of science, we perceive mainly the successful practices of controlling and predicting, dependent on instruments and analogical to technological efforts.

Within the research areas mentioned above, such as empirical case studies of controversies and catastrophes, science and technology studies or the actor-network theory, there is a strong tendency to disregard the difference between science and technology. Such thinkers as Bruno Latour, for example, introduce the notion of technoscience in this context (Latour 1987). This tendency derives mainly from a large disappointment towards the traditional, speculative views of science, presented in such fields as the philosophy of science or epistemological views of the history of science. Those views attempted mainly to describe the logic of scientific theories, understood as coherent systems of true sentences. This is why they are criticized as partial, focused only on an abstract, linguistic level. Traditional views dealt only with the final, official results of scientific work.

Science and technology studies propose to take into account not only scientific theories, but also the real practice in laboratories. While studying science empirically, we observe a mundane, collective undertaking, contextually rooted and deeply reshaping other spheres such as institutions, law, ethics, politics, and even nature. Laboratory practice is supported by tacit knowledge, rooted in an institutional background, and regarded as deeply historical. Scientists replicate experiments in the closed contexts of laboratories that minimize disturbances; they can repeat trials, make errors without consequences (cf. Latour 1983), adjust hypotheses and look for the best explanations.

Ignoring the practical, material, artifactual dimension of science seems to be unjustified. Science has been always deeply embodied in instruments and interconnected with technological innovations (cf. Baird 2004). The work in the laboratory is often a question of guessing, trying as much as possible to manipulate ordinary objects, models, apparatuses, graphs, tables, maps, materials or samples. Technological instruments and concrete interventions in the material context of laboratories give voice to facts and codetermine the content of scientific knowledge. For example, microorganisms are only visible when we prepare them by staining them with aniline dye. Moreover, the stability of content in the history of science can be maintained exactly by those standardized methods and instrumental procedures. Without the equipment and laboratories, science would be powerless. Scientific knowledge is also objectified or made durable by material networks based on technological gadgets outside laboratories.

It is misleading to maintain the difference between purely abstract scientific theory and technological application. Historically, technology was very rarely an unproblematic, automatic application of a theory. On the contrary, new instruments or technological solutions very often played the role of impulses that caused theoretical changes. Theorizing and "technological" manipulation of objects or instruments almost always went together. It has been difficult to develop an effective theory without anchoring it in material models, apparatuses, and real experiments.

3. Risk Inscribed in Technoscience

Contemporary networks of coordination become more overwhelming and sophisticated. As a result, we face new consequences of such intensification. One of them is a new form of risk in the contemporary world. By risk, I mean a probability of some dangerous, unexpected or unpredictable side effects of an innovation. Of course, the term of risk is deeply value-laden. We cannot objectively define "dangerousness," without taking into consideration our axiological preferences. Moreover, we do not even have today any unproblematic or effective methods to estimate or calculate risk, to objectively compare the costs and benefits of some changes.

Risk turns out to be immanently inscribed in technoscience. Technoscience has to go beyond laboratories and intervene with the external context to check its efficiency. The effectiveness of many devices such as missiles, airplanes, and dams, is, in fact, ultimately checked in the environment where these devices must function outside of the idealized arrangements of laboratories. When we study catastrophes, like coastal oil spills, the Challenger or Chernobyl tragedies, it turns out that failures in complex systems are likely. Various components of those systems interact quickly over rigid connections. This is why

Charles Perrow, for example, believes that we should treat catastrophes and accidents as "normal" (Perrow 1984).

Unforeseeable side effects of innovations cannot be avoided, not only because of the complexity, but also because of the recursive dynamics of some phenomena or feedback effects. For example, some toxic substances, genetically modified organisms, or radiation can prove to be dangerous only after accumulation in time or some complex interaction with the environment. Moreover, risks do not happen in isolation. Sometimes one risk must be accepted in order to avoid another.

Earlier human innovations like wheels, telegraphs, or weapons, appeared to be easily controlled, and rationally explained, because the number of variables in them was limited. But during the second industrial revolution we invented and expanded highly complex systems that interact with each other. We no longer observe any device in isolation. For example, an effective car can exist only in a context of gasoline, gas stations, pumps, highways, mechanics, manufacturing plants, driving schools. Multiple infrastructures turn out to be mutually dependent now. Furthermore, it is said that after the information revolution, interactions began occurring simultaneously and not sequentially, which only accelerated changes.

It is certain, that technoscience reduces risk in many areas. But the specificity of the risk today is that, due to the extent of global interconnections and mutual interdependence on such a large scale, a new innovation can threaten the stability of the whole society or even nature. No wonder, that the notion of risk is widely used among thinkers who try to diagnose the conditions of the contemporary, dynamic world. A good example here is Beck's conception of the society of risk (Beck 1992). This German sociologist enumerates the following risky areas: ecological risks, health hazards, catastrophes, weapons of mass destruction, terrorism, financial risks on the speculative markets, and unemployment risk within the global economy.

4. A Cognitive Blockade

According to Bruno Latour, we need a more adequate recognition of the processes in which the parameters of the global, informational world are dynamically reshaped. To achieve this goal, the innovative, destabilizing role of technoscience should be publicly discussed. The scientific and technological "progress" cannot be perceived as unproblematically good. The shape and possible directions of technoscientific development should be submitted to the prior political public debate. (The discussion created post factum, when the innovation is already incorporated into the market and society, is usually too late.) Innovations should be analyzed holistically, as gradually emerging networks, influencing other, sometimes distant domains, due to their surprising ramifications. Let me present here five examples. It turns out, that: 1) bioscientific discoveries can facilitate bioterrorism; 2) the introduction of some genetically modified organisms can destabilize an ecosystem; 3) the innovation of organ transplants can create serious legal problems and new types of crime; 4) the use of animals as organ factories can produce ethical repercussions; 5) the free introduction of genetic screening can collapse the insurance system.

According to Latour, the impact of technoscience remains so difficult to recognize because of a specific cognitive blockade. It makes us almost incapable of looking for the distant side effects of contemporary technoscientific interventions. Innovations are perceived as innocent, iso-

lated objects, in spite of the fact that they need to be constantly maintained by different infrastructures, and that they deeply reshape other spheres. This is why the global effect of destabilization in the ethical, political or legal domain is denied. Moreover, the risk and erroneous trials immanently inscribed in technoscience are ignored, or ideologically presented as "human errors". Complicated processes, in which transformations emerge, are often "black-boxed," hidden away and forgotten about. The history of innovation usually goes unrecognized. Rejected alternatives are made invisible while the controversial history of many "objective" facts and theories is simply erased. All of those cognitive tendencies should be rethought seriously to understand the role of technoscience today.

Literature

Baird, Davis 2004 *Thing Knowledge. A Philosophy of Scientific Instruments*, Berkeley, Los Angeles, London: University of California Press.

Beck, Ulrich 1992 *Risk Society: Towards a New Modernity*, New Delhi: SAGE.

Eriksen, Thomas Hylland 2001 *The Tyranny of the Moment: Fast and Slow Time in the Information Age,* Pluto Press.

Goody, Jack 1978 *The Domestication of the Savage Mind*, Cambridge: CUP.

Hughes, Thomas P. 2005 *Human-Built World. How to Think about Technology and Culture*, Chicago, London: The University of Chicago Press.

Latour, Bruno 1983 *Give Me a Laboratory and I will Raise the World*, in: Karin Knorr-Cetina and Michael Mulkay (eds.), *Science Observed: Perspectives on the Social Study of Science*, London: SAGE, 141-170.

Latour, Bruno 1987 *Science in Action: How to Follow Scientists and Engineers Through Society*, Cambridge, MA: Harvard University Press.

Latour, Bruno 1993 *We Have Never Been Modern*, New York: Harvester Wheatsheaf.

Perrow, Charles 1984 *Normal Accidents: Living with High-Risk Technologies*, New York: Basic Books.

Shapin, Steven, Simon Schaffer 1985 *Leviathan and the Air-Pump: Hobbes, Boyle and the Experimental Life*, Princeton, NJ: Princeton University Press.

Verbeek, Peter-Paul 2005 *What Things Do. Philosophical Reflections on Technology, Agency, and Design,* University Park, Pennsylvania: The Pennsylvania University Press, trans. Robert B. Crease.

Email: Ewa.Binczyk@umk.pl

Franz Brentanos philosophisches Werk im digitalen Zeitalter

Thomas Binder, Graz, Österreich

I.

Im März 2007 erschien in der New York Times unter dem Titel „Knowledge Lost in a Digital Age"[1] ein Artikel, in dem die Schwierigkeiten beschrieben werden, die die Bewahrung des kollektiven kulturellen Gedächtnisses in einer Welt bereiten, in der einerseits Informationen zunehmend über digitale Netzwerke bereitgestellt werden, in der aber andererseits auch die Nutzer – und hierher gehören natürlich auch die Wissenschaftler – bei der Informationssuche sich immer mehr auf die bequeme und schnelle online-Recherche beschränken. Die Folge davon ist, daß Kulturgüter, die in nicht-digitaler Form existieren, immer mehr in Gefahr geraten, aus dem kollektiven Bewußtsein zu verschwinden. Als Haupthindernisse, die einer Digitalisierung dabei im Wege stehen, werden meist nicht verfügbare finanzielle Mittel, Unsicherheit in bezug auf technologische Standards und Copyright-Fragen genannt. Diese Gefahr des „Verschwindens" ist natürlich auf dem Gebiet der Geisteswissenschaften genauso – aufgrund der erwähnten finanziellen Engpässe eher noch mehr – gegeben, als in den Naturwissenschaften oder im Unterhaltungsbereich. Man hat also auch auf dem Gebiet der Philosophie damit begonnen, zumindest die Klassiker in „digitaler Form" bereitzustellen. Häufig handelt es sich bei dieser „digitalen Form" aber lediglich um digitalisierte Druckausgaben, die zwar um bescheidene Suchfunktionen angereichert wurden, aber die Möglichkeiten des elektronischen Mediums bei weitem nicht ausschöpfen.

Eine bemerkenswerte Ausnahme bildet hier die digitale Ausgabe des philosophischen Nachlasses von Ludwig Wittgenstein, die *Bergen Electronic Edition*[2] [BEE]. Werfen wir, bevor wir näher auf sie eingehen, einen kurzen Blick auf die editorische Vorgeschichte.

Ludwig Wittgensteins philosophischer Nachlaß war zunächst nur einem engeren Kreis von Interessierten bekannt. In der breiteren Öffentlichkeit dagegen wurde man sich immer schmerzlicher bewußt, wie sehr es an zuverlässigen Quellen mangelte. Lange Zeit mußten die 1953 von Rush Rhees und G.E.M. Anscombe edierten *Philosophischen Untersuchungen* die Hauptlast der Forschung tragen. An dieser Situation änderten auch die 8 Bände der deutschsprachigen Werkausgabe, welche seit 1984 vollständig vorliegt, nicht wirklich etwas, da diese kaum die Kriterien einer historisch-kritischen Edition erfüllen konnten: sie spiegeln vielmehr die Praxis der ursprünglichen Herausgeber wider, jene gewaltige Ansammlung von philosophischen Bemerkungen, die Wittgenstein hinterlassen hat, auf eine Weise zu „Werken" zusammenzustellen, die ohne die Kenntnis ihres Zusammenhanges mit dem Gesamtwerk kaum nachzuvollziehen ist. Aufgrund dieser unbefriedigenden Situation wurde bereits 1967 an der Cornell University das Unternehmen einer Faksimile-Edition ins Auge gefasst: das Ergebnis war der sog. *Cornell-Film*, der auch von zahlreichen Institutionen erworben wurde. Allerdings muß dieser Versuch als wenig gelungen qualifiziert werden, da er Wittgensteins Nachlaß nur unvollständig und editorisch kaum aufbereitet reproduziert. Auch wurden Textstellen unleserlich gemacht, um private

Notizen zu verbergen. Als ersten ernsthaften Versuch einer traditionellen historisch-kritischen Edition kann daher erst Michael Nedos *Wiener Ausgabe* bezeichnet werden, die sich allerdings auf das zum sog. *Big Typescript* hinführende Nachlaßmaterial von 1929 bis 1933 konzentriert. Von den rund 70 geplanten Bänden sind zwischen 1993 und 2003 aber nur 9 Bände erschienen, die Finanzierung des Projektes durch den österreichischen Forschungsfond FWF wurde mittlerweile eingestellt.[3] Neben der *Wiener Ausgabe* wurde aber am Wittgenstein Archiv der norwegischen Universität Bergen ein zweiter, wesentlich radikalerer Versuch unternommen, Wittgensteins Nachlaß der philosophischen Öffentlichkeit zugänglich zu machen, nämlich die schon erwähnte BEE.

Nach rund zehnjähriger Entwicklungs- und Transkriptionsarbeit eines mehrköpfigen Teams unter der Leitung von Claus Huitfeldt wurde sie schließlich auf nicht weniger als 6 CD-Roms publiziert. Eine Web-Version der BEE ist über die online-Plattform INTELEX zugänglich. Der Wert dieser elektronischen Edition besteht für den Benutzer vor allem aus zwei Dingen: Zum einen werden alle Manuskripte Wittgensteins – in der Anordnung dem Nachlaßkatalog von Wrights folgend – unter einer integrierenden Programmoberfläche zusammengefaßt, die es erlaubt, in allen Dokumenten simultan zu suchen und so leicht Verbindungen herzustellen, die über den einzelnen Text hinausgehen; zum anderen zeigt ihr mehrstufiger Aufbau eindrucksvoll, wie sich komplexes Quellenmaterial transparent aufbereiten lässt – im Gegensatz zu einer traditionellen Buchedition, bei der der Editor immer gezwungen ist, neben dem eigentlichen edierten Text alle textkritischen und erläuternden Informationen auf die singuläre Ebene einer Seite zu projizieren, ist bei dieser elektronischen Edition die Aufteilung der Informationen auf mehrere Ebenen möglich, die sich miteinander verknüpfen und nebeneinander präsentieren lassen. Das Manuskript Wittgensteins wird so in drei Versionen präsentiert: i) als digitales Faksimile, ii) als diplomatische Transkription, und iii) als normalisierte Transkription. Die Faksimile-Ebene bietet die digitalen Reproduktionen (fast) aller Autographe in einer lesbaren Qualität; die diplomatische Transkription versucht, Wittgensteins Text mit allen seinen Eigenheiten (inklusive seiner graphischen Anordnung) so exakt wie möglich wiederzugeben (Ebene der Textkritik); und die normalisierte Transkription stellt eine Lesefassung bereit, die es dem Benutzer ermöglichen soll, sich auf die inhaltlichen Aspekte zu konzentrieren. Von den weiteren attraktiven Möglichkeiten sei hier nur eine erwähnt: Während gedruckte Editionen einen Text meist für viele Jahre fixieren, lassen sich bei elektronischen Editionen Korrekturen und Verbesserungen in Form von Updates vornehmen, wodurch die Edition zu einer Art „living document" wird. Im Falle der BEE wird genau dies in Ansätzen schon praktiziert: Auf der Website des Wittgenstein Archivs wird eine Seite bereitgestellt, auf der BEE-Benutzer von ihnen entdeckte Transkriptionsfehler eintragen können[4].

II.

Nach dieser ausführlichen Einleitung stellt sich natürlich die Frage, was Wittgenstein mit unserem eigentlichen Thema Franz Brentano (1838-1917) verbindet. In philosophischer Hinsicht sind die Punkte, an denen sich Wittgenstein mit Brentano, der so unterschiedliche Strömungen wie die Phänomenologie oder sie sog. „österreichische Philosophie" angeregt hat, berührt, umstritten und lassen sich noch am ehesten unter das Stichwort „philosophische Sprachkritik" subsumieren. Erstaunliche Parallelen bestehen aber hinsichtlich des Nachlasses und der Editionsgeschichte. Ähnlich wie Wittgenstein war auch Brentano sehr zurückhaltend mit Publikationen. Die von Brentano selbst publizierten Schriften waren zwar etwas zahlreicher, aber die Texte, durch die er seine eigentliche philosophiehistorische Wirkung erzielte – vor allem die Vorlesungen aus seiner Wiener Zeit und seine späten Diktate – blieben allesamt unveröffentlicht und nur seinem engsten Schülerkreis zugänglich. Bei seinem Tod 1917 lagen ca. 25.000 Seiten an wissenschaftlichen Manuskripten vor, eine viele tausend Briefe umfassende wissenschaftliche und private Korrespondenz noch gar nicht eingerechnet.

Erste Bemühungen um diesen Nachlaß wurden bereits unmittelbar danach durch seinen Sohn J.C.M. Brentano[5] unternommen, der schließlich Oskar Kraus und Alfred Kastil – beide Schüler von Anton Marty, dem langjährigen Statthalter Brentanos in Prag – mit der Herausgabe der Schriften seines Vaters beauftragte. Von 1920 bis zu Kastils Tod im Juli 1950 wurde von beiden ein beträchtlicher Teil des Nachlasses in 12 Bänden der *Philosophischen Bibliothek* des Meiner-Verlages veröffentlicht. Die Innsbrucker Philosophieprofessorin Franziska Mayer-Hillebrand, eine Schülerin Kastils, setzte als Nachfolgerin die Editionstätigkeit ganz im Sinne ihres Lehrers für weitere zwei Jahrzehnte fort.

So verdienstvoll und unentbehrlich diese Arbeit für die Verbreitung und Bewahrung der Lehren Brentanos auch war, so zog sie doch zunehmend kritische Stellungnahmen auf sich, in denen Zweifel an den editorischen Methoden der Herausgeber formuliert wurden. Zu bedenken ist dabei allerdings, daß die Schwierigkeiten, die die Herausgeber vorfanden, beträchtlich waren. Brentanos Logikvorlesung, von Mayer-Hillebrand unter dem Titel *Die Lehre vom richtigen Urteil*[6] herausgegeben, ist ein gutes Beispiel für diese Probleme: An zahlreichen Stellen nur stichwortartig ausgeführt, liegt sie in verschiedenen Varianten vor, die von Brentano immer wieder korrigiert, ergänzt und weiterentwickelt wurden. Im Vorwort beschreibt und rechtfertigt Mayer-Hillebrand ihre Vorgehensweise. So habe sie im Abschnitt über die Theorie des Urteils, der von Brentano nicht vollständig ausgearbeitet worden war, längere Passagen aus den Vorlesungen ihres Mannes Franz Hillebrand (auch er ein Schüler Brentanos) übernommen.

Die Berechtigung dazu leitet sie daraus ab, daß Hillebrand diese Vorlesungen seinerseits unter Benutzung seiner eigenen Mitschriften von Brentanos Logikkolleg konzipiert habe. „Selbstverständliche Pflicht als Herausgeberin war es mir, alle Ergänzungen und Einfügungen durch entsprechende Hinweise kenntlich zu machen, wenn dabei auch nicht auf jeden Satz Bezug genommen werden konnte." Und weiter: „Es erschien angemessen und Brentanos Intentionen gemäß, in der vorliegenden Publikation nicht die Gedanken einer früheren Entwicklungsstufe, sondern seine endgültige Lehre von der Erkenntnis vorzulegen. Dies aber verlangte Ausschaltung und Ersatz einzelner Teile durch spätere Abhandlungen."[7] Diese editorische Praxis, einerseits im Interesse einer scheinbar abgeschlossenen philosophischen Lehre Werke zu kompilieren, die Brentano in dieser Form nie verfasst hat, und andererseits frühere Stufen der theoretischen Entwicklung zu eliminieren, um eine definitive Fassung dieser Lehre präsentieren zu können, hat schon frühzeitig zu scharfer Kritik Anlaß gegeben[8]. Zu einer Modifikation der editorischen Methoden führte das aber nicht, da sich die Herausgeberin auf eine diesbezügliche briefliche Mitteilung Brentanos an Kraus berufen zu können glaubte. Da Brentanos eigener Umgang mit textkritischen Fragen – vor allem im Zusammenhang mit seiner Aristoteles-Rezeption – unter Zeitgenossen wie Theodor Gomperz oder Eduard Zeller einigermaßen umstritten war, kommt diesem Argument aber nur sehr eingeschränkte Bedeutung zu. Zusammenfassend ist also über die bei Meiner bis 1968 aus dem Nachlaß edierten Schriften[9] das Urteil zu wiederholen, das oben über die Wittgenstein-Edition von Rhees und Anscombe gefällt wurde: Die editorischen Methoden entsprechen in keiner Weise den aktuellen Standards historisch-kritischer Editionen.

Als ein für die Geschichte der österreichischen Philosophie interessantes Detail am Rande sollte nicht unerwähnt bleiben, daß Rhees ein Schüler Kastils war und diesen in den Dreißigerjahren in Innsbruck und Wien aufgesucht hat. Im Nachlaß von Rhees fanden sich Brentano-Transkriptionen von Kastil. Es ist durchaus vorstellbar, daß Rhees in seiner späteren Tätigkeit als Wittgenstein-Herausgeber von Kastils editorischen Methoden beeinflußt wurde. Rhees war noch in den Fünfzigerjahren mit J.C.M Brentano, Mayer-Hillebrand und anderen Brentano-Forschern in brieflichem Kontakt. Auch war er als Brentano-Übersetzer im Gespräch und hat 1956 eine Rezension zu Brentanos Religionsphilosophie verfasst.

Abschließend sei noch angemerkt, daß ebenso wie bei Wittgenstein auch im Falle Bretanos die Nachlaßmanuskripte verfilmt wurden. J.C.M. Brentano und seine Frau Sophie produzierten in den 50iger Jahren Schwarzweißfilme der philosophischen Manuskripte und eines Teiles der Korrespondenz, die sie einigen Universitäten in den USA und Europa zur Verfügung stellten. Die teilweise eingeschränkte Qualität der Filme und die Komplexität und Schwierigkeit der Manuskripttexte haben aber zur Folge, daß sie kein Ersatz für eine Edition sein können.

---

nen von Wittgensteins Manuskripten in Angriff zu nehmen. Vgl. dazu die Besprechung der BEE durch den Autor in *Nachrichten [der] Forschungsstelle und Dokumentationszentrum für österreichische Philosophie*, 10 (2002), S. 98-106.

[5] Franz Brentanos einziger Sohn war Physiker, der bei Röntgen studiert hatte und u.a. Assistent von Laue gewesen war. Seine Rolle in der Editionsgeschichte der Schriften seines Vaters ist bisher viel zu wenig gewürdigt worden. Ohne seine Hartnäckigkeit und sein finanzielles Engagement hätte es wohl kaum eine Fortsetzung der Editionsarbeiten über 1945 hinaus gegeben. Die spannende Geschichte des Nachlasses selbst, die in Zürich beginnt, und schließlich in der Harvard College Library endet, wurde bisher noch nicht geschrieben. Vgl. dazu Th. Binder, „Die Brentano-Gesellschaft und das Brentano-Archiv in Prag". In: R. Haller (Hg.), *Skizzen zur österreichischen Philosophie*. Amsterdam / Atlanta: Rodopi (2000), S. 533-565, wo sich einige Bausteine dazu finden.

[6] Franz Brentano: *Die Lehre vom richtigen Urteil*. Nach den Vorlesungen über Logik mit Benützung anderer Manuskripte aus dem Gebiete der Erkenntnistheorie aus dem Nachlaß herausgegeben von Franziska Mayer-Hillebrand. Bern: Francke (1966).

---

[7] Ebda, S. XIIf.

[8] Direkt Bezug auf die Edition des Logikkollegs nimmt Jan Srzednicki: „Remarks concerning the interpretation of the philosophy of Franz Brentano". In: *Philosophy and Phenomenological Research* XXII (1961/62), S. 308-316. Zur Editionsproblematik bei Brentano vgl. weiter Josef M. Werle: „Bericht: Überlegungen zu einer Neuausgabe der Werke Franz Brentanos". In: *Phänomenologische Forschungen* 17 (1985), S. 143-164, und W. Baumgartner, Th. Binder, A. Reimherr: „Schritte zur elektronischen Edition des Werkes von Franz Brentano". In: A. Sell (Hg.), *Editionen – Wandel und Wirkung*. Tübingen: Max Niemeyer (2007), S. 206-211.

[9] Für die danach publizierten Nachlaßeditionen von Rolf George, Klaus Hedwig u.a. fällt dieses Urteil weitaus positiver aus.

III.

Fassen wir die im vorigen Abschnitt kurz dargestellte Editionsproblematik bei Brentano zusammen, ergibt sich die folgende Situation: i) Trotz der bisherigen Editionen aus dem Nachlaß sind wichtige Teile daraus noch immer nicht publiziert; ii) die bisher aus dem Nachlaß publizierten Werke sind mit wenigen Ausnahmen Werke, die von den Herausgebern nach oft schwer nachvollziehbaren Kriterien zusammengestellt wurden; iii) abgesehen von der problematischen Textzusammenstellung entsprechen auch die editorischen Methoden nicht mehr akzeptablen kritischen Standards; und iv) der zur Überbrückung der unbefriedigenden Situation hergestellte Film des Nachlasses kann eine kritische Edition nicht ersetzen.[10] Die Notwendigkeit einer kritischen Neuedition der Nachlaßschriften war also nicht länger abzuweisen. Die Bemühungen einer Gruppe von Editoren um Roderick Chisholm (Providence), Rudolf Haller (Graz) und Wilhelm Baumgartner (Würzburg), die schwierige Aufgabe einer lesbaren Edition, die zugleich textkritischen Anforderungen gerecht wird, in einer traditionellen Buchedition zu lösen, waren zunächst aber wenig erfolgreich.

Gerade diese höchst unterschiedlichen Anforderungen – möglichst authentischer Text einerseits, Lesbarkeit andererseits – führte schließlich zur Entscheidung, den Weg einer elektronischen Edition nach dem Vorbild der BEE zu beschreiten, die, wie wir oben gesehen haben, diesen Anforderungen bestens entspricht. In Diskussionen mit dem Wittgenstein Archiv stellte sich allerdings heraus, daß es sinnvoller sei, den Ansatz der BEE nicht einfach zu übernehmen, sondern gewisse neuere Entwicklungen für die Brentano-Edition zu berücksichtigen, in erster Linie Entwicklungen hinsichtlich des Datenformates.

Eines der Hauptprobleme einer jeden elektronischen Edition ist nicht so sehr die Haltbarkeit von Datenträgern wie Diskette, Festplatte oder optische Speichermedien, sondern das Format der Information selbst, das Nachhaltigkeit, universelle Lesbarkeit und Unabhängigkeit von proprietären Lösungen garantieren soll. Versuche, solche Datenformate zu entwickeln, gehen bis in die Sechzigerjahre zurück. Der erste echte Standard auf diesem Gebiet wurde aber erst Anfang der Achtzigerjahre mit der Standard General Markup Language (SGML) geschaffen. Auch die BEE ist in diesem Umfeld angesiedelt, setzt jedoch auf eine auf Wittgenstein zugeschnittene Sonderlösung, nämlich das von Claus Huitfeldt am Wittgenstein Archiv entwickelte Multi Element Code System (MECS). Aus diesem Grund wurde für die Brentano Edition nach einer alternativen Lösung gesucht. Erleichtert wurde diese Suche dadurch, daß SGML mit der eXtended Markup Language (XML) einen Nachfolger gefunden hat,[11] der inzwischen zu einem stabilen Standard unter den Auszeichnungssprachen geworden ist.

Es braucht hier nicht näher auf XML einzugehen zu werden, das in den letzten Jahren weite Verbreitung gefunden hat. Nur so viel: Bei XML handelt es sich um eine Art Informations-Container – XML enthält, formt, benennt und strukturiert Informationen. Das macht es mit in den Text eingebetteten Symbolen, die als Markup bezeichnet werden. Das Markup ist die Menge aller Elemente, mit denen die Textbestandteile *ausgezeichnet* werden. XML wird deshalb als Markup-Sprache bezeichnet. Um die Sache zu verkomplizieren, muß allerdings angemerkt werden, daß die Auszeichnungssprache XML im strengen Sinne gar keine Auszeichnungssprache ist: Eine Sprache hat ein festgelegtes Vokabular und eine festgelegte Grammatik. XML dagegen definiert selbst keine Elemente, sondern legt stattdessen ein Fundament aus syntaktischen Beschränkungen, anhand derer XML-basierte Sprachen geschaffen werden können. XML ist daher eine Meta-Sprache, die Regeln für die Erzeugung von Objektsprachen bereitstellt.

Eine solche Objektsprache hat die Text Encoding Initiative (TEI)[12] für den Austausch und die langfristige Bereitstellung von einerseits wissenschaftlichen, speziell geisteswissenschaftlichen Texten, andererseits aber auch von Quellentexten aus allen literarischen Bereichen und Epochen geschaffen. Zusammengestellt sind die Elemente und syntaktischen Regeln von TEI-XML in den sog. *guidelines*, die die schlichte Bezeichnung *P* tragen (was angeblich für „public" steht). TEI-XML wird mittweile von zahlreichen Projekten in aller Welt unterstützt; von den Projekten im deutschsprachigen Raum seien hier *Der junge Goethe in seiner Zeit* (Universität München) und *Jean Pauls Exzerpthefte* (Universität Würzburg) genannt.

Zur Zeit wird die Brentano-Edition nach der Version P4 der *guidelines* bearbeitet.[13] Von den zahlreichen Elementen zur Auszeichnung von Texten, die P4 bereitstellt, kommen das als TEI *light* bezeichnete Basisset, erweitert um Elemente zur Beschreibung von Quellentexten und zur Erstellung von textkritischen Apparaten, zur Anwendung. Neben den allgemeinen, oben diskutierten Vorteilen von elektronischen Editionen sind es vor allem zwei Aspekte, die TEI-XML für die Brentano-Edition besonders attraktiv machen. Zum einen ist das die Integration von UNICODE, die es erlaubt, auch die bei Brentano häufig anzutreffenden altgriechischen Texte und mathematischen Formeln sicher zu repräsentieren. Zum andern sieht die Projektplanung vor, die publizierten und unpublizierten Werke Brentanos nach dem Vorbild der BEE in mehrere Ebenen aufzugliedern. Hier spielt der XML-Ansatz seine ganze Stärke aus: Die Transkription, deren Quellcode in TEI-XML vorliegt, kann nämlich durch *stylesheets* genannte Programme transformiert bzw. weiterverarbeitet werden. Wenn also die Transkription ausreichend komplex ist, lassen sich durch die Anwendung von unterschiedlichen *stylesheets* aus dem Quellcode sowohl diplomatische als auch normalisierte Fassungen eines Textes herstellen. Die Möglichkeiten sind damit aber noch nicht erschöpft. Es ist darüberhinaus vorgesehen, die Brentano-Edition in Form einer sog. Hybridedition sowohl in elektronischer (auf CD/DVD bzw. online auf einer eigenen Website) als auch in gedruckter Form zu realisieren, denn die *stylesheets* können nicht nur das für die diplomatische und die normalisierte Fassung vorgesehene Präsentationsformat HTML erzeugen, sondern auch das (leider proprietäre, aber dennoch) universelle pdf-Format, das den direkten Import in Satzprogramme und damit den hochqualitativen Druck ermöglicht. Daneben bieten *stylesheets* natürlich auch die Möglichkeit, die Edition selbst noch weiter an die Wünsche individueller Benützer anzupassen.

---

[10] Verschärft wird diese Situation noch dadurch, daß mittlerweile auch die Bände der Meiner-Edition fast vollständig vom Buchmarkt verschwunden sind. Um die Zugänglichkeit der Theorien eines der bedeutendsten Philosophen des 19. und 20. Jahrhunderts wieder zu erleichtern, hat der ontos-Verlag eine neue Initiative gestartet und will die von Brentano selbst publizierten Schriften in einer zehnbändigen Edition auf den Markt bringen. Der erste Band, *Die Psychologie vom empirischen Standpunkt*, soll noch 2007 erscheinen.

[11] Die aktuelle Empfehlung wurde 1998 vom World Wide Web Consortium (W3C) veröffentlicht.

[12] Die TEI geht zurück auf eine Konferenz am Vassar College im Jahre 1987, auf dem die „Association for Computers and the Humanities" gemeinsam mit der „Association for Computational Linguistics" und der „Association for Literary and Linguistic Computing" beschlossen, Richtlinien für einen systemunabhängigen Textaustausch zu entwickeln.

[13] Vor kurzem wurde die Version P5 veröffentlicht, die speziell für die physische Beschreibung von Manuskripten neue Möglichkeiten zur Verfügung stellt. Die Prüfung, ob ein Umstieg sinnvoll wäre, wurde noch nicht abgeschlossen. Die *guidelines* sind unter der Adresse www.tei-org frei zugänglich.

Gehen wir nun kurz auf die einzelnen Präsentationsebenen ein.

i) *Das digitale Faksimile*

Zumindest in jenen Abteilungen der Edition, die von handschriftlichen Vorlagen ausgehen, ist es geplant, dem edierten Text elektronische Faksimile zur Seite zu stellen, die eine Überprüfung des edierten Textes durch den Benützer erlauben. Zu diesem Zweck muß die Qualität der elektronischen Faksimile hoch genug sein, um alle bedeutungstragenden Informationen bereitstellen zu können. Als Standardformat hierfür hat sich eine Auflösung von 300 ppi und eine Farbtiefe von 24 bit etabliert.

ii) *Die diplomatische Transkription*

Sie soll die Eigenschaften der handschriftlichen Vorlage mit Hilfe eines textkritischen Apparates exakt wiedergeben. Grundsätzlich sollte die Transkription dem laufenden Text der Vorlage so genau wie möglich folgen, weshalb auf alle „stillschweigenden Korrekturen" und „Emendationen" verzichtet wird. Neben der historischen Orthographie verzeichnet die Transkription auch die Irrtümer und Korrekturen des Autors. Ebenso soll die Positionierung des Textes auf der Unterlage, seine „Topologie", abgebildet werden, was aber hohe Anforderungen stellt. Auch die Zeilen-, Spalten- und Seitenumbrüche des Originals werden als zusätzliche Information verzeichnet. Durch dieses Vorgehen soll die komplexe Struktur der Manuskripte detailliert erfasst werden, um die Textgenese sichtbar machen zu können.

iii) *Die normalisierte Transkription*

Ihre Aufgabe ist es, einen möglichst lesbaren Text bereitstellen. Aus diesem Grund soll sie nur einen stark eingeschränkten textkritischen Apparat enthalten. Im Unterschied zur BEE wird es hier Sacherläuterungen geben, die sich jedoch auf jene Informationen beschränken, die für den zeitgenössischen Leser für das Verständnis der Texte unerläßlich sind. Einen besonderen Hinweis verdienen die Probleme, die sich beim Übergang von der diplomatischen Ebene auf die normalisierte Ebene vor allem dadurch ergeben, daß bei wichtigen Vorlesungs- und Kollegmanuskripten der Text oft nur in Stichworten fixiert ist. Es wird daher überlegt, die normalisierte Transkription in zwei Fassungen herzustellen, eine Fassung, die sich ausschließlich auf den Text Brentanos beschränkt, nur Abkürzungen zu Vollformen ergänzt und offensichtlich fehlende Satzzeichen einfügt; und eine weitergehende Fassung („Lesefassung"), die mit der entsprechenden editorischen Zurückhaltung auf dem Text Brentanos aufbauend vollständige Sätze herstellt. Selbstverständlich bleiben aber auch hier alle Eingriffe und Ergänzungen immer als solche erkennbar.

iv) *Die Druckfassung*

schließlich soll es dem Leser erlauben, den Text in gewohnter Form als Buch in Händen zu halten. In ihrem Aufbau soll die Druckfassung weitgehend der Lesefassung entsprechen.

Wie die BEE soll die Brentano-Edition vorrangig die Texte aus dem Nachlaß in zuverlässiger Form für die Öffentlichkeit bereitstellen. In dieser ersten Phase wird aus zeitökonomischen Gründen noch kein Versuch einer historisch-kritischen Aufarbeitung gemacht: die Texte sollen zwar textkritisch, aber ohne den Versuch, über den Einzeltext hinausgehend Werkzusammenhänge herzustellen, aufbereitet werden. Ebenfalls einer späteren Projektphase muß die Integration der einzelnen publizierten Texte unter einer gemeinsamen Präsentations- und Retrievalplattform

(wie sie Folio Views für die BEE bereitstellt) vorbehalten bleiben. Natürlich bringen erst die Möglichkeiten einer solchen integrierenden Software, die u.a. mächtige Suchfunktionen bereitstellt oder es erlaubt, die einzelnen Texte auch unter inhaltlichen Gesichtspunkten (*topic mapping*) zu verknüpfen, die Stärken einer elektronischen Edition voll zum Tragen. Mit diesen Vorteilen sind aber leider nur allzu oft die Nachteile von proprietären Programmen verbunden. Im Falle von Folio Views etwa hat die mangelnde Pflege der Software durch den Hersteller dazu geführt, daß sie zu aktuellen Betriebsystemen teilweise inkompatibel geworden ist. Der gegenwärtige Ansatz der Brentano-Edition hat dagegen den Vorteil, daß die HTML-Version ihrer Texte mit jedem gängigen Webbrowser zugänglich ist.

Die Brentano-Edition wird zur Zeit von einer Kooperation der Grazer „Forschungsstelle und Dokumentationszentrum für österreichische Philosophie" (FDÖP), der „Franz Brentano Forschung" (Würzburg) und dem philosophischen Institut der Universität Salzburg getragen. Unterstützt wird das Projekt von der „Franz Brentano Foundation" in Boston, der Thyssen-Stiftung und dem österreichischen Forschungsfond FWF.

Bereits realisiert werden konnte die Edition von Brentanos *Gespräch mit Müller und Grossmann über das Dasein Gottes und die Unsterblichkeit der Seele*. Dieses auch als Pilotprojekt bezeichnete kleinere Editionsvorhaben dient in erster Linie als Vorbereitung für die Gesamtedition im Sinne einer Machbarkeitsstudie: Es sollte gezeigt werden, daß eine elektronische Edition auf der Grundlage von TEI-XML prinzipiell möglich ist. Die wichtigsten Ergebnisse dieses Projektes sind zum einen die Anpassung von TEI-XML an die speziellen Erfordernisse des Brentano-Nachlasses in Form eines Transkriptionshandbuches, zum anderen die Programmierung der *stylesheets* für die Herstellung der unterschiedlichen Textfassungen; letztere wurden in Zusammenarbeit mit dem „Centre of Culture, Language and Information Technology" (AKSIS) der Universität Bergen produziert, das bis vor kurzem eines der drei organisatorischen Zentren der TEI war. Das in Schönbühel aufgefundene, noch unpublizierte „Gespräch" zeigt Brentano in ungewohnter Weise als Sokrates im Gespräch mit zwei Würzburger Medizinstudenten; im Verlauf des Gesprächs gelingt es ihm, die beiden Materialisten durch eine streng rationale Beweisführung zum Glauben an Gott „zu bekehren". Das Gespräch soll in einem Sonderband der *Brentano-Studien* abgedruckt und auf einer beiliegenden CD-Rom ebenso wie im www publiziert werden. Darüber hinaus sind noch drei weitere Projekte in Arbeit, die im unmittelbaren Zusammenhang mit der kritischen Gesamtedition stehen.

i) Die Würzburger *Metaphysikvorlesung*

An der Würzburger Franz-Brentano-Forschung wird an der Edition einer der zentralen Schriften Brentanos gearbeitet. Die wesentlichen Ansätze, die im Mittelpunkt seines Denkens stehen und die Brentano später in eigenständigen Werken ausarbeiten sollte, sind hier bereits im Keim enthalten. Im Nachlaß trägt das Manuskript die Signatur M 96. Gefördert wird das Projekt, das kurz vor dem Abschluß steht, durch die Thyssen-Stiftung.

ii) Das Wiener *Logikkolleg*

In einem Kooperationsprojekt der Universität Salzburg mit der FDÖP in Graz wird an der Edition der letzten Fassung des Wiener Logikkollegs aus den Achtzigerjahren des 19. Jahrhunderts gearbeitet. Dieses Kolleg, das Franziska Mayer-Hillebrand ihrer Edition *Die Lehre vom richtigen Urteil* zugrunde gelegt hat, ist eine wichtige Quelle für

Brentanos Erkenntnis- und Urteilstheorie und seine Reform der Logik. Das Manuskript, das die Nachlaßsignatur EL 80 trägt, konfrontiert die Editoren mit besonderen Schwierigkeiten, da der Autor hier immer wieder größere und sehr komplexe Textumstellungen vornimmt, die die Darstellung der Textgenese bzw. die Zuordnung von diplomatischer und normalisierter Version sehr schwierig machen. Gefördert wird das Projekt vom österreichischen FWF.

iii) *Gesamtdigitalisierung des wissenschaftlichen Nachlasses an der Houghton Library der Harvard University* (Cambridge, Mass.)

Da die kritische Gesamtedition des Nachlasses so wie die BEE für sämtliche Manuskripte die digitalen Faksimile bereitstellen soll, ist es erforderlich, den wissenschaftlichen Nachlaß, der der Houghton Library von J.C.M. Brentano als Dauerleihgabe zur Verfügung gestellt wurde, zu digitalisieren. Das Projekt wurde im Juni 2006 begonnen und soll bis Mitte 2008 abgeschlossen sein. Bereits jetzt liegen Brentanos Schriften zur Ästhetik, zu Logik und Erkenntnistheorie und zur Metaphysik vollständig in digitaler Form vor. Das Gesamtvolumen der Digitalisierung beträgt etwa 25.000 Seiten, von denen einige tausend Seiten nicht auf dem Nachlaßfilm vorhanden sind. Es wird überlegt, unabhängig vom Langzeitprojekt der Edition die Manuskripte schon vorher online zugänglich zu machen. Das Projekt wird von der „Franz Brentano Foundation" in Boston finanziert und von der FDÖP organisatorisch durchgeführt.

Email: thomas.binder@fdoep.at

Philosophy, Spoken Word, Written Text and Beyond

Vaclav Brezina, Pardubice, Czech Republic

Introduction

In philosophical reflection about the very nature of philosophy (i.e. in metaphilosophical reflection) one rarely encounters a debate over the issue of what form of discourse in fact philosophy employs or should employ. The particular characteristics of philosophical discourse are unfortunately often (tacitly) dismissed as stylistic. They are thus felt to be of interest to literary theory and linguistics rather than to philosophy. Indeed, philosophy is expected to convey some propositional content regardless of the variation in the use of linguistic forms or forms of discourse. Lang (1983) aptly comments on this situation, introducing the metaphor of a "literary museum without walls".

> The history of Western philosophy is predominantly a history of written texts, but philosophers have lived in that history and looked back at it as if a dependence on such unusual and complex artifacts had nothing to do with the work of philosophy itself. The assumption in this notion of a literary "museum without walls" is that philosophical meaning is self-generating and transparent – that both the medium and form of philosophical texts as they appear to the reader (and before that, of course, to the writer) are accidental causes, with no significant effect on philosophical meaning itself. (Lang 1983: 19)

In contrast to the assumption pointed out by Lang, the history of philosophy offers numerous examples of authors employing specific forms of discourse which itself seems to be of philosophical significance. One may recall, for example Plato's *dialogue* (employed numerously by many later philosophers), Augustine's *confessions*, Aquinas' *questiones,* Nietzsche's *aphorisms,* Wittgenstein's *Bemerkungen* etc.

This article is a contribution to the debate about the significance of particular forms of discourse in philosophy (cf. Lang (ed.) 1981), especially with regard to the possibility of employing new technologies, in particular hypertext, for philosophical ends (cf. Bardini 2003, Kolb 1994). I discuss the issue of appropriateness of the traditional linear textual discourse for certain philosophies, or (pragmatically speaking) for certain ways of doing philosophy. I briefly follow Plato's debate about the inferiority of written text to spoken word as well as Wittgenstein's comment in the Preface to *Philosophical Investigations* about the failure to do (his) philosophy within the bounds of traditional forms of written text.

Plato: spoken word and written text

Plato provides an early comment on the form of written text which he regards as a medium unable to properly convey philosophical thought. At least so it appears from two famous passages, one from a later dialogue *Phaedrus* (274b-278b) and another from his *Seventh Letter* (341c-e), only the latter passage, of course, being written in *propria persona*. The obvious paradox pointed out many times by the commentators (cf. Guthrie 1975, Ferrari 1987) arises from the fact that Plato himself offers a written critique of writing. Furthermore, the reason why Plato has been so influential throughout the history of philosophy lies also partly in the fact that his thought was preserved in a written form (unlike many works of his contemporaries).

In *Pheadrus*, Socrates introduces a myth of invention of writing, "a tradition", as Socrates refers to it, "that has come down from our fathers, but they alone know the truth of it." (Phaedrus 274c). The character of Phaedrus (as well as the readers of Plato's dialogue) are presented with a story, in which the Egyptian god Theuth confronts king Thamus with the invention of writing and argues in order to persuade the sceptical Thamus to look favourably on his new invention: "Here, O king, is a branch of learning that will make people of Egypt wiser and improve their memories: my discovery provides a recipe for memory and wisdom."

In what follows Socrates in cooperation with Phaedrus provides arguments which are in accord with Thamus' sceptical position. The main argument against writing is the static nature of written text, devoid of the sensitivity to reader's response. The words written on a papyrus (or paper) are for Socrates too heavy and inadequate for passing real knowledge; Socrates expresses a strong preference for discourse that is "written in the soul of the learner" (276a), i.e. spoken dialogical discourse.

Leaving aside the hypothesis that Plato's dialogues represent merely preparatory work to some real learning which was not written down, hence not preserved (see Guthrie 1975: 418ff), Plato's written dialogues can be seen as a result of an attempt to overcome the paradox discussed briefly at the beginning of this section (cf. Ferrari 1987).

Judging from the variety of forms of philosophical discourse in the subsequent history of philosophy, many of the authors were confronted with at least a partly similar problem to overcome the disadvantages of the linear, static nature of written text. This problem has remained constant despite the change in the technology of writing and the introduction of printing. Bolter (2001), reflecting on the development of professional academic writing in the last 200 years notes that

> [a]lthough Plato was unwilling to set out his philosophy as a treatise, as a linear progression in which the writer assumes overt control of the argument, for the past 200 years, academic writers have been reluctant to accept any form other than treatise. If in those 200 years our literate culture has used printing press to reinforce that attitude, we are now beginning to use digital technologies to call it into question. Why should a writer be forced to produce a single, linear argument or an exclusive analysis of cause and effect, when writing space allows a writer to entertain and present several lines of thought at once? (Bolter 2001: 107)

In rest of the article, I shall try to 1) discuss Bolter's question in relation to Wittgenstein's *Philosophical Investigations* and 2) briefly consider the possibility of the use of the new medium of hypertext for the purpose of philosophical work.

Wittgenstein: Philosophical Investigations

Unlike Plato, Wittgenstein does not provide an explicit discussion on the nature and limits of written philosophical text. Nevertheless, in the Preface to his *Philosophical In-*

vestigations dated January 1945 there appears what at first might be taken as a personal comment on his unsuccessful attempt to produce a coherent piece of writing:

> It was my intention at first to bring all this together in a book whose form I pictured differently at different times. But the essential thing was that the thoughts should proceed from one subject to another in a natural order and without breaks.

> After several unsuccessful attempts to weld my results together into such a whole, I realized that I should never succeed. The best that I could write would never be more than philosophical remarks; (Wittgenstein 1998 [1953]: Preface)

Here, Wittgenstein first considers the traditional form of written philosophical discourse – a book – which is based on linear and coherent progression of subjects in "natural order". Such form, although rather popular (and thus unmarked and normative) throughout the whole history of philosophy, was seen by Plato as unable to express the dynamics of philosophical thought (see above).

In the latter part of the quoted passage, Wittgenstein admits the difficulty he experienced with such form, which made him finally resort to the form of philosophical remarks (philosophische Bemerkungen). With respect to this brief statement one should recall the complexity of the *Investigations'* textual history, in particular the process of almost constant rewriting and rearranging of Wittgenstein's notes obvious from the drafts in the *Nachlass* (cf. Stern 1996, Hrachovec 2000b).

So far, the nature of the obstacle which the traditional linear written form of philosophical discourse presents to Wittgenstein's later philosophy was left without comment. The inability to "weld [Wittgenstein's] results together" could have been, in principle, of two different kinds: 1) the author's inability to present his thoughts in a linear way or 2) a more fundamental inability.

The passage quoted above continues with the following explanation:

> ...my thoughts were soon crippled if I tried to force them on in any single direction against their natural inclination. – And this was, of course, connected with the very nature of the investigation. (Wittgenstein 1998 [1953]: Preface)

Wittgenstein seems to suggest a fundamental obstacle in the traditional linear writing, inherent in the nature of this medium, which one can only overcome at the cost of twisting the philosophical message. This cost was apparently too high for Wittgenstein. Wittgenstein, therefore, resorts to the form of *Bemerkungen*.

Some commentators (cf. e.g. Bolter 2001) argue in favour of hypertextual reading of Wittgenstein's *Investigations*. They base their arguments on Wittgenstein's dissatisfaction with linear text and expand on the metaphor of criss-cross travel "over a wide field of thought" from the Preface. They, moreover, point to the textual history of the *Investigations*, regarding the printed text as only one of the possible arrangements of the *Bemerkungen*. Hrachovec (2000b:7) in a slightly different context claims that "Wittgenstein's writing is particularly well suited to a post-Gutenberg environment."

Text and hypertext

It is a historical coincidence that in the same year in which Wittgenstein wrote the Preface to his *Philosophical Investigations* an American engineer Vannevar Bush published his article, in which he introduced the idea of Mnemex, a "device in which an individual stores all his books, records, and communications, and which is mechanized so that it may be consulted with exceeding speed and flexibility, [...] an enlarged intimate supplement to his memory." (Bush 1945: 6) This device, which according to Bush's proposal would also be able to link individual pieces of information with "associative trails", is generally considered to embody the idea of hypertextual operations in a rudimentary form (Nielsen 1995).

It is also interesting to notice that Mnemex (a short form for "memory extender") is defined by its author with reference to its use as an aid to our memory, a similar justification to that given by Theuth, the inventor of writing in Plato's myth. What is striking is the fact that although the technology employed in each case is radically different, the functional justification seems to be similar.

It was, however, only twenty years later that Ted Nelson inspired by Bush coined the term "hypertext". Hypertext is often defined in contrast to ordinary written text as *nonsequential/nonlinear* in the sense that there is no pre-established order in which the hypertext is supposed to be read (cf. Nielsen 1999, Hrachovec 2000a). In traditional (linguistic) definitions (cf. Sanders & Sanders 2006), text is understood metaphorically much in accord with the etymological meaning of the word (Latin: *textere* – to weave, hence text – a woven structure) as a coherent stretch of discourse. In contrast to this, hypertext can be seen as a non-coherent discourse, at least in the traditional linear sense in which we use the word "coherent".

Floridi (1999) points out three main components of the hypertext: 1) a set of nodes (*lexia* in Barthes's terminology) 2) a set of associations – links 3) and an interactive and dynamic interface (cf. also Bardini 2003). Floridi goes on to stress the fact that the computer-human interface is not the only possibility (although the most often thought of in the current debate) and considers the advocates of this claim as committing *electronic fallacy*. In order to escape the trap of electronic fallacy, therefore, one has to be ready to recognise hypertextual features also in some of the traditional texts written or printed on paper (cf. the discussion about hypertextual features of Wittgenstein's *Investigations* above).

Nevertheless, it is hard to deny that the computer technology not only promotes the use of hypertext but also provides support for its full and sensible use. It is the computer and appropriate software that enable us to move smoothly in the web of links and trace back the history of our virtual journey through the chunks of text (cf. Bardini 2003)

In comparison to written/printed text, hypertext seems to escape at least to some extent the major objection formulated by Plato and hinted at by Wittgenstein in the Preface to *Philosophical Investigations* (see above). The reader is much more actively involved in the process of finding one's way through the text and can enjoy a quasi-dialogical relationship with the text. Hypertext, although unable to respond in the personalised way of a teacher-student exchange which Plato had apparently in mind when praising the spoken word, is nevertheless able to "react" to the reader's need through enabling the him/her to enter yet another dimension of the written mes-

sage. Hypertext can thus be seen besides more traditional spoken discourse and written/printed text as a possible candidate to be employed in the work of philosophy. After all, hypertextual potential for philosophy has already been explored in David Kolb's Eastgate essays "Socrates in the Labyrinth".

Conclusion

This article does not close with a definite conclusion since many issues discussed here remain necessarily open. I tried to explore the concept of hypertext – first as a theoretical concept providing us with a new understanding of Wittgenstein's form of discourse in *Philosophical Investigations* – second as a form to be employed in philosophy to challenge the linear nature of text with all its philosophical implications. Needless to say that the possible objections to hypertext pointing out the loss of the line of argument i.e. the fact that the text might become incoherent rather than non-coherent (disregarded completely in this article but discussed e.g. in Kolb 1994) should also be evaluated.

Literature

Bardini, Thierry 2003. Hypertext. In: (ed.) *The Blackwell Guide to the Philosophy of Computing and Information.* Oxford: Blackwell.

Bolter, Jay David 2001. *Writing Space: computers, hypertext, and the remediation of print.* Mahwah: Lawrence Erlbaum Associates.

Bush, Vannevar 1945. As we may think. In: *Atlantic Monthly* - July, available at http://www.theatlantic.com/doc/194507/bush [acessed 27. 4. 2007].

Ferrari, Giovanni R. F. 1987. *Listening to the Cicadas: A Study of Plato's Phaedrus.* Cambridge: CUP.

Floridi, Luciano 1999. *Philosophy and Computing: An Introduction.* London: Rutledge.

Guthrie, W. K. C. 1975. *A History of Greek Philosophy IV.* Cambridge: CUP.

Hrachovec, Herbert 2000a. Electronic Texts are Computations are Electronic Texts. *Journal of Philosophy* of Education 34 (1), p. 169 – 181.

Hrachovec, Herbert 2000b Wittgenstein on line/on the line. Available at http://sammelpunkt.philo.at:8080/archive/00000998/01/wab%2Fwab_contrib-hh.page.html [accessed 27. 4. 2007]

Kolb, David. 1994. Socrates in the Labyrinth. In: Landow, G. P. (ed.) *Hyper/Text/Theory.* Baltimore: Johns Hopkins University Press.

Lang, Berel (ed.) 1981. *Philosophical Style: An Anthology About the Reading and Writing of Philosophy.* Chcago: Nelson Hall.

Lang, Berel 1983. *Philosophy and the Art of Writing: Studies in Philosophical and Literary Style.* New Jersey: Bucknell University Press.

Lang, Berel 1990. *The anatomy of philosophical style.* Oxford: Blackwell.

Nielsen, Jakob 1995. *Multimedia and Hypertext: the Internet and beyond.* Boston: AP Professional.

Plato 1952. *Phedrus.* Trs. R. Hackworth. New York: The Liberal Arts Press.

Sanders, T. & Sanders J. 2006. Text and Text Analysis. In: Brown, Keith R. (Ed.) *Encyclopedia of Language and Linguistics* (2nd ed.). Amsterdam: Elsevier

Stern, David 1996. The availability of Wittgenstein's philosophy. In: Sluga, H. & Stern, D. (Ed.). *The Cambridge Companion to Wittgenstein.* Cambridge: CUP.

Wittgenstein 1998 [1953]. *Philosophische Untersuchungen - Philosophical Investigations.* Oxford: Blackwell.

Email: v.brezina@volny.cz

From HyperNietzsche to Discovery:
Digital Semantic Corpora for Virtual Research in Philosophy

Katja Brunkhorst, Munich, Germany / Paolo D'Iorio, Paris, France

HyperNietzsche is a web site that gives free access to primary sources and scholarly contributions concerning the life and works of Friedrich Nietzsche and allows scholars to publish their own works. It comprises a coordinated set of software instruments, legal models, publication procedures and a framework for generalizing the pilot model to make it applicable to other authors or disciplines. All the software is distributed under Open Source licences and as such is freely available, as well as adaptable to the needs of different research groups. HyperNietzsche was developed with the support of the CNRS, the French Ministry of Research, and above all the Sofja Kovalevskaja research prize (Humboldt-Foundation and German Ministry of Research). The generalisation of the model is being realised in the context of both the Discovery project (www.discovery-project.eu) and COST Action A32, "Open Scholarly Communities on the Web" (www.cost-a32.eu).

1. Archive, Library and publisher

The project HyperNietzsche has three main objectives:

(1) To provide simple, free and permanent Internet access to digitized facsimiles of primary sources for the study of Nietzsche, including published works, manuscripts, correspondence, biographical documents and the books in his personal library.

(2) To serve as a repository and publishing venue for secondary literature on Nietzsche, including critical editions of works and manuscripts, translations, essays, multimedia documentation of conferences, etc.

(3) To develop the technological, administrative and legal support necessary to compile and integrate these sources and to ensure the long-term sustainability of the project.

Compared to traditional systems for the conservation and dissemination of scholarly knowledge, one may consider HyperNietzsche as the integration of a public archive, which allows free access to primary sources; a public library, which allows free access to critical editions and other scholarly contributions; and a non-profit academic publisher with a prestigious editorial board and rigorous procedures of peer review.

Another way to describe HyperNietzsche is to say it is an instrument for realizing the idea of Open Source within the humanities. Without access to primary sources and without open confrontation of competing interpretations, neither the hard nor the human sciences would be possible, for science is in its essence a public discussion about freely available objects and sources.

2. Digital Classification

The first requirement, before any body of documents can be accessed and researched, is to classify it. To this end, in the world of paper, archivists or librarians stick labels on volumes, number manuscript folios and compile catalogues, so as to enable researchers to identify unambiguously their objects of study, as well as unambiguously to refer to them in their editions and commentaries. The classification thus creates a *system of indicators* (signatures, page numbers) associated with the primary sources and their parts, thus rendering the body of documents citable and fully usable in scholarship.

Hyper transposes this intellectual operation into a digital environment and permits creating a *system of unique identifiers* (the "sigla"), which refer to the primary sources and at the same time correspond to unique and stable web addresses thus becoming citable and fully usable in digital scholarship. Hyper permits attributing sigla not only to each page, but also, by means of a set of Cartesian coordinates, to *areas within a page*: one may thereby for example define notes on a manuscript page, paragraphs in a printed text, or distinguish details within images (www.hypernietzsche.org/N-IV-4,4).

3. Facsimile Editions

With the classification established, it becomes possible to attach to each siglum any type of scholarly contribution, for example facsimiles of primary sources. It is possible to publish one or more facsimiles for each level of granularity, e.g. a colour and a b/w facsimile (www.hypernietzsche.org/N-IV-2,1), or facsimiles with different contrast to help to distinguish details. The HyperNietzsche project has already digitized approximately 32.000 pages of manuscripts, first editions, and biographical documents, of which around 3.400 pages of manuscripts have already been published on the site, corresponding to the genetic dossiers of *The Wanderer and his Shadow*, *Daybreak* and *The Gay Science*.

4. Text Editions

Beyond facilitating digital editing in facsimile, Hyper is designed to publish diverse editions of manuscripts and works in text mode. The way in which Hyper works and its manner of structuring information is not based on text encoding in general, and even less on one particular encoding language. Instead, Hyper permits publishing different editions, established according to different editorial criteria and using diverse encoding formats. Nonetheless, the HyperNietzsche project has also designed a new encoding language, based on XML and inspired by the *Text Encoding Initiative*, that is particularly adapted to representing genetic processes in manuscripts. This is the *HyperNietzsche Markup Language* (HNML). The most interesting features of HNML are to generate either a critical or a diplomatic edition from the same encodings and render distinct the successive stages of the writing process on a given manuscript page (www.hypernietzsche.org/igerikemvdalfonso-89). Although taking its departure from Nietzsche manuscripts, HNML is being adapted to other authors such Schopenhauer, Flaubert, Proust, Valéry...

5. Genetic paths and rhizomes

A path is a scholarly contribution that a researcher has prepared by gathering pertinent material present in Hy-

perNietzsche (each element represented by its siglum) and arranging it on the basis of chronological, thematic or genetic considerations. The path may also include a commentary for each of the steps and for the path as a whole. Paths allow, for example, the tracing of a genetic sequence which follows the stages of the writing process for a particular aphorism, from the first outline in a notebook, through its copy in a book, corrections in proof copy and finally to the printed version (www.hypernietzsche.org/vzapf-761); or the establishment of a thematic route consisting of several aphorisms on the figure of the "free spirit" in Nietzsche's works. Once paths have been published by scholars, the system is able to generate automatically a rhizome that indicates graphically all the paths that "pass through" a given piece of material, whether it be an aphorism (www.hypernietzsche.org/rhizome/WS-215), a page, a note or a whole manuscript (www.hypernietzsche.org/rhizome/N-IV-4).

6. Critical essays, commentaries, translations, peer review.

HyperNietzsche permits the publication of essays in facsimile – simply by digitizing articles or books already published on paper – or in text mode, both new contributions and ones that have already been published on paper or on the Internet. Each essay is given an identifying siglum consisting of the initials of the author's first name, followed by his or her surname, a hyphen and a number. This siglum, together with the address of the site, forms the web address of the essay and permits identifying it in a stable and unambiguous manner and to quote it (www.hypernietzsche.org/mmontinari-5 or www.hypernietzsche.org/oponton-1). The *commentaries* are commonly short passages of discursive text closely linked to the materials commented on. Each document in Hyper – an essay, a commentary, a manuscript page, or also a path description – may be an object of *translation* into another language, and the translations published by a researcher are obviously linked automatically to the corresponding original documents.

The *internet peer review system* administers all voting procedures automatically, as well as the writing and reading of the reports and the publication or rejection of the contribution submitted for evaluation according to the procedures described in the rules established by the Editorial Board. Furthermore, it automatically sends the contract to the author, who then signs and returns it to the Editorial Board electronically.

7. Dynamic Contextualization and Hyper-Federation

One key innovation developed by Hyper is the Dynamic Contextualization. When the user selects a page, this feature makes a list of links available to precisely those documents that are relevant to the page that is presently being viewed. For example, if the user selects a manuscript of Wittgenstein, the system immediately makes accessible, without the need for additional complicated searches, all the transcriptions and translations available for the page, as well as all the relevant critical essays. Likewise, if the user selects a critical essay or an audiovisual contribution, the contextualization mask will automatically present a list of all primary sources and scholarly contributions *cited* in the essay or in the video, as well as a list of all scholarly contributions *citing* the essay or the video currently being viewed. Dynamic contextualization is

not limited to one HyperPlatform only, because the different HyperPlatforms can communicate within the Hyper-Federation. Imagine, for example, that Schopenhauer is cited in an essay published in HyperNietzsche. The reader should be able to move from HyperNietzsche to Hyper-Schopenhauer with a simple click of the mouse, and so have immediate access to the original context of the passage from Schopenhauer, as well as translations of the passage in different languages and relevant commentaries from Schopenhauer specialists.

8. Discovery

A first extension of the HyperNietzsche model to other philosophical corpora is being realised by the Discovery project. Co-financed by the European Union under the eContentplus programme, Discovery was launched in November 2006 with a twofold aim:

1) to prepare an extensive collection of scholarly editions of primary sources and scholarly contributions for the study of philosophy from the Presocratics to modernity; to enrich this material with metadata and develop philosophically informed ontologies that will semantically structure it; and to publish the enriched content via a federation of inter-operable websites called *Philosource*.

2) to build an advanced digital workspace for philosophical research using a desktop application – called *Philospace* – with which scholars can exploit the resources of the *Philosource* contents and engage in collaborative research projects with optimal efficiency through peer-to-peer (P2P) networking.

Philosource will be the data provider, much like a digital library or archive; *Philospace* will be an advanced working environment for philosophers, enabling them to perform sophisticated queries, apply inference rules and, above all, semantically enrich the data published on the websites. The *Philosource* federation will rely on the stringent peer review standards traditionally used in academic publishing for quality control, while *Philospace* will be an open venue with user-selected filtering for information management. *Philospace* will overlie and extend *Philosource*, enriching its content with non-reviewed information. Scholars working in *Philospace* will be able to submit the results of their research to *Philosource* for peer review and, if successful, publication.

The project is constituted by a coalition of partners including the *Institut des Textes et Manuscrits Modernes* of the CNRS, Paris; *Lessico Intellettuale Europeo e Storia delle Idee* of the CNR, Rome; the *Wittgenstein Archives* at the University of Bergen; RAINET, the web branch of the Italian public broadcaster RAI, Rome; the Department of Electronics, Artificial Intelligence and Telecommunications at the Polytechnic University of Marche, Ancona; and the Pisa-based IT company *Net7, Internet Open Solutions*.

The first part of the project will be devoted to the publication of the selected content on dedicated *Hyper-Platforms.* The content to be published concerns three very important moments in the history of Western philosophy: ancient Greek philosophy (a complete electronic edition of the fragments and testimonia of the *pre-Socratic philosophers*, a complete electronic edition of all testimonia related to *Socrates* and the so-called *Minor Socratics*, the complete text of *Diogenes Laertius'* Lives of the Philosophers), modern philosophical and scientific literature from the 16th to the 18th century (52 works by 7 major authors such as Leibniz, Bruno, Descartes, Spinoza, Vico...), and the work of two important representatives of

contemporary philosophy: Friedrich Nietzsche and Ludwig Wittgenstein. It consists of reproductions and editions of primary sources and scholarly contributions in text format (ca. 26.000 pages), images (ca. 36.000) as well as audio and video (300 units).

The second part of the project will be dedicated to the semantic enrichment and consists of representing in a machine-readable way the philosophical concepts referred to throughout the content. Thanks to the *Philospace* application, the scholars will be able to apply the concepts expressed in the domain ontologies to the content stored in *Philosource*, whether they be facsimiles or editions of primary sources, or even textual or audiovisual scholarly contributions.

For example, if in a paragraph of the Latin version of Spinoza's *Ethica ordine geometrico demonstrata* there is a question regarding the freedom of will and the concept "freedom of will" is in fact contained in a Spinoza domain ontology, an ILIESI scholar will be able to use the *Philospace* application to link that paragraph with the ontology concept. But *Philospace* will also guide the scholar through the exploration of other excerpts from Spinoza which have been linked to that same concept or it will display graphically the relationships between the concept of "freedom of will" and that of "freedom" in a broader sense. Furthermore, if a colleague at CNRS has used his *Philospace* application to link a passage of Nietzsche concerning the freedom of will, say an aphorism of the original German version of the *Wanderer und sein Schatten*, to the Nietzsche domain ontology, *Philospace* will also show the connection between the two concepts and possibly between the two ontologies. The same thing will happen seamlessly if a RAI colleague has done annotations on lectures from the *Multimedia Encyclopaedia of the Philosophical Sciences* in which a scholar speaks about the freedom of will using concepts contained in either the Spinoza or the Nietzsche ontologies.

The *Philospace* application is conceived not only as a tagging software, but also for the use of its searching, browsing and annotating functions together as an instrument to discover unexpected connections and conceptual relationship between different philosophical content, possibly spanning across different authors, different epochs, and written in different languages.

While *Philosource* can be compared to a library, the *Philospace* application is like the notebook in which the researcher, simultaneously reading all the different books on his table, traces schemes of connection, applies grids of sense, marks words and concepts. *Philospace* allows the user to apply inference rules locally on collected data to generate new knowledge, which in turn is likely to aid the creation of new scholarly contributions to be submitted for publication on *Philosource*.

That is the vision of the *Discovery* project: exploit the tools of the Semantic Web to help scholars to make new discoveries using the digital collections in unexpected ways; allow them to share their discoveries prior to the actual publication first with colleagues within the *Philospace-Network*; and finally to publish the final version of their works on the Web within *Philospace*, in a high profile context to be useful for their scientific career, given their peer-reviewed status. The result is a virtuous circle, in which content is continuously disseminated, improved and augmented. *Philosource* will become the place to go for *anyone* who seeks reliable information, for *scholars* who need primary material and secondary literature to produce new knowledge and for *leading specialists* who want to publish their work in a dynamic, prestigious and highly visible environment.

Email: brunkhorst@discovery-project.eu / diorio@ens.fr

Privileged Access to Information: Dretske's Accounts of Self-Knowledge

Kai-Yuan Cheng, Chia-Yi, Taiwan

I

Fred Dretske (1981, 1988) has been noted for his vigorous project of naturalizing the mind. In his version of representational theory, a mental state is characterized as a physical state of a person, which has a certain function of carrying information about aspects of the environment, to which the person is causally related. So construed, a mental state is an objective item in the world, which shall be accessible to both its possessor and external observers in a similar way. This, however, does not seem right. It does not seem to do justice to our observation that we appear to have a privileged (not easily challenged by others) and immediate (not mediated by inference or observation) access to our mental states, an access which no other people share. How could this special first-person epistemology and phenomenology be explained within a naturalistic framework? Dretske (1995, 1999, 2000) has taken up the challenge to solve this daunting problem, by offering some ingenious and illuminating accounts of introspection. This paper aims to discuss how, and whether, those accounts work, and to the extent that they do not, whether they can be amended.

Although Dretske does not make it explicit, there are two main accounts that Dretske has offered to explain the special characters of self-knowledge (c.f. Lycan, 2003). In one account, Dretske (1995) exploits the notion of displaced perception to provide a model of introspection. In another account, Dretske (1999, 2000) first distinguishes between three different kinds of awareness, and then shows how making this distinction can offer a "neat and satisfying" explanation of the special characters of self-knowledge. The core idea of these two accounts is the same, but the ways in which the idea is implemented are different. I will make three main claims in this paper: 1) the first account has a difficulty explaining the psychological immediacy of self-knowledge; 2) the second account can avoid this difficulty, but it would encounter a problem of its own; 3) An alternative model is proposed to account for the directness of self-knowledge that shall be congenial to the two accounts offered by Dretske. The following three sections are devoted to illustrate these thee claims respectively.

II.

Dretske (1995, Ch.2) offers a displaced perception model of introspection to explain the special characters of self-knowledge. This model is built on the basis of the conceptual framework in which a cognitive subject is assimilated to a simple measuring instrument like a scale as a representational system. A scale can represent my weight when I stand on it. If it works properly, it delivers a correct piece of information about my weight. A scale can also *misrepresent* my weight if it breaks. In that case, it does not carry correct information about me. Whether a scale misrepresents or not, there is always an objective representational fact about the scale, a fact that is automatically and necessarily there whenever the scale stands in a causal relation to something. I, as a cognitive subject, can also represent certain aspects of the world to which I am causally

related. By standing in front of a red flower, I can represent what it looks like by having a certain visual experience of it. I may misrepresent the flower as yellow, when something goes wrong. In this case, there remains a representational fact about me, about how I (mis)represent an external object. Other people cannot occupy my position to have my (mis)representational state; it belongs only to me. They can nonetheless obtain the informational content of my representational state, but only in a more indirect way.

Now, could a scale know, or have access to, the informational content of its representational state when I stand on it? Obviously not! The reason is that it could not conceptually represent what a scale and an object like me are, and what the relation between the two may be. As an external observer, in contrast, I can know the informational content of the scale's representational state, because I know that the scale would not have a pointer position like that unless I had a certain weight. This is an instance of *displaced perception*, which has the following form:

> I know that k is F by perceiving that h is G, plus a connecting belief about k and h, namely, h would not be G unless k were (probably) F. (c.f.Dretske, 1995: p.42)

Dretske then applies the notion of displaced perception to explain how we know our own mental states. To the question: "How do I know what my experience is like when I see a red flower?", Dretske's answer is that I do not "look inward" to find out facts about my experience. All I have to do is to look at the red flower in front of me, see what its color is like, and infer that my experience is of a certain kind, based on the connecting belief that if my experience were not of this kind, the flower would not appear in a certain way to me. Introspective knowledge is thus a form of displaced knowledge, which is obtained by perception of external objects, plus certain connecting beliefs.

Dretske holds that the nature of perceptual displacement in introspection is the "source of the first-person authority" (1995: p. 53). A person does not need to look at herself, in order to know some state of her own, e.g., to know what kind of experience she has. She only has to look at a red flower, and think to herself that her experience must be an experience of a red flower, for otherwise the flower would not look red to her. She may misrepresent the flower as yellow. But in that case, she would again know that her experience is of a yellow one, for otherwise the flower would not look yellow to her. There is thus a strong sense in which a person's introspective knowledge is *infallible*. On the other hand, the explanation of the psychological immediacy of self-knowledge is not so straightforward on the displaced perception model. On this model, the obtainment of introspective knowledge is mediated by a connecting belief. This obviously renders introspective knowledge inferential. Dretske has noticed this defect in his model, and tries to neutralize its negative impact by pointing out that the form of inference involved in introspective knowledge on the displaced perception model is very unusual. It differs from other species of displaced knowledge in two aspects. One is that introspective knowledge does not require that one's representation of the world be veridical, while other kinds of displaced knowledge do. Another is that one's connecting belief does not

have to be true in order for introspective knowledge to be obtained, whereas the same thing does not apply to other kinds of displaced knowledge. Dretske claims that this is the "source of the 'directness' and 'immediacy' of introspective knowledge" (1995: p. 62)

In my view, the explanation of the epistemic privilege of self-knowledge on the displaced perception model has more plausibility than that of psychological immediacy. Despite the fact that introspective knowledge is achieved *via* a very peculiar form of inference, it *remains* inferential in nature. Our phenomenology of introspection is not like that, however. We know what we think, and what our experience is like, in a saliently immediate way. We do not normally go through an inference that h looks G to me, so my experience k must be of the F kind, in order to obtain introspective knowledge. There must be something wrong on the displaced perception model.

III.

Dretske (1999; page numbers refer to 2000) has further, and independently, offered an account to solve a vexing problem concerning phenomenal experience. This problem has to do with the follow two gripping statements:

(1) Conscious perceptual experiences exist inside a person (probably somewhere in the brain"

(2) Nothing existing inside a person has (or needs to have) the properties one is aware of in having these experiences. (Dretske, 2000: p. 158)

It seems right that my experience of seeing a red flower is inside me. It also sees right that nothing inside me has the (redness) property that I am aware of when I have this experience. The puzzle then arises: "How, then, can I be aware of what my perceptual experiences are like…if none of the properties I am aware of when I have these experiences are properties of the experience?" (Dretske, 2000: p. 159) Dretske tries to solve this puzzle by drawing our attention to the distinction between the following three kinds of awareness: object-awareness (o-awareness), property-awareness (p-awareness), and fact-awareness (f-awareness). Dretske puts great effort to show that one could have one kind of awareness without having another two. For the sake of the main concern in this paper, we may put aside how Dretske demonstrates this and whether the demonstrations are convincing. The point is to note that the result of showing the distinctness of these three kinds of awareness has important implications.

Suppose e is my perceptual experience of a red flower, and r is a property of e. Dretske argues that I become aware of what my experience of a red flower is like, not by having an awareness of either e or r, but by having an awareness of the fact that I have an experience of a red flower. In other words, my awareness of an experience e is an f-awareness that e is r, rather than an o-awareness of e, or a p-awareness of r. The puzzle can then be solved. Both (1) and (2) can be true, because the experience e is an internal state of mine, and it does not have the property of redness r, since it is simply a brain state. All I should, and can, do, in order to become aware that e is r, is to be o-aware and p-aware of a red flower which is externally related to me. The mistakes of the Lockean "inner sense" theories of introspection lies, according to Dretske, in failing to make distinct the three kinds of awareness, and in holding that one's f-awareness that e is r is directly achieved by having an o-awareness of e and p-awareness of r.

Dretske claims that this account of the mind's awareness of itself can give a neat and satisfying account of the special characters of psychological immediacy and epistemic privilege of self-knowledge. Dretske admits that one's awareness of one's own experience is indirect, since it consists in having a f-awareness that e is r, rather than in having a direct o-awareness of e or p-awareness of r. Nonetheless, the externally represented property of an object directly "reveals to the person having the experience exactly what property [i.e., r] it is that his or her experience has" (Dretske, 2000: p. 170). Dretske is making the point that one's f-awareness that e is r is so directly given by a p-awareness of the property of an external object that one's introspective knowledge seems direct and immediate. Dretske adds that one's introspective knowledge can be made more direct and immediate by confusing the property of an external object one is p-aware of and the property of one's experience which one is not p-aware of. As to explaining the character of epistemic privilege, Dretske's story does not differ much from what he gives in the previous model, that a person having an experience is the only person who can possess this experience. No one else can occupy that privileged position.

This account of self-knowledge is similar to a displaced perception model of introspection discussed earlier in one basic aspect: both accounts regard introspective knowledge as a product of an indirect process, from perceiving things outside to being aware of something inside. However, there lies a crucial difference between these two accounts. In the second account, no connecting belief is mentioned or needed for the attainment of introspective knowledge. Making this move is exactly what Dretske needs to do, because, as we have seen earlier, only by doing so can the non-inferential phenomenology of introspective knowledge be faithfully captured. However, a problem remains. How does this account explain that a person shifts from a p-awareness of properties of an external object to an f-awareness about her inner mental state? A young child can have a same experience as an adult when they both see a red flower; they are both p-aware of the redness property of the flower. But the young child is not f-aware that e is r, whereas the adult are normally f-aware that e is r. Why does this difference exist? A reasonable explanation is that an adult has suitable conceptual representations of what a red flower and an experience are, and of what the relation between the two may be. Seeing a red flower, plus having a connecting belief that I would not see a red flower as red unless I had an f-awareness that e is r, are responsible for an adult to possess an f-awareness that e is r, and are lacking in a young child. This explanation is clearly a displaced-perception model explanation. Dretske's theory of introspective-knowledge thus seems to face a dilemma. On one horn of the dilemma, to better explain the psychological immediacy of introspective knowledge, Dretske has to give up the idea of a connecting belief in a displaced-perception model when he offers the account of introspective knowledge as a form of f-awareness directly revealed by p-awareness of external objects. The problem is that this account cannot explain how one moves from p-awareness of external objects to f-awareness. What would be worse is that when attempting to look for an explanation, this account turns to the displaced-perception model which it has rejected. On another horn of the dilemma, Dretske retains a displaced-perception model, but this would leave the problem of explaining the psychological immediacy of introspective knowledge unresolved.

IV.

Dretske's theory of self-knowledge thus seems unstable when it comes to deal with the character of psychological immediacy of self-knowledge. He offers two accounts of introspective knowledge, but one is unsuitable, and another appears inadequate. An internal tension between the two accounts seems to resist any easy fusion of them. My proposal is that Dretske's two accounts of introspective knowledge can be made compatible and unified within an expressivist view of mental states and self-knowledge, such as the one offered by Bar-On (2004). On this position, a mental state is of such nature that it can be *expressed* by its possessor either in a linguistic or non-linguistic form. When a normal young child sees a box of ice cream, she may reach for it. This physical movement directly expresses her desire for ice cream. As the child gradually grows up, she begins to pick up certain words, and may utter "Ice Cream!" to express her desire for ice cream. As a person's linguistic capacities and social interactions get more sophisticated, she may say "I want ice cream" to make her desire explicit. The third type of expression is a mental self-ascription in a sentence form. It can be either true or false, depending on whether the person who utters it has the self-ascribed mental state.

Now, to characterize the same phenomena with Dretske's terminology, a young child who has not developed any linguistic ability will be said to be merely o-aware and p-aware of a box of ice cream. She has a desire for ice cream, but is not f-aware of it. She only becomes aware of it after she has been taught certain concepts like "desire" and "ice cream", and has learned how to relate the two concepts in a variety of contexts. A person's f-awareness of her desire d for something x is not possible without the person's having acquired elaborate linguistic capacities to form certain connecting beliefs that I would not want x unless I had d. The process of developing relevant concepts and establishing connected beliefs is a necessary condition for a person to possess introspective knowledge, in the form of having an f-awareness that I have a mental state as such and so. However, after a person matures and has mastered relevant practices, the person does not need to entertain a conscious connecting belief in order for her to obtain introspective knowledge. A person, upon seeing a red flower, can simply and directly express her experience in a linguistically self-ascribed form like "I have an experience of seeing a red flower". My conclusion is, therefore, that Dretske's two accounts of introspective knowledge can more adequately and coherently explain the psychological immediacy character of self-knowledge, if some form of expressivism about the mind is supplemented.

Literature

Bar-On, Dorit 2004 *Speaking My Mind: Expressivism and Self-Knowledge*, Oxford University Press.

Dretske, Fred 1981 *Knowledge and the Flow of Information*, Cambridge, MA: MIT Press, Bradford Books.

Dretske, Fred 1988 *Explaining Behavior,* Cambridge: Cambridge University Press.

Dretske, Fred 1995 *Naturalizing the Mind*, MA: MIT Press, Bradford Books.

Dretske, Fred 1999 "The Mind's Awareness of Itself", *Philosophical Studies*, 95, 103-24.

Dretske, Fred 2000 *Knowledge, Perception, and Belief: Selected Essays*, Cambridge: Cambridge University Press.

Lycan, William 2003 "Dretske's Ways of Introspecting", in *Privileged Access: Philosophical accounts of Self-Knowledge*, edited by Brie Gertler, Ashgate.

Email: kcheng@phil.ccu.edu.tw

Reading Wittgenstein: Texts, Contexts, and Hypertexts

Istvan Danka, Budapest, Hungary

Wittgenstein in Hypertexts I.

By the preparation and appearance of the Bergen Electronic Edition of Wittgenstein's *Nachlass* (Wittgenstein 2000; below, conventionally, BEE), it is not only the case that a significant improvement has been made in Wittgenstein philology but also a new subfield has come into existence in debates on Wittgenstein's philosophy. Several interpretations claim that the well-known fact that Wittgenstein didn't publish his thoughts after his *Tractatus* is not independent of his mental inability to read (and therefore write) lengthy systematic works (Hintikka 2004) and his aversions of written texts in general (Nyíri 1997, Hrachovec 2000). It is also claimed that Wittgenstein's short, often rewritten and rearranged remarks could be read as hypertexts in some sense (Hrachovec 2000).

One of the main definitive marks of a hypertext is that it "offers a low cognitive load" like paragraphs or sections (Floridi 1999, 119-120). It is a common experience among Wittgenstein-experts that texts of Wittgenstein should and could not been read in a linear way and it is also supposed that if computers and word processors were invented that time, Wittgenstein would greatly make it of use (Neumer 1997, Nyíri 1997). His *Tractatus* still was in fact not a one-way line of thoughts but a tree-structured document. In his later period, his remarks are quite segmented and isolated - with several well-detectable interrelations among them, however. Instead of linear, one-dimensional books or papers, he wrote multi-dimensional and multimediated documents: texts with several references to his other remarks, containing a significant number of graphical illustrations as well. The only thing which was missed for being suitable for electronic publication is a technical one: hyperlinks among his paragraphs.

In a sense, that was partially done by the editors of different printed collections of Wittgenstein's remarks. They have done what could have been done in a printed environment: they directly connected remarks among which they supposed strong links, arranged by a linear order. That was of great help for beginners in Wittgenstein philology, and a no less difficulty for experts. Due to his working method, there were several cases in which Wittgenstein himself arranged one and the same remark to different places. The relations among these places, proved to be quite illuminating and essential in occasional cases, disappeared in a linear book (as opposed to using slip of papers arranged on a whiteboard or hyperlinked texts displayed by an electronic browser). The solution should be for this problem, with no doubt, an electronic document. That was the main reason behind the project of BEE (Pichler 2002).

Some Critiques of BEE

It is not surprising, however, that many philosophers (i.e., scholars working almost exclusively with printed/written texts) expressed some anxieties regarding BEE and electronic documents in general. It was the case even among Wittgenstein-experts acknowledged benefits of BEE in several aspects. Katalin Neumer argues that "a display of a computer is inappropriate for contextual analysis", and therefore "in the edition readable only on a computer we lose precisely that greater coherence which was aimed to get by the editors" (Neumer 1997). Herbert Hrachovec also thinks that "[t]he disappearance of manifest meaning is in fact the price to pay for enhanced electronic facilities" (Hrachovec 2000).

In my view, these partial critiques mentioned only on the side by Neumer and Hrachovec (who are, I should stress again, sympathisers of the BEE in several aspects) are consequences of some deeply embedded prejudices – not only regarding printed vs. electronic texts but also regarding what 'the' meaning of a text is and, therefore, how it should be read. More precisely, there is a strong connection between questions of the medium, those of the supposed uniqueness of meaning and those of interpretation. Alois Pichler claims, "[i]n dealing with texts we are tempted towards realism. This is because our text training predominantly involves printed books, which in their uniformity offer the practised reader very little resistance and seem to allow for a smooth and relatively unproblematic 'reading off'." (Pichler 2002).

Following Allan Renear, Pichler adds that "in text encoding there has been a development from realism to antirealism" (Pichler 2002). This development has been done, I suppose, as an effect of leaving aside prejudices inherited by the printed/written culture. As Havelock, Ong and others convincingly argued, it is not an accident that philosophy came into existence in the beginning of the age of literal culture: Platonist questions of what the essence or the meaning of a (decontextualised) word is an effect of *seeing at* (the face of) written words (Havelock 1963, Ong 1982). In an agreement with (Nyíri 1997), Hrachovec claims that Wittgenstein's anti-Platonism can be seen as an effect of his resistance to literacy. Not being comfortable in the world of written words, it is not surprising that Wittgenstein raised doubts against Platonist abstract ideas generated by those words.

Main Trends in Interpreting Wittgenstein

Regarding interpretative questions of Wittgenstein, two main characteristic trends can be drawn up – undoubtedly schematically but I hope rather illustratively than mistakenly. In an approximate parallel with the schematic picture of continental vs. analytic philosophy, in German-speaking world there is a text-oriented trend of Wittgenstein-interpretations, whereas in the Anglo-Saxon world there is a problem-oriented one.

On the one hand, German interpretations mostly focus directly on certain particular paragraphs of Wittgenstein, also often placing it into a biographical framework. The elbow room of their argumentation covers only the space of reasons given by Wittgenstein himself. They are as text-oriented as being responsible only for an understanding what he said – independent of the context of its alleged truth or applicability to our present circumstances. On the other hand, English-speaking authors, most notably in the US, usually directly claim that they are not certain, even not interested in, what Wittgenstein really wanted to say. What they are interested in is only how his decontextualised sentences can serve as arguments for the interpretation's own purposes.

As far as I see, there is no other possibility than balancing between these extremes. Below I emphasise one *common* problem with these so different methods of interpretation. I claim that both of the approaches, as some mixtures of those, are *methodologically* infected by the myth of 'the essence of thoughts' which is *theoretically* rejected by both of them.

According to the text-oriented view, there is an essence of *what* Wittgenstein really thought. This essence, the moral of his texts, could and should be grasped – and the aim of the investigations is to grasp this essence. According to the problem-oriented view, there is an essence of what Wittgenstein really thought *about.* This essence, the problems occurred in his texts, could and should be grasped – and the aim of the investigations is to grasp this essence. Both of these approaches say therefore that there is some deep essence behind texts – both of them are meaning realists.

Meaning as Use

Whether or not meaning realism has any reasonable grounds, it is undoubtedly *un-Wittgensteinian* in its spirit and as far as I see its being un-Wittgensteinian is commonly agreed by most of the text-oriented as well as problem-oriented Wittgensteinians at the level of what the texts say – even if not at the level how they should be read. If we accepted what is more or less generally accepted in questions of what Wittgenstein thought about language, then, using these insights as some methodological principles of our interpretation, it would not be permitted to attribute any such essences to his thoughts - either essences of his original thoughts, or essences of the problems he dealt with. It also means that I should definitely not argue that the *essence* what Wittgenstein said is something else. What I assert is that the *surface* of his thoughts doesn't let us think that there is such an essence.

What I have in mind is of course his notorious remark which identifies meaning with use (MS 142, 36) and its no less famous application to the question what (the essence of) a game is (MS 142, 60). Attributing any general theoretical relevance to the latter remark, it should be certainly applicable to the case of interpretations – which means that Wittgenstein himself should say that there is no well-definable intersection of different interpretations, there is no 'essence' of what he said, or what he spoke about. Mostly these remarks are claimed central to Wittgenstein-interpretations but I do not restrict my view to that essentialist point. It would be quite enough if I were allowed to say that it is *one* of the legitimate readings.

I try to legitimise my reading *practically.* Using BEE, the most appropriate way of reading texts is searching for keywords. This is the proper method of put together *every single* remark made by Wittgenstein on a certain topic. Keyword search is a kind of (dynamic) linking: the same word which occurs in different contexts yields the direct connection among different and spatio-temporally distinct paragraphs. It means that figuring out what Wittgenstein meant by a certain word, keyword searching should be well claimed a Wittgensteinian method: for understanding what a word means, it should be seen how it is used in different contexts. This method of course supposes an 'aboriginal' understanding of several words – some knowledge of what common sense German words mean and also some external usage of philosophical terms. This entrance to the language game will finally determine to a large extent what relevant and legitimate readings could be. Following the remarks on meaning given by the above-

mentioned surface reading, that no essence of thoughts can be formulated, there is practically *no other* way of entrance into Wittgenstein scholarship. Starting by other keyword searches and therefore other remarks, we could start from quite different point of views – most of those would, however, shortly come to a contradiction with newly read remarks. Ideally, at the end there will be quite few, but by no certainty one and only one, consistent and scientifically profitable readings. On the contrary: due to newly raised problems and fields of applications, it can also be the case that by fleeting the time, more and more consistent and scientifically profitable readings occur.

Wittgenstein in Hypertexts II.

Above as a ground I have alluded to Hrachovec's point that Wittgenstein's remarks can be read as hypertexts. Hrachovec himself is, however, not so straight at this point. He also claims that "Wittgenstein, it is true, despaired of achieving the linear order demanded by a printed book. But this does not imply that hypertext could have solved his problem" (Hrachovec 2000). The reason is that "[o]ne understanding of 'hypertext' is of segments of texts linked together in a more or less haphazard way, often without any single, controlling authority. This meaning is certainly not applicable to Wittgenstein". Even if "[t]he *Nachlass* does, in fact, contain a number of tentative registers that could easily be implemented as a hypertext", he adds, "Wittgenstein's 'hypertext' *avant la lettre* arises from unsuccessful attempts at closure rather than from intentional design" (Hrachovec 2000).

An obvious answer suitable for my own purposes (not contradict to Hrachovec's view, regarding his purpose) is that even if it was certainly not Wittgenstein's intention to formulate his thoughts as hypertexts; it could be our own one. The purpose of an interpretation is not exclusively trying to follow the intentions of the author interpreted; it is equally important to invent methods of interpretation. BEE could be seen as a tool of interpretation, not as a part of the *essence* of Wittgenstein's 'real' *Nachlass.* As Pichler put it,

> "Machine-readable texts make it more clear to us what texts are and what text editing means: Texts are not objectively existing entities which just need to be discovered and presented, but entities which have to be constructed. They are products of both the author and the reader. All that exists in the case of Wittgenstein's *Nachlass* are scripts which first of all need to be identified, interpreted and organized. Having a machine-readable version of Wittgenstein's *Nachlass* provides a multiplicity of ways to organize and construct texts, it makes this easy - and it makes it obvious that there is an element of construction" (Pichler 1995, 774f).

BEE as a medium determines how its content is able to be grasped. But even if the medium determines the content, that is less delimited than in printed editions. It is certainly impossible to present unorganised data; by putting a set of data onto a disc it *has been* organised. Therefore a result of interpretation (partially) depends on the medium. By using new media, it is not a new challenge, however. For the very same reasons, it was the case in the printed age. The only thing has been changed is that due to multiple channels of mediatedness, we are at least able to see, and therefore hopefully manage, that dependence.

Literature

(URL's has been checked on 17th April 2007)

Floridi, Luciano 1999, *Philosophy and Computing. An Introduction.* London: Routledge.

Havelock, Eric A. 1963, *Preface to Plato.* Cambridge, Mass.: Harvard University Press.

Hrachovec, Herbert 2000, "Wittgenstein on line, Wittgenstein on the line." URL: http://sammelpunkt.philo.at:8080/archive/00000998/

Hintikka, Jaakko 2004, "Wittgenstein's Demon and His Theory of Mathematics." In (Demeter Tamás ed), *Wittgenstein and Austrian Philosophy. Essays in Honour of J.C. Nyíri.* Amsterdam: Rodopi. pp. 89-107.

Nyíri J. Kristóf 1997, "Wittgenstein as a Philosopher of Secondary Orality." *Grazer Philosophische Studien* 52, pp.45-57,
URL: http://www.hunfi.hu/nyiri/gps97.htm

Neumer Katalin 1997, "Wittgenstein hagyatéka és a Wittgenstein kiadások." ["Wittgenstein's Nachlass and the Wittgenstein-Editions"], *BUKSZ,* 2. pp. 168-175.
URL: http://www.c3.hu/scripta/buksz/97/02/neumer.htm

Ong, Walter J. 1982, *Orality and Literacy. The Technologizing of the Word.* London: Methuen.

Pichler, Alois 1995, "Advantages of a Machine-Readable Version of Wittgenstein's Nachlaß." In (K.S. Johannessen & T. Nordenstam eds), *Culture and Value. Beiträge des 18. Internationalen Wittgenstein Symposiums.* Kirchberg: ÖLWG. pp. 770-776.

Pichler, Alois 2002, "Encoding Wittgenstein. Some remarks on Wittgenstein's *Nachlass*, the *Bergen Electronic Edition,* and future electronic publishing and networking." *Internet-Zeitschrift für Kulturwissenschaften*, 10.
URL: http://www.inst.at/trans/10Nr/pichler10.htm

Wittgenstein, Ludwig 2000, *Wittgenstein's* Nachlass. *The Bergen Electronic Edition.* Oxford: Oxford University Press.

Philosophy and Computational Ontologies

Stefano David / Cesare Rocchi, Ancona, Italy

Introduction

Ontologies in philosophy have been used for the study of existence since the age of the ancient Greek philosophy. Existence and being are the main subjects of Plato's and Aristotle's philosophical investigations, which have been carried in terms of entities and relations between them.

In the last years, however, ontologies in computer science, and in the Semantic Web in particular, have become a popular mean for the efficient management of information.

The Discovery project aims at exploiting existent Semantic Web technology like computational ontologies to ease and support the work of scholars on different philosophical topics. This goal will be reached by the work of people with different expertise working together to realize a federation of networked and interoperable websites dedicated to different aspects of philosophy. Each website will contain a variety of resources about a philosopher (e.g., Nietzsche, Wittgenstein) and will be based on the Hyper (Hyper 2000) technology. Hyper is an e-learning platform developed with the purpose to support HyperNietzsche (Hypernietzsche).

Semantic Web technology comes into play for the management of information. By management we mean efficient retrieval, insertion and connection of information chunks in an integrated framework, which allows an easy integration of new information and a simple navigation of the existent content. Computational ontologies will be used to relate concepts in different Hypers and to describe each of the Hyper. The content of each Hyper will be stored as instances of ontologies, allowing the use of Semantic Web technology to organize the knowledge and to retrieve data efficiently from many Hypers.

This paper is organized as follows: Section 1 presents the Discovery projects, Section 2 introduces Computational ontologies and shows the most relevant differences with ontologies in philosophy, Section 3 and 4 describes the Scholarship Ontology and the domain ontologies in Discovery, and finally Section 5 draws the conclusions and shows some possible future work.

1. The Discovery Project

The Discovery project is based on lessons learned in the last years from the HyperNietzsche Project, whose primary purpose was "To provide free and direct access via the Internet to digitized facsimiles of primary sources for the study of Nietzsche [...]". HyperNietzsche has an underlying framework based on the Hyper[1] technology, an e-learning platform dedicated to Humanities studies.

The Discovery project will combine the experience from Hyper with Semantic Web Technologies with the goal of a better organization and management of knowledge stored in every Hyper, more reliable inter-Hyper interaction and exchange of knowledge, faster information retrieval from different sources (i.e., different Hypers), and easier possibilities for Scholars to submit their own contribution.

The aim of Discovery lays on two levels [layers]: each will build a piece of an integrated framework that will /support the work of a Scholar, allowing him easier research of data and submission of contributions. These two levels are:

Philosource. It is a federation of interoperable Web sites, based on Hyper, each devoted to a different philosopher (e.g., Nietzsche, Wittgenstein) or philosophical topic (e.g., the Ancient Greek philosophy).

The content of each Hyper will be composed of different types of contributions (i.e., digitalized corpora of the philosopher in form of jpg images, pdf documents, videos and so on), that a Scholar can freely comment and annotate with suitable metadata (e.g., description tags).

Philospace. It is a network of peer2peer client applications that will ease the enrichment and the interchange of knowledge about philosophers. Scholars will be able to query all the data present in a hyper and use the results for building and submitting new knowledge.

2. Computational Ontologies

In a few words, Ontology (from Greek ὄντος-, *of being,* and -λογος, *study, theory*) in philosophy represents the study of existence, whose most general purpose is to find an answer to the question: "*what is there?*".

However, in the last years, a lot of efforts were put in the research on ontologies in other fields not directly related to philosophy, especially in Knowledge Representation but also in Artificial Intelligence, Computer Science, Information Integration, and so on. In these fields, ontologies are used as a means for the organization, management, and disambiguation of information (Guarino 1998), and called *computational ontologies* to distinguish them from ontologies used in philosophy.

One of the most compact and meaningful definitions of ontology when used in Knowledge Representation is *"a formal, explicit specification of a shared conceptualization"* (Studer et al 1998). We will see what this definition means and how it characterizes ontologies used by the different communities, philosophy and Computer Science. Disambiguation is indeed, according to (Guarino 2003) the main difference between Ontologies in philosophy and computational ontologies.

Computational ontologies, can be expressed with different syntaxes, formalisms, and languages. Hence, rather than introducing the main characteristics and some of the (formal) theoretical formalism underlying computational ontologies, we prefer to describe the most relevant properties of computational ontologies, and highlight the commonalities and differences between ontologies in philosophy and in Knowledge Representation.

The commonalities between the two interpretations of ontology are basically two:

They both try to analyse the property of an object in order to describe it. Take a wine as example: in order to describe the concept of wine, we can say that it has a colour, it has a given alcoholic degree, the grapes needed to

---

produce a certain kind of wine, the location where it comes from, and so on. The granularity of such a description depends on the purpose of the ontology.

A first common characterization of ontologies is therefore the tentative to organize knowledge about the world, which can be not the whole world, but only a subset, for example the domain concerning wines and other objects related to wines (e.g., which courses can better accompany a wine).

Ontologies represent a conceptual schema of the word and are used to create suitable categories in which the objects of the world can be classified. Wines can be distinguished between white or red, dry or sweet, possibly also combining them: white-dry, white-sweet, and so on, defining different concepts of wine. This allows to classify different wines into different categories, according to the schema defined.

However, from this point on, ontologies for philosophers and for Computer Scientist present many, significant differences. We present here the most relevant, pointing the interested reader to (Guarino 1998) and (Guarino 2003) for a deeper analysis.

Formal specification. The first difference between the two types of ontologies is in the language used for their description. Philosophers use natural language, whereas Computer Scientists use formal languages, which usually have an underlying logical theory. Compare for example a simple description of a white wine in natural language:

"A *White-wine* is a *Wine* with a *white colour*" with its formal counterpart:

"*White-wine* DEF (*Wine* AND *colour.white*)".

The formal description carries a semantic model with it, that is, a truth theory that allows to say when a particular element in the world belongs to a certain class. That is, whether an individual of the domain is an instance of a class.

Purpose. The information carried by a computational ontology is used to make calculation over it, i.e., to "reason" about the knowledge stored in the ontology to discover what is called *implicit knowledge* (see below), whereas philosophers use ontologies to explain their vision of the world. An ontology has therefore to explicitly carry all the necessary information to allow everyone who reads it to understand it.

Implicit (Incomplete) knowledge. Computational ontologies allow to specify what an object is not, rather than describe what is it. For example, in an ontology there can be statements like:

"NOT *Student*(paul)". Paul is not a student, but we do not care whether he is a professor or perhaps an assistant.

"*Parent*(john, paul) OR *Parent*(jane, paul)". Either John or Jane is parent of Paul, but whom of them? Perhaps both?

Ontologies in philosophy do not allow specifying this kind of knowledge: they contain a clear description of the world as seen by the philosopher.

Language. A philosopher describes an ontology in natural language, in order to share it with other people and to communicate his/her vision of the world. On the other hand, Computer scientist write ontologies in a language that is not directed towards human comprehension, but

that can be easily understood by computers. Popular machine languages used for ontology description are based on XML[2].

Ambiguity. Computational ontologies do not allow any type of ambiguity in the definition of the concepts, because they have to be interpreted by machines and not by humans. Philosophers, however, use natural language and for this reason the definition of a concept can be misinterpreted or not understood by other philosophers.

Finally, consider the following example. A philosopher introduces an ontology where he distinguishes the animals in mammals or non-mammals. His fixed categorization cannot classify a platypus, since it has characteristics of both mammals and non-mammals. A computer scientist that has a similar ontology (that distinguishes mammals from non-mammals), when finds a platypus can choose between different possible solutions (which depend on the formalism chosen for representing the ontology): (1) he can reject the concept of platypus in order to keep consistency[3] in the ontology, (2) he can modify the categorization, or (3) relax the constraints of the concept definitions in the ontology to allow platypus to be classified.

3. The Scholarship Ontology

In the scope of the Discovery project, the Scholarship Ontology is intended as an upper (foundation) ontology, i.e., an ontology that contains those concepts that all Hypers will share. The use of upper ontologies eases the research and the retrieval of information from different domains, in that they allow people that describe different domains to refer to the same entities and the same conceptual schema. As an example, consider the concept of *Commentary*, which is a short text that comments a *Source* (See (Barbera et al. 2007)). As it denotes the same thing across different Hypers, it can be defined in the Scholarship Ontology. Scholars working in different domains can then refer to commentaries in other Hypers by simply referencing *Commentary* in the Scholarship Ontology, to automatically inherit all the properties and the relations defined in the upper model.

The Scholarship Ontology is the ontology underlying all Hypers, acting as a kind of pool, which scholars of different Hypers can take the common concepts from. We present and describe here its main components, that can be seen also in Figure 1.

The root concept is *Source*: everything in a Hyper is a *Source*, except for Contributors. Sources are specialized in four different subclasses: *Interpreting*, which are contributions that add other contribution to the hypers, starting from existent material; *Ordering*, which are contributions for which the order of its elements matters; *Describing*, which are collections of information about sources; and *Editing*, which are different reproductions of a source.

We do not describe further the taxonomy of the concepts of the Scholarship Ontology, the interested reader can refer to (Barbera et al. 2007) for more information.

4. Domain Ontologies in Discovery

We can divide computational ontologies in two categories: upper ontologies, that define concept that can be shared

---

2 See http://www.w3.org/XML
3 *Consistency* is the property of a computational ontology to be coherent and to present no contradictions in the knowledge stored.

across different domains (e.g., the Scholarship ontology), and domain ontologies, which define concepts in only a single domain.

As in Discovery there will be Hypers dedicated to different philosopher, it is straightforward to foresee to create an ontology for each of the Hypers, tailored to each philosopher.

However, at the moment of writing this paper, the status of Discovery is in the starting phase of the definition of the domain ontologies, hence we can not present the reader any of the domain ontologies.

5. Conclusions and future work

We introduced commonalities and differences between computational and philosophical ontologies. We focused on computational ontologies and how they can be exploited in the Discovery project. We put particular effort in the description of computational ontologies to emphasize the advantages of their use.

We presented also the Discovery project and its goals, along with the progresses made at the time of writing this paper. Although at a very early stage, and the presence of some issues in the tentative of reconciling two disciplines so different like philosophy and the Semantic Web, this project and its initial results are good and promising.

The next steps foresee the creation of Hypers dedicated to Wittgenstein and to philosophy in the ancient Greece within the Discovery project and their use by scholars worldwide. Additionally, other Hypers dedicated to other philosophers or philosophical topics could be set up and used.[†]

Literature

Studer, Rudi, Benjamins, Richard and Fensel, Dieter. 1998 *Knowledge Engineering: Principles and Methods*. Data and Knowledge Engineering. 25 161-197

The Discovery Project, 2006, http://www.discovery-project.eu/

Guarino, Nicola 1998 Formal *Ontology in Information Systems*. In Proceedings of FOIS'98, Trento, Italy, June 6-8, 1998. IOS Press, Amsterdam, pp. 3-15

Guarino, Nicola, 2003 *Il ruolo dell'ontologia nella disambiguazione del significato,* in NETWORKS (in Italian), Nr. 2003/2, pp. 14-24

The Hyper e-learning platform, 2000 http://www.hyperl-org/

HyperNietzsche Web Site, http://www.hypernietzsche.org/

Herman, Ivan 2001 *The Semantic Web Activity* home page, http://www.w3.org/2001/sw/

The Semantic Web Home page, http://www.semanticweb.org/

Barbera, Michele, David, Stefano, D'Iorio, Paolo, and Morbidoni, Christian, 2007 *Formalization of the Scholarship Ontology*, Deliverable D7.1, Discovery, March 2007

Email: sdavid@delicias.dia.fi.upm.es / cesarerocchi@gmail.com

Figure 1: UML diagram of the Scholarship Ontology.
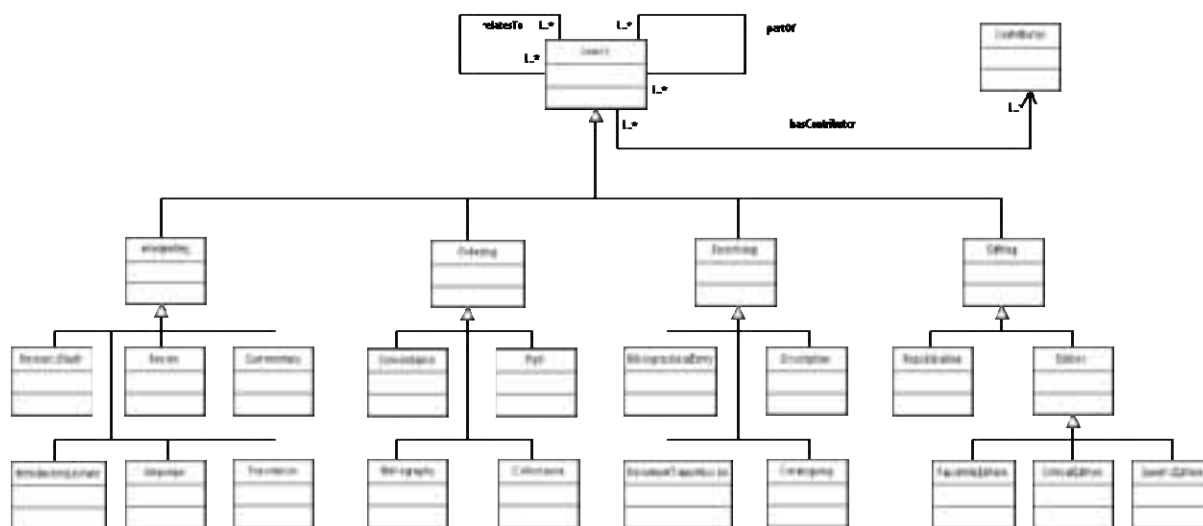
Philosophy at the crossroads.
Is it possible to love wisdom in the information age?

Aleksandra Maria Derra, Torun, Poland

1. Introductory remarks

Every time we reflect upon the specific features of the times we live in, we encounter an interesting phenomenon. We cannot be sure to what extent the description we are going to give shows the characteristics of the entity described, and to what extent the very description makes the entity look more as it is described. We are faced with the limits of the description process whenever we have to catch too many dynamic factors in one flash. So, I would prefer to say, we tend to create (the description of) the entity according to the assumptions we have already taken and which make our goal easier to achieve. The situation with the famous notions of the information age or the information society is not different. We are trying to define them, and we are still not sure if there are such things as we are talking about in our theories (there are probably just as many theories devoted to characterizing the information age as the critics of them who point out that these theories are inadequate) (Webster 1995). Moreover, any attempt at doing classification, enumerating features, defining wrongly suggests that the study of the problem has been closed and that we already solved it. The most famous researcher of the media, Marshall McLuhan himself has taught us that instead of classifying we should explore (McLuhan 1997). So let me explore here the problem of philosophy and its place in our contemporary culture: the question of the role it can or cannot play in information (not wisdom) oriented age. According to well established conceptions in therapeutic psychology, which I admire, in order to improve things, we should start from ourselves. Therefore I am not going to complain about the way the world is. I am not able to change the world in a dramatic, revolutionary or structural way, so complaining would bring only psychological, not cognitive, relief. However, I am going to complain about philosophy and philosophers, because I am convinced that I can change the way I understand philosophy.

There are many theses which I must take for granted here. Firstly, my thesis which remains implicit is that philosophy plays (as it indeed should play) an important role in our culture, creating the ways of thinking and the ways in which we treat values. I am well aware that I follow this thesis without giving any arguments in favour of it. I know, too, that one can find many good reasons for giving up such a view of philosophy; still, in a short text such as this one, there is not enough space to defend it. Secondly, presenting a certain view of the information age, I have to skip all the interesting country-specific differences, hence to ignore different historical and cultural backgrounds, assuming that a more or less unified treatment can embrace all European countries and the USA. The differences we are talking about are crucial when we consider the cultural role of philosophy in different areas of our globe. Finally, I have chosen to present the core of the features of the information age which can be found in the literature. I am going to enumerate these features and characterize some of them, being aware of the fact that the thinkers dealing with the characteristics of the information age or the information society have not managed to work out a broader consensus in this matter.

2. What is the information age?

There are six factors which are usually mentioned when one tries to give the description of the information society or the information age. They are not normally all used in a single theory, but frequently they are combined in many different ways. These factors are the following: technological innovations and the changes they cause, occupational change and its social results (predominance of work connected with the transfer of information), economic values, information flow (with new, faster media being used and with the growth of information networks which change the spatial relations in society and culture), the expansion of symbols and signs (entering immaterial age) (McQuail 2005: 108). Technological metaphors include all innovations which have been brought along by technology and are seen in almost every corner of social and individual life of humans. The way people deal with the information source, value technological facilities and treat new technological innovations is seen as something which has turned the industrial society into the information society. The occupational and economical factors are often seen as mutually related. The emergence of the information society is measured by occupational change and the percentage of people whose occupation is connected with the so called information jobs. What is more, each national economy is valued more when the percentage in question is higher. When – as in my home country – a considerable proportion of the society works as farmers, the country's economy is less competitive and advanced. Nowadays, it is the information industry that is responsible for the bulk of a country's economic output. Let me say a few words about the idea of networks as a main feature of the information society. The network society has transformed the description of space and time. The limitations arising from the physical distance in space have been largely removed by the advent of communication via computer or telecommunication. Again, there are plenty of consequences of this process for social (economic, political, ethical) and personal (within the families, marriages etc.) relations. The metaphor of entering the immaterial age is connected with the conviction that there is an enormous increase of the information accessible in social circulation nowadays. The way information is transferred (via internet, telecommunication, advertisements, television, radio etc.) changes the organization of our everyday life – hence the quality of it as well. Additionally, almost everything can be a vehicle for information, for example the clothes that we wear, the cars that we drive, the apartments that we live in, etc. The philosophically interesting result of that process is the lack of traditionally understood meaning. Some thinkers claim that the effect of too much information is its meaninglessness or the act of communication that does not communicate any content (Baudrillard 1983). With other words, the information we are talking about here is not referential, but digital, and that is its crucial feature.

3. Philosophy at the information age. Possible concerns.

What are the possible consequences of the changes the information age brings for philosophy understood as a part

of Western culture with a historically established past? Are we as philosophers going to get some good or some bad news from the age we live in? I suppose both. Given the difficulties with making a correct diagnosis of our age, we can only speculate about it, which is what I am going to do now.

The story of philosophical writing has its roots in the idea that there are some people who are in a privileged position relative to others with respect to conveying important messages. What is more, philosophy could develop as a product of Gutenberg's invention, because philosophical theories could really spread only once they are written. The information age has changed the situation on both sides: the writer and the reader. The access to something that comes in written form is now easier than ever. People do not have to use publishers with their long, expensive, time-consuming and frequently selective process in order to transmit some information to others. Anyone who is able to use the internet can write her books, poems, stories and theories on the websites. Written words are more accessible to ordinary people. They do not have to look for expensive books or articles, which are sometimes difficult to find; instead they can simply use Google to read something which interests them. The effect is obvious: too much information with no comfortable tool that could help arrange it according to its quality. What is more, the time people have is highly limited. The information providers have to fight for consumers who would be ready to spend their time getting their information, not others. In his book published as early as in 1981, Masuda has stated that in the information society "time value will be the major determinant of modes of action" (Masuda 1981: 71). More recently, Eriksen points out that something which we all lack nowadays is "slow" free time which can be correlated with another feature of the information age, namely the loss of privacy (Eriksen 2001). Will people be able to use their priceless free time for reading philosophy? How will philosophical works be visible in the general mess of all possible kinds of information that always surrounds us?

Philosophy, traditionally understood, requires time to be "slow". It concerns not only the reading and writing process, but also the processes of thinking and reflecting which cannot be engaged in without a proper amount of concentration, a quiet place and the lack of deadlines. We all know that this is very far from what the situation looks like nowadays. We philosophers, who are mainly academics, are no longer expected to write long, detailed, carefully prepared books whose completion necessarily lasts up to a few years, but are instead expected to publish often, a lot and in distinguished journals. And we care less and less about how many people will read such work and discuss it with us. We, as others, lack "slow" time. One can even have a feeling that there is more and more to read but there are less and less readers. We cannot escape the conclusion that when we write something (being obliged by the academic rules to do that), we increase the amount of information people have to deal with. As philosophical writers, we make the situation worse.

It is quite often emphasised that the first decade of development of the business of computer technology (which is a vital part of the information age) was influenced by the military industry, and the next thirty years – by show business. Neither the former nor the latter creates any space for traditionally understood philosophy. If philosophy consists of information that could be important to many people in different situations, why does it remain such an insignificant domain in contemporary society? Why does this information matter less and less? Maybe it is the fact that philosophical knowledge does not count as knowledge

anymore. Maybe philosophy should be a kind of descriptive therapy as Wittgenstein wanted us to think. Or maybe, in a worse version, information matters nowadays only when – in one way or another – it can lead to making money, and philosophers do not know precisely how to produce such information? It can be said that if we count information as a product to buy, its quality is not always the most important factor. If so, and assuming that in philosophical thinking quality is something what truly matters, then maybe the philosophers of the information age would have to become pop philosophers at the expense of quality. Are we ready for that? Pop does not have to mean rubbish. To state something easier in order to make it more comprehensible does not mean that it becomes less professional, less scientific, less important, as many philosophers tend to assume. Yet, in order to do so, the whole tradition of teaching philosophy to the elites would have to be given up.

If we treat philosophical theories as a source of useful knowledge for people dealing with everyday life, should we not do everything that we can to popularize philosophy in order to share the knowledge we possess? Should we not use all accessible media of the information age to achieve this, in order to prove that philosophical thinking can change the way the world is to us, that it can change our life for the better (as Dewey has claimed many years ago)? How many of us, however, are ready to make our articles openly accessible from our websites? How many of us help to write internet encyclopaedias and take part in internet chatrooms and other places where one can share the opinions? A number of researchers claim that there are many boundaries which have been transgressed in the information age, for example the boundaries between the experimental and the established, between high and low culture, also the boundaries between scientific disciplines (Briggs, Burke 2002: 320). Is it possible that philosophers may be able to learn something from such changes, or will they insist to focus on establishing what can count as a real philosophical problem and what is not? Perhaps it is time to enrich philosophy with fresh ideas, to respond to the problems of today's culture, to learn something from sociologists, psychologists, anthropologists etc. – to open our minds and change our discourses towards pop and vision-oriented culture.

Some factors of the information age look really promising. According to some researchers, the current trends favour the professions of intellectuals (Toffler 1980). Philosophers are mainly academics, so they are intellectuals by definition, and their situation from the point of view of occupational change seems to be perfect. Philosophy is a kingdom of reason, of abstract ideas, the domain which has gone through all possible battles against wrongly understood positivist and materialist theories according to which only concrete, physical entities matter. If we have passed the material eras and have reached the information age, that abstract and immaterial phase in the history of the human species, the present should be the perfect time for philosophers. Why, then, are they at the margins not only of the academia, but also of interests of ordinary people? Is there something wrong with the diagnosis of the contemporary age or, perhaps, is there something wrong with the way philosophers do philosophy?

4. Concluding questions

Philosophy as an intellectual activity of humans has many breathtaking stories to tell. It can be read as a history of ideas which were changing the way people used to think. But if the information age researchers are right, the world has changed dramatically. Recently, it has been changing

faster than ever before, and it has brought new values into play. Let me provide just one example, one concerning the definition of information. Stonier writes: "Information exists. It does not need to be perceived to exist. It does not need to be understood to exist. It requires no intelligence to interpret it. It does not have to have meaning to exist. It exists." If he is right, almost all values and activities, so important from the philosophical point of view, do not matter in the age of information. They do not come from old philosophical stories. Are we, as philosophers, able to move on with the baggage of our tradition and respond to the world's most recent issues at the same time? Are we able to be treated as useful and needed elements of cultural heritage of our societies, not just because of the past, but mainly because of everything that we can do for the future? At present, the interest in philosophy is next to nothing from the point of view of the ordinary man. If we choose to say complacently that it was always like that and philosophy should simply go on, then we have learnt no lessons from our own tradition of critical and reflective thinking.

Literature

Baudrillard Jean 1983 *Simulations*, New York: Semiotext(e).

Briggs Asu, Burke Peter 2002 *A Social History of the Media. From Gutenberg to the Internet*, Cambridge: Polity.

Eriksen Thomas Hylland 2001: *Tyranny of the Moment. Fast and Slow Time in the Information Age*, London: Pluto Press.

Masuda Yoneji 1980 *The Information Society as Post-industrial Society*, Washington: World Future Society.

McLuhan Marshall 1997 *Essays. Media Research. Technology, Art, Communication*, Amsterdam: OPA.

McQuail Denis 2005 *McQuails Mass Communication Theory,* London: Sage Publications.

Stonier Tom 1990 *Information and the Internal Structure of the Universe: an Exploration into Information Physics*, London: Springer-Verlag.

Toffler Alvin 1980 *The Third Wave*, New York: Bantam Books.

Webster Frank 1993 *Theories of the Information Society*, London: Routledge.

Email: aldewicz@umk.pl

Substance and Phenomenology in *Tractatus*

Dan Dusa, Paris, France

The concept of substance is introduced in the *Tractatus* at the point where Wittgenstein deals with the simple-complex relationship. The issue of the meaning of the simple names in a proposition could be naively put as it follows: in a proposition, all names have meaning, and if a name doesn't have meaning the proposition is nonsense. According to the theory of definite descriptions, if the object which is denoted by a name in a proposition is found out through analysis being a complex[1], then *even* if the name by itself doesn't have *any meaning*, this proposition is not nonsense, but it is a false one.

In the first part of this work, we will try to interpret correctly the sequence where the simple-complex issue appears for the first time and the so-called "substance argument" is being articulated (2.01-2.0212), and we will draw some consequences. In the second part, we will interpret another important proposition about substance which will lead us to the following problem: how can it be possible to have a phenomenology in Wittgenstein's *Tractatus*. Here is the first fragment:

2.02 The object is simple.

2.0201 Every statement about complexes can be analyzed into a statement about their constituent parts, and into those propositions which completely describe the complexes.

2.021 Objects form the substance of the world. Therefore they cannot be compound.

2.0211 If the world had no substance, then whether a proposition had sense would depend on whether another proposition were true.

It must be noticed that from the beginning of the argumentative section the first proposition introduces the essential feature of the object, that of being simple and the second one makes explicit the way in which an expression about a complex is being analysed. We may also notice that the way in which the analysis is being presented introduces the notion of *complete description*. The analysis of any complex means the *complete* description of its *components.* The first time when the term substance appears in *Tractatus*, it is used to define the objects and also to justify their simplicity. The argument of substance appears in the proposition 2.0211, where it is said that if there was no substance, then *the sense of the proposition would depend on whether another proposition were true*. This statement puzzled many commentators because, as Wittgenstein states in the proposition 3.24, it's *not* the sense of the proposition that depends on whether the proposition describing the complex is true, since even if this is false, the proposition makes sense. How can we make a coherent reading of these fragments?

Usually, the so-called "substance argument" is explained on the model of Russell's theory of descriptions, and it is wrongfully read by most commentators. We will take as example the case of H. - J. Glock and Fogelin. The former, starts by stating that this argument establishes the autonomy of sense, which is true. But Glock's explanation is insufficient: „A complex consists of, for example, *a* standing-in-the-relation-*R* to *b*. A proposition ascribing a

property to it – 'Φ(*aRb*)' – comes out as 'Φ*a*. Φ*b*. *aRb*' (TLP 2.0201, 3.24; NB 15.5.15; *Principles* 466). If ~*aRb*, then the analysandum does not lack a truth-value, but a false one. It is not the sense, but rather the truth of a proposition which depends on the existence of complexes. *But*, it has a sense only if the propositions of the analysans do – the sense of a complex proposition is a function of that of its constituents. And these propositions are senseless unless they ultimately consist of names for simples: if '*a*' were further explained through descriptions only, its referring to something, and hence the sense of '*aRb*', would depend on facts."(Glock, Hans-Johann 1996, 271) The last part of the argument is only dismissing the issue at the compounded propositions level and then builds an infinite regression, giving the impression that the sense of the proposition depends, ultimately, on whether the propositions describing the complex are formed of simple names.

Wittgenstein's argument doesn't have the form of an infinite regression. In fact, it doesn't have any impact on his conception (*TLP*. 4.1122). On the other hand, Glock's remark, that the sense of the proposition depends on the fact that the statements on the complexes do or do not have sense, is not invoked *here* by Wittgenstein. Glock's argument completely misses its target. Let's see how R. Fogelin interprets the above Wittgenstein argument: „If analysis always generates names that are in their turn names of complexes, then the criterion of sense laid down in 2.0201 would forever remain unsatisfied. Thus without simples there could be no propositions with a sense and we could not sketch out any picture of the world (true or false). Since we obviously can sketch pictures of the world, we cannot deny the existence of simples. I confess that there are some difficulties with this reading of the text. They turn upon proposition 2.0211 […]. Suppose we have a proposition that attributes a feature to the complex of (*a* combined with *b*) is p. What proposition must be true in order for this proposition to have a sense? The naive answer is this: it must be true that *a* is combined with *b*. However tempting this interpretation may be, it apparently runs contrary to the stated text: "3.24 . . . A proposition that mentions a complex will not be nonsensical, if the complex does not exist, but simply false." It thus seems that if there are no simples, then the *truth*—not the *meaning*—of one proposition will always depend upon the truth of another. This, perhaps, is a bad enough result, but it is not the result Wittgenstein speaks about at 2.0211. In sum, I do not know how to make the argument in the 2 .02s square with the statement at 3.24." (Fogelin, Robert J 1987, p. 14.) In the end, Fogelin reaches the same result as Glock, but in return he admits that this is not what Wittgenstein's argument means. But what does this argument claim?

We have to pay attention to the argument's form otherwise we risk to miss its content. The form of the argument is *reductio ad absurdum* and we can suppose that it has been misunderstood because the form of the argument has not been taken into consideration and, as a result, neither the *consequences*, at the language's level, of the absurd supposition from which it started. The argument starts with the assumption "what it would mean if the world had no substance?" and the rest of the argument develops its consequences. Consequently, the only question to be asked is: how can a proposition describe the reality in a

---

[1] We'll take a name which denote a complex object for a 'complex name'.

world with no substance and what *structure* could such a proposition have?

A world with no substance would be a world with no form or structure (*TLP.* 2.032), thus if we stated a proposition, it would not determine *any form* (it would not have an internal relation to reality) so it could describe reality *only* through its external (contingent) features. This would mean that it could only describe it if the objects which compound the reality *exist*, since if they didn't exist and their possibility hadn't been granted by an internal feature of the proposition, we couldn't attribute any property to these objects. Thus, a proposition should *assert* the existence of the objects which compound the fact and, *at the same time*, it should *assert* the possibility of their combination in a certain structure. Then we couldn't understand any false proposition because that would mean that we asserted an impossible possibility and, on the other side we couldn't assert a true proposition because we couldn't compare it to the reality. This argument is so simple, that it may have passed unnoticed for this very reason. We can say that it is aimed against Russell's theory of external relations. In conclusion, we can say that the content of the argument states that the sense of a proposition *doesn't depend* if its elements are "complex names", but if they are *names* and thus they determine *a form*.

It should be noticed that the substance argument *does not depend on the necessity of the analysis* in simple names and that it is valid no matter if the names in the proposition are complex or simple. In this way, the justification of the logical analysis, based on the fact that the natural language's propositions don't show their essential features, namely they don't show their form, is not relevant in this case. The following objection could be raised: if the propositions of the usual language have a logical structure, meaning that a name of the natural language indeed *signifies* an object, and if a constituent of the proposition is a complex name which doesn't denote anything, (since that complex doesn't exist) how can we say that the proposition makes sense, namely that it is true or false? In order to compare the proposition, it is necessary that the form of its constituent parts be the same as the form of objects in the situation it represents and the non existence of complex name's denotation would mean that we could only compare *the form* of the name. In other words, if in reality nothing corresponds to a complex name, then only *the form* of the name remains in the proposition, but we *couldn't compare* the last one to reality. If we interpreted Wittgenstein's argument in this way, we would completely miss its meaning, because if a name is in a proposition, it *does have* a meaning, but it's exactly this thing that cannot be stated, but *shown* by the fact that it is a name. That's why Wittgenstein holds that:

2.025 It [substance] is form and content.

The names *always have meaning* in the propositions, and this is one of the important differences between Russell's analysis of the proposition and Wittgenstein's one. But then it could be asked what is the difference between the "apparent form" of the language and its "logical form" and how could we justify the exigency of the analysis? The requirement of the analysis in *Tractatus* is not based on the fact that some complex names (incomplete symbols) have no meaning by itselfs, but on the indeterminacy of the way in which the complex name signifies, an indeterminacy resulted from the complexity of the way the complex name denotes and the opacity of the natural language. Even though there is an expressive equivalence between the complex name appearing in the proposition and the proposition analysing it, the relation between the

two cannot be expressed in a proposition, because the signifying relation of the name is not the same as the relation of representation in a proposition, which describes the complex. Thus, what we have between the proposition where the complex name appears and the proposition describing the complex is an "internal relation" (3.24) which cannot be expressed in language, but through a definition.[2] That's why the *Tractatus*' conception has a system of implicit definitions (conventions) between the analyzed language and the usual one (*TPL.* 3.261), a system which cannot be expressed but, (and this is one of the *Tractatus*' metaphysical assumptions) the usual language can be *translated* into an analysed language with the aid of the truth-functional logic, a language with the same *expressivity*.

The second fundamental "argument" regarding the substance articulates what we could call the phenomenology of the *Tractatus* and it is introduced in the proposition 2.0231. By phenomenology, we shall understand what is usually characterized as a field of philosophical studies that describes the essential structures of experience. Phenomenology tries to represent what is necessary in experience and consequently it *describes* the way in which the substance manifests itself. But the following proposition of Wittgenstein refers exactly to the possibility and the way of describing the substance in language:

2.0231 The substance of the world *can* only determine a form and not any material features. For these are first presented by propositions – first formed by the configuration of the objects.

Although the substance *can* only determine a form (as the objects *only* contain their *possibility* to appear in states of affaires), we cannot refer to it *but* through propositions, in other words, we cannot refer to the essence, unless we specify its accidental features. If the substance does *appear* in the language, this appearance can only be through propositions. But the propositions *represent the configuration* of the objects and *not* their possibility. This configuration [*Konfiguration*], by which in the propositions are asserted the (accidental) external features of the objects, is „the changing, the variable" (*TLP.* 2.0271) which „forms the atomic fact" (*TLP.* 2.0272). In this regard, there is no way for us to *say* the essence of the world. Any attempt to represent reality in the language may be performed by asserting the contingent *configuration* of the objects in states of affaires. Wittgenstein refuses any philosophy based on an *a priori* intuition which could *represent* in the language the possibility of the objects' configuration. Thus, there are no *a priori* synthetic propositions which represent reality, but only rules that we use in order to describe the meaning of words.

In fact, this is where we can find one of the features crossing the whole philosophy of Wittgenstein, namely the fact that whatever is independent from experience must *already* have a use in the language, in propositions. For Wittgenstein, there is no *given fact* or reality we can *refer* to, whose evidence we could appeal to, in order to justify the sense of the propositions. We cannot *say* what the objects are, we can assert only their (external) properties in propositions, meaning that what we say may be true or false and, as a result, contingent. We can only *assert* facts. Any phenomenology aiming to express the necessary relations between the objects cannot do it without the objects manifesting themselves in *propositions*. And when it tries to do it, it "'treats' of nothing." Thus, in the *Tractatus*,

---

2 3.24…The combination of the symbols of a complex in a simple symbol can be expressed by a definition.

tautologies which "must show something about the world" "presuppose that names have meaning, and that elementary propositions have sense" (6.124). This is the sense in which we can interpret the so-called Wittgenstein's formula – „meaning as use": the meaning does not reduce itself to the use, because its definition is *a priori* (it express itself in the arbitrary rules of grammar), but in order to be explained and to be understood, it must have a use. And I think that *this* is Wittgenstein's notion of *a priori* which he defended during all his life.

Literature

Fogelin, Robert J 1987 *Wittgenstein*, London: Routledge & Kegan Paul

Glock, Hans-Johann 1996 *A Wittgenstein dictionary*, Oxford: Blackwell

Wittgenstein, Ludwig 1990 *Tractatus logico-philosophicus*, Routledge

Email: dan.dusa@malix.univ-paris1.fr

‚Alles, was der Fall wird’:
Wittgenstein und die informatische Wende in der Physik

Harald Edelbauer, Hinterbrühl, Österreich

Der Begriff des ‚logischen Atomismus’ erfährt seit einiger Zeit eine Renaissance im Rahmen der informations-theoretisch geprägten Quantenphysik. Das legt einen Vergleich der neuen Version mit dem ‚Original’ (Russell/Wittgenstein) nahe. Es zeigt sich, dass die Grundannahen der sogenannten ‚Urhypothese’ – entwickelt durch C.F. v. Weizsäcker - nur sehr bedingt mit der Ontologie des Tractatus kommensurabel sind. Eine Entsprechung besteht nämlich nur zwischen Wittgensteins ‚Sachverhalten’ und v. Weizsäckers ‚Uralternativen’, während die ‚Gegenstände’ der logisch-philosophischen Abhandlung keinen Konterpart im Rahmen der ‚Ur’-Vorstellung haben. Eben deshalb kann die Anzahl der letzten Alternativen gemäß der Urhypothese zunehmen, während die Menge der Sachverhalte – und Elementarsätze – im Sinne Wittgensteins abgeschlossen bleibt.

1. Der logische Atomismus kehrt zurück

Wer derzeit öfters einen Blick auf die rezenten Publikationen zur Quantentheorie wirft, könnte die Physik für eine Teildisziplin der Informatik halten. Dass dem so ist, verdankt sich zwei epochalen Entwicklungen der 1970er Jahre, die zunächst weitgehend unabhängig voneinander vonstatten gingen. Die eine gehört – als ‚quantum state engineering’ - eher der physikalischen Praxis an und beginnt mit den Experimenten zur Überprüfung der Bell’schen Ungleichung.

Diese wurde von vornherein für Zwei-Zustands-Variablen (z.B. Spin oder Polarisation) formuliert, während das motivierende Gedankenexperiment von Einstein, Rosen und Podolsky (EPR) kontinuierliche komplementäre Größen (Ort/Impuls) im Fokus hatte. Der Quantenformalismus der einfachen Ja-Nein-Entscheidung ließ sich leicht und zwanglos in den informationstheoretischen Kontext einbetten. Neben das klassische ‚Bit’ trat das quantenmechanische ‚Qubit’. Der Unterschied: Qubits können in Überlagerung (Superposition) existieren, Bits nicht.

Heute werden die meisten Experimente zu Grundlagenfragen wie Verschränkung, Dekohärenz, Teleportation etc. quanteninformatisch konzipiert und beschrieben. Quantenkryptographie und ‚quantum computing’ als potentiell gewinnträchtige Anwendungen dieser Entwicklung forcieren sie zugleich weiterhin.

Der andere, hochtheoretische, Anstoß für *It from Bit* (so John Archibald Wheelers Kosename für den informatischen Paradigmenwechsel in der Physik) stammt von Carl Friedrich von Weizsäcker, der mit seiner bis heute nicht voll ausgearbeiteten ‚Ur-Hypothese’ der Information in ihrer Doppelrolle als Form *und* Substanz die zentrale Rolle zusprach.

Spätestens, seit Holger Lyre in Bezug auf v. Weizsäckers Konzept der Ur-Alternativen den Terminus *Logischer Atomismus* für die Grundlagen der Quantenphysik reaktiviert hat – das war Mitte der Neunziger – wäre von philosophischer Seite ein Vergleich mit dem Original fällig gewesen.

Der ‚klassische’ logische Atomismus wurde zu Beginn des 20. Jahrhunderts von Bertrand Russell an- und in der Folge durch Ludwig Wittgenstein zu Ende gedacht. Wittgensteins Version – codifiziert im *Tractatus logico-philosophicus* – setzte sich rasch durch. Sie unterscheidet sich von der Russell’schen vor allem durch den *Grundgedanken*, „daß die ‚logischen Konstanten’ nicht vertreten.“ (Wittgenstein 1984; *Tractatus* 4.0312)

Ich werde, in Gegenüberstellung mit der Ur-Hypothese, Ontologie und Terminologie des *Tractatus* heranziehen, also hier nicht mehr auf Russells Version eingehen. Erschöpfend kann ein solcher Vergleich in Kürze freilich nicht ausfallen. Es soll nur kurz überdacht werden, ob beide Entwürfe wesentlich mehr gemeinsam haben, als den Namen.

Zuvor noch kurz ein Wort zur informationstheoretischen Wende in der Quantenphysik. Der Grundgedanke stammt von Niels Bohr, wie Caslav Brukner im Vortrag ‚Information and Quantum’ (Universität Wien) hervorhob. Bohrs Bemerkung von 1934 wirkt heute noch klärend:

> „Obviously, these facts not only set a limit to the *extent* of the information obtainable by measurement, but they also set a limit to the *meaning* which we may attribute to such information.“

Darin liegt der Leitfaden zur Lösung etlicher Quanträtsel. Vier Jahrzehnte später wird v. Weizsäcker Bohrs Anregung durch die definitorische Unterscheidung von potentieller und aktueller Information Rechnung tragen.

Expliziten Bezug auf informationstheoretische Grundlagen nahm John Archibald Wheeler, der das Schlagwort ‚It from Bit’ prägte:

> „Otherwise put, every *it* - every particle, every field of force, even the spacetime continuum itself – derives its function, its meaning, its very existence entirely – even in some cases indirectly – from the apparatus-elicited answers to yes-or-no questions, binary choices, *bits*. … It from bit symbolizes the idea…that all things are information-theoretic in origin…“ (Wheeler 1990)

Anton Zeilinger hat vor einiger Zeit in dieselbe Kerbe geschlagen und postuliert: “Naturgesetze dürfen keinen Unterschied machen zwischen Wirklichkeit und Information.” (Zeilinger 2003) Das erinnert an Ununterscheidbarkeitsannahmen am Anfang der beiden Relativitätstheorien und ist auch so gemeint. Erinnern wir uns aber, daß bei Einstein die Ununterscheidbarkeit gekoppelt war an eine bestimmte Form der Naturgesetze. Dem Postulat der Allgemeinen Relativitätstheorie: *Naturgesetze dürfen lokal keinen Unterschied machen zwischen Beschleunigung und Gravitation* entspricht mittelbar: *Naturgesetze haben tensorielle Form*. Ich bin überzeugt, im Falle Zeilingers würde die Entsprechung lauten: *Naturgesetze haben ‚mathematische’ Form*. Aber das ist Gegenstand einer anderen Arbeit.

2. ‚Sachverhalte’ und ‚Gegenstände’

Für Wittgenstein besteht die Welt letztlich aus Fakten. Sie ist die Gesamtheit der Tatsachen, nicht der Dinge. Bei der

Analyse von Tatsachen müssen wir schließlich auf elementare Fakten, *Sachverhalte*, stoßen; mögliche Sachverhalte sind die denkbar kleinsten Einheiten dessen, was der Fall sein kann, was besteht oder nicht besteht.

Zerlegte man diese letzten Fakten noch weiter, so wären ihre Bruchstücke keine Träger von Wahrheitswerten mehr. Denn auf quasi logisch subatomarer Ebene finden sich nur noch sogenannte *Gegenstände*. Ein Gegenstand besteht eigentlich nicht; seine Existenz ist noch kein Faktum. Gegenstände sind cisfaktisch. Im elementaren Sachverhalt hängen Gegenstände ineinander. Außerhalb eines solchen atomaren Fakts kann ein Gegenstand nicht einmal gedacht werden.

Ganz wesentlich für die Ontologie des *Tractatus* ist der Umstand, dass das Bestehen oder Nichtbestehen jedes einzelnen Sachverhalts unabhängig vom Bestehen oder Nichtbestehen aller anderen Sachverhalte bleibt. Das erlaubt die Verortung der Welt als Inbegriff von allem, was der Fall ist, im Raum möglicher atomarer Sachverhalte, dessen Topologie sich sehr einfach darstellt. (Es genügt ein N-dimensionaler Würfel für N mögliche Sachverhalte.)

Rein logisch betrachtet, bilden die Sachverhalte einen boolschen Verband.

Über die Anzahl der letzten Fakten und ihrer unaussprechlichen Bestandteile kann und will Wittgenstein keine Angaben machen. Er konstatiert nur: „Auch wenn die Welt unendlich komplex ist, so daß jede Tatsache aus unendlich vielen Sachverhalten besteht und jeder Sachverhalt aus unendlich vielen Gegenständen zusammengesetzt ist, auch dann müsste es Gegenstände und Sachverhalte geben." (Wittgenstein 1984; *Tractatus* 4.2211) Es ist anzunehmen, dass er dabei an ‚abzählbar unendlich' dachte, nur so bleiben Sachverhalte und Gegenstände diskret.

3. ‚Uralternativen' und ‚Urobjekte'

Carl Friedrich v. Weizsäckers Ur-Hypothese soll hier vor allem im Kontrast zur Ontologie des *Tractatus* präsentiert werden. Es handelt sich ebenfalls um ein Konzept letzter Sachverhalte, allerdings, wie es der Formalismus der Quantenphysik nahelegt, im Hilbertraum.

Die Welt (der Quantenphysik) ist hier zunächst nicht die Gesamtheit der Tatsachen, wie bei Wittgenstein, sondern der Dinge, ‚Objekte' genannt. „Die Physik formuliert Wahrscheinlichkeitsvorhersagen für das Ergebnis zukünftiger Entscheidungen von empirisch entscheidbaren Alternativen. … Die Antworten einer Alternative schreiben einem Objekt kontingente Eigenschaften zu." (v. Weizsäcker 1971)

Zur Verdeutlichung: Ist das Objekt beispielsweise ein Elektron, so formuliert die Quantphysik Wahrscheinlichkeitsvorhersagen für die Messungen kontingenter Eigenschaften wie Ort, Impuls, Spin in verschiedenen (orthogonalen) Richtungen. Ladung oder Betrag des Spins stellen dagegen notwendige, weil definierende Eigenschaften des Elektrons dar.

Die Einheit eines quantenmechanischen Objekts manifestiert sich übrigens nicht unbedingt im physikalischen Raum, weil das ‚Objekt' – als Gesamtheit seiner Zustände – im Funktionenraum (mathematisch: ein komplexer Vektorraum; Hilbertraum) gegeben ist. Daraus resultieren letztlich die vieldiskutierten scheinbaren Fernwirkungen bei verschränkten Systemen.

Im allgemeinen definieren mehrere Objekte ein Gesamtobjekt, dessen Teile sie darstellen. Die Alternativen am Gesamtobjekt umfassen die gesamten Alternativen der Teile. (Mathematisch: Es wird das Tensorprodukt aus den Zuständen der Teilobjekte gebildet.)

Nun kommen wir zu dem Postulat v. Weizsäckers, das seinem Ansatz die Bezeichnung „radikal informationstheoretischer Atomismus" eingebracht hat: *Alle Objekte bestehen aus elementaren Objekten, welche eine einzige, einfache Alternative repräsentieren.* Diese letzten Objekte heißen nach v. Weizsäcker ‚Urobjekte', kurz ‚Ure', die ihnen zugeordneten Ja-Nein-Entscheidungen ‚Uralternativen'.

Dies ist die Stelle, an der beide logisch-atomistischen Ontologien, die des *Tractatus* und die aus dem Quantenformalismus abgeleitete, direkt vergleichbar – unmittelbar kommensurabel – sind.

4. ‚Sachverhalte' vs. ‚Uralternativen'

a) Ein Sachverhalt im Sinne des *Tractatus* kann bestehen oder nicht bestehen. Wenn er nicht besteht, ist das keine Art von ‚negativer Tatsache' – die beiden Möglichkeiten sind ontologisch nicht gleichwertig.

Ob dagegen die Entscheidung einer letzten Alternative so oder so ausfällt, bleibt in der Urtheorie vollkommen symmetrisch. Es obliegt dem Belieben, wo sozusagen das Ja- und Nein-Etikett angebracht wird.

Dieser fundamentale – ontologische, nicht aussagenlogische – Unterschied beider Ansätze hat seine Wurzel darin, dass Wittgensteins ‚Gegenstände' mit v. Weizsäckers ‚Urobjekten' überhaupt nicht vergleichbar sind.

Die Gegenstände befinden sich bildlich gesprochen auf der logisch-subatomaren Ebene, eine ontologische Etage tiefer als die atomaren Sachverhalte. Sie bilden die Sachverhalte in wechselnder Konfiguration (was übrigens nicht mit dem höherstufigen Konfigurationsraum der Sachverhalte selbst verwechselt werden darf):

> „Der Gegenstand ist das Feste, Bestehende; die Konfiguration ist das Wechselnde, Unbeständige. Die Konfiguration der Gegenstände bildet den Sachverhalt. Im Sachverhalt hängen die Gegenstände ineinander wie die Glieder einer Kette." (Wittgenstein 1984; *Tractatus* 2.0271f.)

Und wenn Gegenstände eben *nicht* als ein bestimmter Sachverhalt ineinanderhängen, dann resultiert daraus kein anderer, sondern *gar kein* Sachverhalt.

Wenn dagegen die Entscheidung einer Uralternative *so* (‚Kopf') ausfällt, dann ist das die Feststellung einer elementaren Tatsache; fällt sie *anders* aus (‚Adler'), dann wird die eine andere – wenngleich zugehörige – elementare Tatsache konstatiert.

In Wittgensteins Bild ergibt sich also in puncto letzte Alternative eine Prävalenz des Positiven, im Konzept v. Weizsäckers eine Äquivalenz von positiv und negativ.

b) Ein Sachverhalt besteht entweder oder nicht. Tertium non datur. Das läßt sich so veranschaulich, dass auf einer Geraden eines kartesischen Koordinatensystems entweder der Ursprung oder der Punkt im Abstand Eins markiert ist, ohne Zwischenmöglichkeiten. Für jeden möglichen Sachverhalt gibt es eine weitere Koordinatenachse, für sein Bestehen eine Eintragung bei Eins. So ergäbe sich der Zustand der Welt - das Insgesamt von allem, was der

Fall ist - als Eckpunkt eines hochdimensionalen Würfels mit der Seitenlänge Eins.

Dagegen wird in v. Weizsäckers *radikalem Atomismus*, wie er seine Idee selbst bezeichnet, jedes ‚Ur' durch einen zweidimensionalen Vektor- (Hilbert-) Raum repräsentiert. (v. Weizsäcker 1985) Daraus folgt, dass die beiden Komponenten der letzten Alternativen einander überlagern können. In v. Weizsäckers Terminologie haben wir es vor der Entscheidung der Alternative mit potentieller, nachher mit aktualer Information zu tun. Informationstheoretisch lässt sich das cum grano salis als Übergang von der Q-Bit- zur klassischen Bit-Struktur ausdrücken. Dieser Übergang wird freilich immer von den PhysikerInnen sozusagen von Hand durchgeführt und kann in der Physik (noch) nicht vorkommen, die deshalb am bekannten *Quantenmeßproblem* leidet. Es handelt sich um den (Quanten-) Sprung vom kontinuierlichen in einen diskreten Zustand, was der Schöpfer der Ur-Hypothese als Ausdruck der apriorischen und physikalisch unhintergehbaren Zeitlichkeit jeder Erfahrung deutet: *Möglichkeiten sind diskret, Fakten kontinuierlich.* (v. Weizsäcker 1992)

Fazit:

Eine Gegenüberstellung der Ontologie des Tractatus (OT) und der Ur-Hypothese (UH) ergibt:

1) Den ‚Sachverhalten' in OT entsprechen die ‚Uralternativen' in UH.

2) Die ‚Gegenstände' in OT haben keine Entsprechung in UH. Weizsäckers ‚Urobjekte' bezeichnen lediglich die ‚Uralternativen' aus der objektiven Perspektive.

3) Die Gesamtheit möglicher ‚Sachverhalte' steht ein für allemal fest. Die Gesamtheit entscheidbarer ‚Uralternativen' nimmt qua Zeit zu.

4) Wittgensteins ‚Gegenstände' verleihen den ‚Sachverhalten' – und damit der Welt überhaupt – Kontur und Eindeutigkeit. Sie bilden die Substanz der Welt. v. Weizsäckers ‚Ure' dagegen entbehren dieser Stütze. Ob eine Uralternative potentiell besteht, hängt davon ab, ob andere Uralternativen faktisch entschieden sind. Das erinnert an die Feststellung: „Hätte die Welt keine Substanz, so würde, ob ein Satz Sinn hat, davon abhängen, ob ein anderer Satz wahr ist." (Wittgenstein 1984) Damit wären wir freilich schon auf der semantischen Ebene.

Soweit überhaupt eine Vergleichbarkeit besteht, deckt die Ontologie des Tractatus den *faktischen* Bereich des physikalischen Universums ab, aber nicht den *potentiellen.* Insofern hat Anton Zeilinger Recht, wenn er am Ende seines Buches deklariert:

„Daher ist die Welt mehr, als was Wittgenstein meinte. Die Welt ist alles, was der Fall ist und auch alles, was der Fall sein kann." (Zeilinger 2003)

Darüber hinaus kann aber auch der neue logische Atomismus nur zwei Drittel des Kosmos darstellen. Der *Übergang* vom Möglichen zum Faktischen, vom Kontinuierlichen zum Diskreten, also alles, was modallogisch als ‚wirklich' bzw. zeitlogisch als ‚gegenwärtig' zu bestimmen wäre, fällt durch den Raster. Wie ich es sehe, hat die Physik die Wahl, indexikalische Termini einzuführen, oder sich weiterhin am ‚Messproblem' die Zähne auszubeissen. (Abgesehen davon, dass ein Vermittelndes zwischen dem Überabzählbaren und dem Abzählbaren auch mathematische Probleme aufwirft.)

Vielleicht müssen wir Zeilingers Fassung von *Tractatus* 1 noch einmal verlängern:

Die Welt ist alles, was der Fall ist und auch alles, was der Fall sein kann sowie alles, was je und je der Fall wird.

Literaturangabe

v. Weizsäcker, C.F. 1971 *Die Einheit der Natur*, München: Carl Hanser

v. Weizsäcker, C.F. 1985 *Aufbau der Physik*, München: Carl Hanser

v. Weizsäcker, C.F. 1992 *Zeit und Wissen*, München: Carl Hanser

Wheeler JA, 1990 *Information, physics, quantum: the search for links*, Santa Fe Institute

Wittgenstein, Ludwig 1984 *Werkausgabe Band I*, Frankfurt am Main: Suhrkamp

Zeilinger, Anton 2003 *Einsteins Schleier*, München C.H. Beck

Email: huhki@aon.at

Utilizing Experiences from Knowledgebay for Digital Wittgenstein Scholarship

Christian Eric Erbacher, Regensburg, Germany

Introduction

www.knowledgebay.de is a web portal that provides streaming of lectures from various disciplines and universities. Scholars can actively use the portal in several forms as well. The project *Knowlegdebay,* that runs the portal, combines technological development with a social learning environment. Regarding digital technology a specific softwareframework was developed which supports distributed production and usage of digital academic media (Sporer, Jahnke & Köstlbacher 2005). This Community-Content-Collaboration-Management-System (C3MS, Baumgartner and Kalz, 2004) includes five components that complement each other: an online authoring tool and an online editing tool serve the production of the academic media, whereas the web portal and a player window constitute the base for using the digital media archives. Additional communication tools (e.g. internal messaging, discussion forums, conferencing tool) contribute to online interaction and cooperation. The software is based on a combination of standards (HTML/SMIL/CSS; PHP; SQL; Javascript/VBscript; RDF/RSS, for a detailed description of the softwareframework see Sporer, Jahnke & Köstlbacher 2005).

As can be seen from this brief description *Knowledgebay* not only presents academic media but allows to participate actively. For Example, scholars can create online portfolios, communicate with each other or organize the media content personally. Moreover, participants can add written or audiovisual content online. For this purpose *Knowledgebay* created a learning community for active participation (Sporer, Köstlbacher & Erbacher 2005; Sporer, Riecks, Walter, Erbacher, Köstlbacher & Jahnke 2006). The core of *Knowledgebay*'s production process is the recording of lectures by students who attend them as part of their study curriculum. University seminars for imparting the know how of Digital Lecture Documentation were established, and audiovisual podcasts that deal with academic topics similar to seminar papers were cooperatively produced and published on the portal.

Employing this concept, between 2002 and 2005 more than 300 lectures were produced and presented without institutional funding and the projects concept was presented at several conferences. *Knowledgebay* might therefore be seen as a good example for possibilities of how to facilitate the availability of high quality academic lectures by means of new Information and Communication Technologies (ICT). Its bottom-up concept was future-directed and is now employed by various other internet and new media projects.

Based on my experiences from co-constructing and running *Knowledgebay* I sketch in this paper some aspects of ICT applications to Wittgenstein scholarship. Section 1 shows the value of Digital Documentation for philosophical *teaching*. Section 2 exemplifies application of ICT to philosophical *research* by mentioning advantages of ontology development. Section 3 summarizes considerations that might be important to both ICT in *teaching and research*. In each section I try to refer briefly to Wittgenstein's philosophy or Wittgenstein research.

1. The Value of Digital Documentation: Learning the Use of Key Terms

Traditionally academic teaching is managed through lectures: a professor presents a subject orally to his or her students. This form of presentation is more than transfer of scientific facts. Due to the voice and personality of the lecturer, students get a subjective reading of and a response to a topic. This includes interpretations, valuations, subtle connections, emphasized connotations of central questions, and discussions of critical parts. Thus, the distinctive value of a lecture is an interpretative arrangement of facts rather than a neutral presentation. Students can adopt this framework to navigate through textbooks and journal articles. That is, to relate to Wittgenstein, by listening to a lecturer and looking at him or her treating a topic students learn the *use* of key terms of their discipline. The lecturer models the language-game of a subject by discussing critical parts and arguing for or against a certain claim. For this aim, lectures have evolved as an effective format, yet one that is not unlimited.

Characteristically a lecture is given to a certain audience in a certain place at a certain time. It is therefore restricted to a unique historical and social situation. Written texts, a second traditional form of academical teaching, overcome the lecture's inherent limits by making thoughts durable. The price for gaining durability in this form, however, is to leave behind a good deal of the author's distinctive voice and personality specific to oral presentation. Digital Documentation introduces yet another method for imparting academic knowledge that might bring the advantages of the two classical forms into a useful proximity. It is a record of the lecturer's personal tone and its subsequent presentation on an integrated internet-portal. This form of knowledge-transfer associates durability with at least a part of the initial interpretative guidance of the lecturer's vivid spoken language.

The development of ICT allows to conserve lecture's in this format on a wide base. Using a web portal more features can semantically enrich the lecture stream, e.g. links to related web pages, content lists that allow immediate access to subtopics of the lecture and slides that accompany the lecturer's voice. This might develop to a powerful intellectual instrument, not as a substitute for either of the two classical forms of teaching (direct communication and intensive work on texts) but as a supplement offer in an effort to enhance academic education.

2. ICT Research Tools: for Example Wittgenstein's *Nachlass*

ICT has transformed research in many ways. Researchers present themselves on homepages and communicate and cooperate via e-mail and internet-conferences; online journals, open access initiatives as well as internet-based encyclopaedias have changed scientific publishing dramatically. Beside these various influences of ICT on research, I want to focus on the use of *Ontologies* (in the sense of information systems) for philosophical research.

Wittgenstein's *Nachlass* might illustrate benefits as well as limits of such an approach.

The linguistic corpus of Wittgenstein's *Nachlass* is very complex. The unpublished writings as catalogued by G. H. v. Wright amount to at least 82 manuscripts, 45 typescripts and 11 dictations that have become known as the *Nachlass* (v. Wright 1990). These extensive writings are characterized by multifold revisions, variations in wording, transmissions, interrelations and rearrangements. The *Nachlass* therewith reflects Wittgenstein's continuous discourse with himself, leading to gradual development of his thoughts in different shapes. On the one hand, this particular characteristic allows unique and insightful reconstructions of the genesis of texts such as the *PU* (Pichler 1997); on the other hand, however, the structural complexity of the *Nachlass* makes difficult to utilise it entirety: Physical and semantic proximity can indeed greatly differ in the *Nachlass* documents (Pichler 1994).

Given the complexity of the *Nachlass*, it seems that an electronic edition corresponds to its structure and simultaneously meets requirements for research. If one of Wittgenstein's troubles was to find the right arrangement of passages while seeing them interweaved, arrangements on paper might not provide satisfying solutions. To take a simple example, just three passages (a-b-c) can permuted in 3*!* sequences (a-b-c, b-c-a, c-a-b, a-c-b, b-a-c, c-b-a), none of which visually expresses interconnection of the passages with each other. As every printed text is necessarily subject to linear sequencing, hyperlinking facilitated by ICT might satisfy to a greater extent the structure of single documents as well as of the whole corpus. This point might also be reflected by the course of editing the *Nachlass* electronically.

During the 1980s, the *Wittgenstein Archives at the University of Bergen* (*WAB*) started to create a machine-readable version of the *Nachlass*. This endeveaour lead to publication of the complete *Nachlass* in electronic form (Wittgenstein's Nachlass 2000), known as the *Bergen Electronic Edition* (*BEE*). The *BEE* consists of facsimiles as well as normalised and diplomatic transcripts together with software for their presentation on CD-ROM. In addition, further work in order to unfold the entire potential of a digital publication of Wittgenstein's *Nachlass* is going on. By using XML, the *Nachlass* could be prepared for distributed internet-based examination (Hrachovec 2006). XML allows the presentation of information in different formats according to individual needs as well. Yet another functional improvement can be implemented by creating ontologies to structure the content of machine-readable texts.

Ontology in the information systems context can be described as explicit formal specification of terms in a domain and relations among them (Gruber 1993). By formalizing properties of defined terms and relations among them, ontologies up to a certain degree render semantics of a domain processable to machines. Electronic agents are quasi facilitated to compute the content of information. The formal basis of Ontologies is constituted by formal semantics of description logics. That makes it possible for electronic reasoners to not only test the logical consistency of an ontology, but also to deduce new information. Such powerful ontologies have been developed in several domains (see Ontoselect 2007).

Though very delicate in detail, the general usefulness of an ontology system for the corpus of Wittgenstein's *Nachlass* is evident. By formalizing properties of and relations among numbered texts and sections, the semantic structure of these texts can be described and in fact become readable for machines. This may help to make the complex corpus more manageable. With a suitable conceptual grid, sophisticated queries can be computed (see Hrachovec 2006). An ontology could work like the clarifying tree diagrams in the Analytical Commentary on the Philosophical Investigations (Hacker & Baker 1980), but with the important difference that the descriptive information about the quality of the relationship between the sections is already included and automatically computable. This enrichment of the *Nachlass* transcriptions might be useful for single sections within one document as well as for sections across different documents.

3. Limits of and Conditions for Successful Implementation

In this final section, I want to sum up some aspects that might limit the sketched usage of ICT and, therefore, might be important for successful implementation. All of them converge to stress the differences between computers and humans.

Firstly, in regard of using digital media for teaching purposes it seems crucial to me to point out that humans deal with information differently than computers do. The more we learn from the cognitive sciences, the more it becomes evident that the computer metaphor of the mind / brain has been misleading in some respects; especially concepts like *understanding* have been hard to grasp. However, the human way of dealing with information should be taken into account when applying ICT. It might be advantageous to say that human '*digest*' information (rather than process or compute it). Accordingly, inter-based media might not be optimized in the way computer information processing is optimized. In other words, not the quantity of information per time (e.g. kilobyte per second) might be maximized, but, say, the 'nutritional value of the intellectual meal'. In my view, this is influenced by the selection of fine lectures that are documented digitally as well as their *perspicious* arrangement in the context of a certain web portal, to refer briefly to Wittgenstein again.

Secondly, in regard of using ICT as a research tool it seems important to me to point out that computers calculate, but they do not investigate. As can be seen in several scientifc disciplines ICT might revolutionize the possibilities of collecting and analyzing data (or: texts), but it needs the researcher's wit to find the interesting questions. Computers do calculate anything we want them to; but it is not an academic aim to calculate anything. To relate to the sketched possibility to develop ontologies to semantically structure Wittgensteins *Nachlass* this notion seems especially striking: Ontology development is based on the formal semantics of description logics, and Wittgenstein's writings explicitly struggle with the limitations of formal languages. From this point of view, ontology development presents itself as a kind of 'applied logics' to the understanding of which Wittgenstein's texts contribute significantly. Ontologies might provide appropriate *tools* for carrying out research on Wittgenstein's writings, and Wittgenstein research might help to understand the inherent limits of these tools as well.

Thirdly, in regard of both using ICT for teaching and research I want to mention a factor that has turned out to be crucial in the case of *Knowledgebay*. The core experience after evaluating the project was the importance of a community of practice. The success of the project depended crucially on the persons who actively participated and cooperated to realize their goals. It is not possible, I think, to establish an internet platform successfully without

building a community of creators and users. The circumstances under which such learning and research communities are most likely to grow is an important subject to empirical research. From my experience, for an ICT application to be successful in the academic realm it should be significant to the *forms of life* of the scholars.

Literature

Gruber, Thomas R. (1993). A Translation Approach to Portable Ontology Specification. *Knowledge Acquisition* 5(2), pages 199-220.

Hacker, Peter M. S. and Baker, Gordon P. 1980 *Wittgenstein: Understanding and Meaning*. Volume 1 of an analytical commentary on the Philosophical Investigations, Oxford: Blackwell, Chicago: Chicago University Press.

Hrachovec, Herbert 2006 "Evaluating the Bergen Electronic Edition", in: Alois Pichler and Säätelä, Simo (eds.), *Wittgenstein: The Philosopher and his Works*, Frankfurt a. M.: ontos, pages 405–417.

Ontoselcet: For a collection of more than 1,100 ontologies cf: http://olp.dfki.de/OntoSelect/index.php?mode=home, accessed 2007-02-05; for a description: Buitelaar, Eigner and Declerck 2004 "OntoSelect: A Dynamic Ontology Library with Support for Ontology Selection", accessed 2007-02-05.via: http://www.dfki.de/~paulb/iswc04.demo.OntoSelect.pdf.

Pichler, Alois 1994 *Untersuchungen zu Wittgensteins Nachlaß* (Working Papers from the Wittgenstein Archives at the University of Bergen 8).

Pichler, Alois 1997 *Wittgensteins Philosophische Untersuchungen. Zur Textgenese von PU §§ 1–4* (Working Papers from the Wittgenstein Archives at the University of Bergen 14).

Sporer, Thomas, Jahnke, Tino & Köstlbacher, Anton 2005 „Entwicklung eines Softwareframeworks für audiovisuelle digitale Medien im Internet", in: Gesellschaft f. Informatik (ed.), *Informatiktage 2005 - Fachwissenschaftlicher Kongress*, Bonn: Köllen, pages 121-124.

Sporer, Thomas, Köstlbacher, Anton and Erbacher, Christian 2005 „Projekt Knowledgebay - Erfahrungen mit der Produktion und Nutzung von Online- Vorlesungen durch Studierende", in: U Lucke, K Nölting and D Tavangarian (eds.), *Workshop Proceedings "eLecture" der DeLFI 2005 und GMW05*, Berlin: Logos Verlag, pages 49-54.

Sporer, Thomas, Riecks, Angelika, Walter Goetz, Erbacher, Christian, Köstlbacher, Anton & Jahnke, Tino 2006 „Knowledgebay - Informationsdienst einer digitalen Hochschule von Studierenden für Studierende" in: R Geier and A Kretzer (eds.), *Information und Entertainment. Studentische Medientage Chemnitz 2005*. Schriften zur Medienwissenschaft12, Hamburg: Kovak Verlag, pages 153-164.

Wittgenstein, Ludwig 1921 "Logisch-philosophische Abhandlung", *Annalen der Natur- und Kulturphilosophie* 14, pages 184–262.

Wittgenstein, Ludwig 1953 *Philosophical Investigations*. G.E.M. Anscombe and R. Rhees (eds.), G.E.M. Anscombe (trans.), Oxford: Blackwell.

Wittgenstein's Nachlass: The Bergen Eletronic Edition, Wittgenstein Archives at the University of Bergen (ed.), Oxford: Oxford University Press. (For BEE in the Intelex past masters collection cf: http://www.nlx.com/titles/titlwnac.htm, accessed 2007-02-05).

v. Wright, Georg H. 1990 *Wittgenstein*, Frankfurt am Main: Suhrkamp (transl. by Joachim Schulte). The catalogue was first published 1969 in *The Philosophical Review* 78, pages 483–503.

Email: christian.erbacher@gmx.de

How could he try to try to whistle it?

Lemaire Francis Eric, Nancy, France

1) What is philosophy?[1]

Philosophy is not a natural science. The purpose of philosophy is not to build general theories or to construct philosophical propositions, such as synthetic *a priori* judgments, but it is to logically clarify thoughts. "Philosophy is not a body of doctrines but an activity". In philosophy, you cannot do any hypothesis. Philosophy is not an empirical enquiry but an *a priori* one. His aim is, he says in 4.113, to "set limits to the much disputed sphere of natural sciences."

The main thesis of the book, which is expressed in the preface, is that problems of philosophy are based on the misunderstanding of the logic of our language. The only thing one can do with philosophical propositions is to eliminate them because they do not have a clear sense. As he says in the preface[2] "What can be said at all can be said clearly, and what we cannot talk about we must pass over in silence." When one meets some philosophical problem, as for example "Does the external world exist?", one is tempted to give them some solutions which consists in philosophical propositions. Generally, when, one is confronted with such questions, one does not find a unique apparently suitable answer but several contradictory answers, even though, all the sources of argumentation are dried up. In these cases, there are three different possibilities. Firstly, one can cut short the discussion in favour one of the possible answers. Secondly one can conclude that things are contradictory. Thirdly, one can investigate the foundations of our theses in order to find the point(s) of tension or disagreement. The last possibility is the on chosen by Wittgenstein. To investigate the foundations of our theses, the foundations of what we say, one needs to clarify the sense of what one says. The way to do this is the analysis of ordinary language. That's why, in 4.0031, he defines philosophy as critic of language. The correct method in philosophy, he says in 6.53, is: "To say nothing except what can be said, propositions of natural sciences […]. Whenever, someone else wanted to say something metaphysical, to demonstrate him that he had failed to give a meaning to certain signs in his propositions." With the logical clarification of thoughts, one should be able to eliminate metaphysical propositions; so that the propositions of natural sciences would enter into considerations. The solution of a philosophical problem is not a philosophical proposition but the disappearance of the problem (4.003) and of its apparent solutions.

2) The project of analysis of ordinary language

The project of analysis of ordinary language aims at distinguishing sensical propositions and nonsensical propositions. The project is based on at liest three premises. 1) Sometimes, ordinary language deceives us because its apparent logical structure is not necessarily its real logical structure. 2) One has the idea of perfect logical language in which nonsense are intrinsically excluded. Such a language is the *ideography*. 3) The translation of ordinary

language in logical language is the mean to draw the frontier between sensical and nonsensical propositions.

In 3.323, he writes that in "every day language (3.323), it frequently happens that the same word has different modes of signification – and so belongs to different symbols – or that two words that have different modes of signification are employed in propositions in what is superficially the same way." If one is tempted, he says in 3.324, to assert some philosophical propositions, it is due to the fact that the apparent logical structure of ordinary language is not necessarily the real logical one, as the signs we use to express thoughts do not necessarily and immediately reflect what they mean.

The logical imperfection of ordinary language is not something inevitable. In order to avoid it, one must use a perfect logical language. A perfect logical language, he says in 3.325, consists in "a sign-language that excludes them by using the same sign for different symbols and by not using in a superficially similar way signs that have different modes of signification: that is to say, a sign-language that is governed by logical grammar – by logical syntax." *Such a language is symbolic logic.* Symbolic logic is the universal grammar of every possible language. For Frege and Russell, in quite different ways, logic was conceived as a science. It was presented as an axiomatic, with its primitive's symbols and propositions. For Wittgenstein, there is no *real* primitive's a symbol or propositions in logic. The only logical constant is a form, and not the name of a logical entity. Logical propositions are tautologies or contradictions that depict no fact, but the frontier of the world. In that manner, they are empty of sense. We can notice the fact the criticism of ordinary language depends on the idea of a perfect logical language.

The translation of ordinary language into perfect logical language is the way to draw the frontier between sensical and nonsensical propositions. What is the difference between a sensical and a nonsensical proposition? The fundamental point of the theory of proposition is that a proposition is not a name. As D.pears showed in 1977[3], this point is a criticism of Russell's theories of judgment[4]. In 3.144 he writes "*Situation can be described but not given names.*" The reason why a proposition cannot be a name is that a proposition can be false, not a name. One can assert or deny a proposition. But one cannot assert or deny a name, because in the first case the proposition would be redundant, and in the second case, it would be nonsensical. A proposition has a sense when it has truths-conditions or if one *knows*[5] what the case is when it is true

---

[1] See the preface, 4.002 to 4.0031, 4.111 to 4.116, 6.5 to 7.
[2] See also 4.116 and in 7

[3] The relation between Russell's theory of judgment and Wittgenstein picture theory of proposition. *Philosophical review*.
[4] Russell's theories of judgment are criticism of Bradley, Moore, Meinong, Frege, Mach and James and Kant.
[5] The use of such a term is source of tension. 1) If one can know only what is describable, what can be expressed in a proposition, 2) and if logical form is absolutely ineffable, how is it possible to *know* logical form or truth-conditions? Is there some ineffable knowledge? Knowledge one cannot say when it is true or when it is false. If one accept this, we enter into contradiction with the fundamental principle of the theory of proposition: a proposition has a sense iff it has truth-conditions. We believe that the picture theory of proposition is contradictory in itself. That's why, to escape the contradiction we must not deny it or say an opposite thing, as many commentators affirm and as Wittgenstein did, but we investigate the foundation of the contradiction in order to correct it. I suppose that it is, as we will see, the only way to solve the problem of the relation between conception and practice of philosophy in Wittgenstein's

and what the case is when it is false. One can understand a proposition without knowing if it is now true or false. The sense of a proposition is independent of the world in that manner. But in another sense, it is not independent because, for him, it is necessary that a proposition can be true or false. To know if a proposition is true, one must compare it with reality. There is no necessary proposition. To represent something, a proposition must be a picture of a fact. And it is a picture of a fact if and only if the proposition has the same number of elements than the fact it represents. It is also possible to say that it must have the same logical form. The logical form is not a further element. Logical form does not exist apart from the elements of the proposition. Understanding a proposition is knowing the totality of its use. In other words, when one understands a proposition one cannot fail while using it even if what he says is true or false. In order to understand it, one must get its constituents and their meaning, the objects they *mean*, and to know an object is to know the totality of its possibilities of occurrence in states of affairs (2.012 to 2.0123). Logical form is neither an object nor a fact, so one cannot *name* or *describe* it. *The logical form is indescribable*, it can only be *shown*. Whoever knows the constituents of the proposition understand its sense, sees its logical form. The ineffability of the logical form is absolute. It says that, the proposition p does not *describe* what its sense is, and none can do this. It does not say that the proposition p cannot describe what its sense is, but another proposition can do this.

A meaningless proposition is a proposition in which at least one element lacks meaning. When such a case appears, the whole proposition lacks logical form and has as much sense as "tcheuntchewa tobicha" which is gibberish. It has absolutely no sense, or denotes no reality.

3) The failure of the project of logical analysis of ordinary language.

The success of the project is based our ability to clarify the propositions of ordinary language. What is such a thing? What is an elucidation? Its function is to clarify the meaning of a constituent part of a proposition. Wittgenstein wrote in 3.263:

> "The meaning of primitive signs can be explained by means of elucidations. Elucidations are propositions that contain the primitive signs. So they can only be understood if the meanings of those signs are already known."

Wittgenstein's explanation is circular. It says that to clarify the meaning of a constituent of a proposition, one must use a proposition containing the sign we want to explain. But to understand the elucidation, one must understand the sign we indeed search to explain.

Moreover, the absolute ineffability of logical form implies that any proposition could explicit the sense of a proposition. If it was possible, a proposition would have a sense if and only if another proposition was true otherwise, which contradicts the ontological commitments (2.0211, 2.0212).

But, on the other hand, concretize the project of analysis necessitates our actual capacity to recognize that such or such part of such propositional sign is essential to its sense.

So it is difficult to see how we could actually do the clarification of our language. It, therefore, seems impossible to draw the frontier between sensical and nonsensical propositions. For the distinction between saying and showing entails the impossibility to describe the logical form, the impossibility to concretize the project can be seen as a consequence of it.

4) Applying the theory of proposition:

Others consequences of the distinction can be seen. In the last pages of the book, Wittgenstein applies his theory of symbolism to different subjects such as mathematics, ethic, moral, aesthetic, natural sciences, religion and philosophy. In each case, it is said that propositions are nonsensical. Especially, in 6.54 Wittgenstein writes a very famous and baffling remark:

> "My propositions serve as elucidations in the following way: anyone who understands me eventually recognizes them as nonsensical, when he has used them – as step – to climb up beyond them. (He must, so to speak, throw away the ladder after he has climbed up it.)

He must transcend these propositions, and then he will see the world aright."

So, if one understands Wittgenstein, believes that he is right, one must see that his propositions are nonsensical, that they are neither true nor false, and cannot be true or false, which is not comfortable.

5) The problem

We have seen three facts: 1) The *Tractatus* has a project: to draw the frontier between sensical and nonsensical propositions and to eliminate nonsensical propositions. To succeed, the author needs to analyse ordinary language. 2) The project does not work, so it is not possible to draw the frontier. 3) But, Wittgenstein nevertheless declares that some propositions are nonsensical. As a result, we lack determination for the use of the concept of nonsense, but meanwhile the concept is being used. *It seems that analysis is impossible and in the same time that it is effective. The question is « how is it possible? »*

This paradoxical situation is generated by the distinction between showing and saying, by the idea that logical form is absolutely ineffable. So another question could be: How is it possible that the distinction between showing and saying has two conflicting consequences?

6) Possible answers:

To finish we can see three ways of answering the problem we arose. We can distinguish three ways of treating the problem.

1) One can say that it is *really* a contradiction, which is the interpretation of Peter Hacker or David Pears. The ladder metaphor means, as the second Wittgenstein suggested, that we must abandon our need for metaphysical explanations because every attempt to assert such propositions falls into nonsense.

2) One can say that there is absolutely no contradiction, even an apparent one, because the analysis of language is not the method of the *Tractatus*. That the way chosen by the defenders of the *New Wittgenstein*, Cora Diamond, James Conant. For them, the ladder metaphor

---

works. This problem can be simply formulated as follows: Is it possible, and how, to do philosophy when one think that philosophy is nonsense?

means the same thing than for M.Hacker. In each case, we must throw away the *Tractatus*.

3) One can say that there is a contradiction and that we must not be aware of the ladder metaphor because, analysis does not work, so Tractarian propositions cannot be nonsensical. This point of view was defends in 1982 in the *Australasian journal of philosophy* by Brenda Judge and Leonard Goddard. For them, we must correct the ontology and the theory of proposition in order to avoid their dramatic consequences for common sense.

Literature

Diamond, Cora, *The Realistic Spirit: Wittgenstein and the mind (Representation and mind)*, 1995, Massachusetts Institute of technology

Gandon, Sebastian, *Logique et langage*, *étude sur le premier Wittgenstein*. 2002, Paris, Vrin.

Glock, Hans-Johann, *Dictionnaire Wittgenstein*, 1996, Oxford, Blackwell.

Goddard, Leonard, Brenda, Judge, *The metaphysics of the Tractatus*, June 1982, Australasian Journal of Philosophy, The Australasian association of Philosophy.

Hacker, Peter, *Insight and illusion*, 1972, Oxford, Clarendon Press.

Hacker, Peter, *Wittgenstein: connections and controversies*, 2001, Oxford, New York, Oxford University Press.

Hacker, Peter*, Wittgenstein, Carnap and the American wittgensteinians*, January 2003, The Philosophical Quarterly, Vol 53, No 210.

Hacker, Peter, *Laying the ghost of the Tractatus,* in *Ludwig Wittgenstein critical assessments.*

Hacker Peter, *Wittgenstein's place in the twentieth century analytic century*, 1996, Oxford, Blackwell.

Hacker Peter, *Wittgenstein*, 1999, Paris, Le Seuil.

Hintikka, Jaako and Méril, *Investigating Wittgenstein*, 1989, New York, Blackwell.

Kenny, Anthony, *Wittgenstein*, 1973, Harmondsworth, Penguin.

Kenny, Anthony, *The legacy of Wittgenstein*, 1984, Oxford, Blackwell.

Crary, Alice and Read, Rupert (eds), *The New Wittgenstein*, 2000, New York, Routledge.

Pears, David, *Wittgenstein*, 1971, London, Fontana.

Pears, David, *The false prison*, 1988, Oxford, Oxford University Press.

Shanker, Stuart (eds), *Ludwig Wittgenstein critical assessments*, 1986, London, Routledge.

Wittgenstein, Ludwig, *Tractatus logico philosophicus*, 1961, English Translation by Pears David and Mc Guinness Brian, London, Routledge.

Wittgenstein, Ludwig*, Philosophical investigations*, 1953, 1998, English Translation by Anscombe Elizabeth, Oxford, Blackwell.

Wittgenstein, Ludwig, *On certainty*, 1969, English Translation by Anscombe Elizabeth, Oxford, Blackwell.

Email: lemai013@voila.fr

On Roses, PI, and Understanding

Craig Fox, California, Pennsylvania, United States

I am struck by the thematic and stylistic richness of the seldom-discussed early to mid-§§500s of the *Philosophical Investigations*. The couplet of §515 and §516 evidence this richness:

> 515. Two pictures of a rose in the dark. One is quite black; for the rose is invisible. In the other, it is painted in full detail and surrounded by black. Is one of them right, the other wrong? Don't we talk of a white rose in the dark and of a red rose in the dark? And don't we say for all that that they can't be distinguished in the dark?

> 516. It seems clear that we understand the meaning of the question: "Does the sequence 7777 occur in the development of π?" It is an English sentence; it can be shown what it means for 415 to occur in the development of π; and similar things. Well, our understanding of that question reaches just so far, one may say, as such explanations reach.

Initially, what I find most striking is simply the odd juxtaposition. First we get the quiet, stark, (perhaps) beautiful image of roses in darkness. (In one of the few comments on this passage, Garth Hallett (Hallett 1977, pp. 522–23) does remark that "[i]t is easy to miss the beauty of this example.") Following this, we are confronted with the decidedly prosaic specter of the decimal expansion of π.

It is unlikely that these two sections just happened to end up next to each other. Wittgenstein associated this talk of "roses in the dark" with questions about mathematical understanding at least as early as 1941—although their final arrangement was not made for at least four more years.[1] One goal of this paper is to suggest something of what Wittgenstein intended with this pairing of sections.

It will become clear that a number of significant themes are connected with these sections. I aim to relate §§515–516 to considerations about understanding, mathematical understanding, behaviorism, and meaning. My broader goal is to demonstrate why the §§500s deserve as much attention as earlier sections of the *Investigations*.

1. Considering §515 in isolation is a dangerous interpretive strategy. So let's pay some attention to §514 first. This section reads:

> 514. A philosopher says that he understands the sentence "I am here", that he means something by it, thinks something—even when he doesn't think at all how, on what occasions, this sentence is used. And if I say "A rose is red in the dark too" you positively see this red in the dark before you.

I'll ignore the disparaging remark about philosophers; I think that we can do so without damaging the substance of Wittgenstein's observation. "I am here," would seem to be a sentence that must be true whenever uttered and hence is always meaningful. Wittgenstein suggests that consideration of how this sentence might be used will undermine the presupposition that this sentence will always be meaningful.

Consulting Wittgenstein's *Nachlass* (MS 175, pp. 50r–v), we can find an elaboration: "the words 'I am here' have a meaning only in certain contexts, and not when I say them to someone who is sitting in front of me and sees me clearly." So, suppose I am sitting on a train across from a man. I happen to glance up and catch his eye, at which point he looks very serious and says, "I am here." Now, I would have no idea why he said what he did and so would have no idea what his words meant.[2] If we accept this, then Wittgenstein's point is made: we cannot assume that we would know what "I am here" means independent of situations in which it might be asserted. To say you understand something is to say that you know what it means; you understand what sense it makes. Knowing what something means, Wittgenstein highlights in various places, is something that comes about, when it does, in a given context (in this section's neighborhood, consider, e.g., §525)—and here we get a similar treatment of *understanding*. What is of utmost importance about these apparent "conclusions" is that they're justified because of what we say about the meanings of our words or what we say about what we understand. They aren't, for instance, based on some theory of meaning that justifies what we say. Saying that you understand a sentence in isolation is inconsistent with other things we'd normally say about a sentence, given that we understand it. For instance: what was the point of saying it?

2. Concluding §514, Wittgenstein says, "[a]nd if I say 'A rose is red in the dark too' you positively see this red in the dark before you." Clearly this sentence ("a rose is red in the dark too") is meant to correspond to "I am here."[3] I believe that Wittgenstein offers this second example because he appreciates the oddness in what he's saying; it's quite natural to say that one fully understands "I am here" or "a rose is red in the dark too," as their grammars are straightforward and compelling. Thus Wittgenstein suggests that "you positively see this red in the dark before you": that's what the sentence *says*, after all. I'd suggest that *seeing the red in the dark before you* is a proxy for a particular way in which we understand the sentence "a rose is red in the dark too." It is a representation of what we might take its meaning to be.

§515 comes, then, as a response to what Wittgenstein takes to be the entrenched view that the meaning of a sentence can be completely understood in isolation. Each of his "[t]wo pictures of a rose in the dark" is a plausible candidate as an understanding of the sentence. Hence, the implied answer to his question about whether one picture or the other is correct is "no." Apart from a context, we have reasons in favor of either representation.

My claim is that §515 is about the contextuality of our understanding. Wittgenstein grants the mentalistic talk of "what I had in mind"; he makes it more concrete and shows that such an assumption does not necessarily determine the meaning of a sentence, or determine whether I've understood. Either of the offered pictures could capture something about "a rose is red in the dark too," de-

---

pending on the circumstance.[4] It is not that "what I had in mind" is wrong—rather, it is at best only part of the story about my understanding, about my meaning what I did. My performance in an actual situation will always potentially supervene on claims based on "what I had in mind." The worst case is that "what I had in mind" is *irrelevant* to our saying what the meaning of a sentence is or whether I've understood it.

I don't think that Wittgenstein is concerned, as Hacker and Hallett understand him, to say that what we imagine is somehow inadequate or wrong. Rather, the point is that regardless of what one imagines in connection with a given sentence, it is not sufficient to guarantee that you are making sense or that you have understood. This is confirmed by a remark temporarily added in to this section in a stage of revision, in TS 233a: "That one can 'imagine' something does not mean that it makes sense to say it."

3. Wittgenstein distances himself from the claim "that we understand the meaning of the question: 'Does the sequence 7777 occur in the development of π?'" Now, instead of a sentence such as "I am here" or "a rose is red in the dark," he is putting forth a question and suggesting that it is somehow parallel to those statements.

Wittgenstein begins by suggesting why it is that this question *does* look like one that we would clearly understand. It is grammatically well formed: "it is an English sentence." But grammaticality is not sufficient for understanding a sentence—this is surely a lesson from §514. He cites another reason why we might be inclined to think that we clearly understand the meaning of this question: "it can be shown what it means for 415 to occur in the development of π…" We know that "415" occurs at the second place in the development of π, which we all know to begin "3.1415…" Asking about "7777" is clearly similar to asking about "415."

In 1941, it was not known that the string "7777" does occur in the expansion of π (at the 1589th place). So we might characterize things by saying that there is an unknown element to the question as it stands. But surely, one might interject, that's the point of a question—there's something unknown, we ask about it, and then hopefully someone comes up with a good answer. I'll return to this.

Let's relate this discussion back to the talk of roses. One picture of a rose in the dark was "quite black," rendering the rose invisible. It is of note that this picture might correspond to our actual experience of seeing a rose in complete darkness. However, it is also the case that such a picture could correspond to our experience of seeing *nothing* in complete darkness. (Notice that this reverses the direction of the discussion in §§514–515.) Our ignorance of "7777" in the expansion of π is comparable to seeing darkness. We do not see "7777," but we don't know if this is because we haven't found it yet, or because it isn't in fact there.

Hence, "our understanding of that question reaches just so far, one may say, as such explanations reach." This statement is important. Wittgenstein's conclusion is *not* that we fail to understand the question entirely, but rather that we understand it to the extent that we can compare it to other situations of which we have a better understanding. All of this talk makes clear the fact that Wittgenstein

wants to allow for what one might call degrees of understanding; we might say that *understanding something* is not an all-or-nothing matter. This leads to the following corollary: if understanding is not an all-or-nothing matter but being in a (mental or physical) state is, then understanding cannot consist in being in a certain state.

The thing that makes the mathematical case troubling is that it seems as though there must be an answer, already, out there somewhere, even if we don't know it yet. But Wittgenstein's main point is that *even if there were* such an answer out there, it is not now what we would call "part of our knowledge," or that of which we have an understanding—and his reasons for saying this are our ordinary reasons for saying when we understand something.

A common appraisal of Wittgenstein is that he is a verificationist about mathematics. If true, this would be a good criticism in part because it would, as Wittgenstein himself realizes in 1930, "wipe out the existence of mathematical problems." I would suggest that it is Wittgenstein's account of mathematical questions—and the search for mathematical proofs—that actually makes some sense of how it is that we could, for instance, try to prove something that was impossible to prove for two thousand years. The answer is straightforward: we lacked some needed understanding.

4. Before I conclude, I want briefly to examine the section that lived for a short time in between our §515 and §516. This occurred in TS 228, which represents the final stage of revision before the *Investigations* took the form we know it as. This section is now §414 in the *Investigations*:

> 414. You think that after all you must be weaving a piece of cloth: because you are sitting at a loom—even if it is empty—and going through the motions of weaving.

Why might one be tempted to assert something like "if you're sitting at a loom and you're making weaving motions, then you're weaving"? One might hold a view, call it "behaviorism," according to which a mental act—say, understanding—*consists in* the behavior we associate with that act. But what Wittgenstein highlights is that all of this behavior could be in place although understanding is lacking, just like the weaver who might behave in the appropriate ways but is simply not weaving. If he were giving us an account of what understanding consists in, then he would be running the risk of a kind of behaviorism. But what he says here does not eliminate our mental act. (The different rose pictures *are* important to us. They're not simply "grossly inaccurate" as Hallett states.) Wittgenstein is not operating at that kind of philosophical level—here or elsewhere in the *Investigations*. Rather, he's reminding us of different things that we say about understanding and about meaning, in order to prevent us from being tempted to offer any philosophical account of understanding (behaviorism included) or of meaning. Such accounts are most likely going to be irrelevant (and unjustifiable), wrong (because based on some erroneous assumption), or both.

---

[4] Hacker has a somewhat different reading of this (and the preceding) section. He says that since neither picture is right and the other wrong, "there is no such thing as correctly picturing a red rose in the dark, [and so] there is also no such thing as correctly imagining it" (Hacker 1996, p. 210). This seems to give up too much. Hallett also disagrees with my characterization here: "any mental picture seem[s] grossly inaccurate" (Hallett 1977, p. 523).

5. Wittgenstein highlights several false assumptions in the course of these sections:

(i) that my understanding something is strictly "a personal matter" (as one might put it);

(ii) that mathematical understanding is somehow fundamentally different from non-mathematical understanding; and

(iii) that understanding is an all-or-nothing matter.

Literature

Hacker, P. M. S. 1996 *Wittgenstein: Mind and Will*. Oxford: Blackwell.

Hallett, Garth 1977. *A Companion to Wittgenstein's "Philosophical Investigations"*. Ithaca: Cornell University.

Wittgenstein, Ludwig 1953 (2001). *Philosophical Investigations*, Third Edition. Oxford: Blackwell.

Wittgenstein, Ludwig 2000. *Wittgenstein's Nachlass*. The Bergen Electronic Edition. Oxford-Bergen: OUP.

Email: fox@cup.edu

Annihilation der Zeit in der Informationsgesellschaft?

Georg Friedrich, Graz, Österreich

In diesem Beitrag möchte ich (1.) erörtern inwieweit die in Diskussionen, Aufsätzen und anderen Beiträgen zum Informationszeitalter und zur Spätmoderne oft vorkommenden Diagnosen über Beschleunigung und Verzögerung der Zeit, über den Stillstands der Zeit, über das Verschwinden der Zukunft, etc. eine ontologische Grundlage und Rechtfertigung haben bzw. überhaupt haben können. Sind diese und ähnliche Aussagen bloße Redeweisen oder haben sie ein ontologisches Fundament? Ich möchte zur Beantwortung dieser Frage (2.) einige *Beurteilungskriterien* nennen und näher betrachten, die mir dazu geeignet erscheinen, nämlich einerseits eine Entscheidung zu treffen und andererseits auch festzustellen was das Phänomen ist, das man *Annihilation der Zeit* nennen könnte. Mit diesem Begriff möchte ich gesammelt auf all diejenigen Phänomene Bezug nehmen, die in undifferenzierter Weise als Veränderungen der Zeit bzw. der Struktur der Zeit in der Spätmoderne identifiziert werden können. Anmerken möchte ich dabei, dass es Diagnosen ähnlicher Phänomene auch in Bezug auf den Raum bzw. die Struktur des Raumes gibt. Für diese lassen sich analoge Überlegungen anstellen.

Einleitende Bemerkungen zu den Veränderungen der Zeit

Die Bezeichnung *Annihilation der Zeit* erscheint mir passend, da es in der Informationsgesellschaft nicht mehr in der gleichen Weise gültig zu sein scheint von "Zeit" zu sprechen, sie wird – so einige Diagnosen – ausgelöscht, annihiliert. Es kommen dabei mehrere, teilweise recht gegensätzliche Phänomene zur Sprache, die sich auch direkt widersprechen. Nimmt man die Diagnosen ernst, d.h. man geht einerseits davon aus, dass die Diagnosen solcher Phänomene wörtlich zu nehmen sind und andererseits, dass sie tatsächlich zutreffen, müsste man auch zugestehen, dass der Zeit kontradiktorische Eigenschaften zukommen. Das kommt ihrer Nichtexistenz bzw. ihrer Auslöschung gleich. Im Unterschied zur Irrealität der Zeit handelt es sich bei der Auslöschung der Zeit um eine Begebenheit, die erst mit dem massiven Aufkommen der Informations-, Kommunikations- und Transporttechnologien beobachtbar ist, d.h. die Annihilation der Zeit ist selbst zeitlich.

Wie manifestiert sich die Annihilation der Zeit? Wenn Martin Heidegger 1949 feststellt, dass „[a]lle Entfernungen in der Zeit und im Raum [ein]schrumpfen" (Heidegger 2005, S. 3), liegt der Beginn des Schrumpfungsprozesses ein Jahrhundert zurück. Schon zuvor erkannte Ernst Bloch die "Gleichzeitigkeit des Ungleichzeitigen" als eines der Kennzeichen der Moderne. (Bloch 1977, S. 112ff.) Wenn dann Paul Virilio vom "Tod der Gegenwart" (Virilio 2001, S. 21.) und vom "Rasenden Stillstand" (Virilio 2002) spricht, hat die Entwicklung schon eine neue Dimension erreicht. Helga Nowotny stellt die "Ersetzung der Kategorie Zukunft durch eine erstreckte Gegenwart" (Nowotny 1989, S. 9) fest. Weitere Diagnosen sind z.B. die einer "zeitlosen Zeit" (Castells 1996, S. 464) und die der "Gegenwartsschrumpfung" (Lübbe 1998). Das Ziel scheint ein „weltweite[r] Zustand von Gleichzeitigkeit" (Nowotny 1989, S.10) zu sein. Die Aufzählung könnte noch fortgeführt werden, was aber nicht erforderlich ist, da ich nur auf eine generelle Tendenz hinweisen möchte, nämlich die *Tendenz Veränderungen der Zeit oder der Struktur der Zeit anzunehmen*.

Phänomene der *Annihilation der Zeit* treten zwar verstärkt seit dem Beginn der digitalen Revolution (d.h. seit etwa 15 Jahren) auf, sie sind aber schon zuvor, wenn auch in geringerem Ausmaß, bemerkbar. Doch erst seither scheint es mir gerechtfertigt zu sein von Annihilation der Zeit zu sprechen. Es stellt sich ein erster Komplex von Fragen. Welchen Einfluss kann der Umgang mit der Zeit auf die Zeit selbst haben? Kann unser Umgang mit der Zeit einen Einfluss auf die Zeit selbst haben? Hat sich die Zeit in der Informationsgesellschaft verändert? Wann begann die Veränderung? Die Beantwortung dieser Fragen ist eng mit dem ontologischen Status der Zeit verbunden.

Die Diagnosen betrachtend, liegt es nahe anzunehmen, dass die Veränderungen an der Struktur der Zeit so groß und unwiderruflich sind, dass es gerechtfertigt von einer neuen Ebene der Zeit zu sprechen. Analog, wie auch die Technik eine neue Gestalt Welt ist, und nicht einfach eine Fortsetzung des Handwerks in größerem Stil. (Heidegger) Die in diesem Zusammenhang diagnostizierten Veränderungen der Zeit bzw. der Struktur der Zeit, sind bedingt durch technologische, soziale, individuelle und auch psychologische Faktoren, die auch untereinander in Wechselwirkung stehen (Vgl. z.B. Rosa 2005, S. 243ff.). Die Aufgabe beginnt damit eine eventuelle Veränderung festzustellen oder zumindest begrifflich fassbar zu machen.

Zur strukturellen Mehrdeutigkeit des Begriffs "Zeit". Eines der wichtigsten Schlagworte in der Debatte ist Beschleunigung. Beschleunigung – so lautet zumindest die einfachste physikalische Definition, die als Ausgangspunkt dienen kann – eine Veränderung der Geschwindigkeit in einer bestimmten Zeitspanne. Es ist jedoch nur dann sinnvoll von Veränderung, sei es der Geschwindigkeit, sei es einer anderen zur Diskussion stehenden Bestimmung der Zeit, zu sprechen, wenn es auch einen Bezugspunkt der Veränderung gibt, eine Veränderung in Bezug auf irgendetwas. Im Fall der Zeit ist es insofern schwieriger, als es keine Einheit ihres Vergehens gibt, ein "Mangel", den man kaum beheben kann. (Was wäre die Einheit des Vergehens der Zeit?) Mit andern Worten: Ohne eine Referenz ist es sinnlos und unmöglich von Veränderungen im Fluss der Zeit zu sprechen. Im Alltag haben wir die Möglichkeit Divergenzen im Fluss der Zeit beispielsweise anhand des Vergleichs von Uhrzeit und wahrgenommener Zeit zu festzustellen. Ein solcher Vergleich ist jedoch weder begrifflich noch "messtechnisch" genau – vermutlich ist man sich normalerweise gar nicht dessen bewusst, dass es sich um zwei Ebenen der Zeit handelt. Um im Rahmen dieses Beitrags einen begrifflich klaren Referenzpunkt zu haben, nehme ich die strukturelle Mehrdeutigkeit des Begriffs "Zeit" an. Eine Argumentation für die Mehrdeutigkeit von "Zeit" ist an dieser Stelle der Kürze wegen nicht möglich und im Übrigen auch nicht erforderlich, da die Unterscheidung in diesem Beitrag vor allem der Einfachheit der Darstellung dient. Die "messtechnische" Genauigkeit muss in jedem Fall offen bleiben. Ist diese Unterscheidung getroffen, so ist es möglich im Folgenden nicht einfach nur von Zeit, sondern beispielsweise von

physikalischer Zeit, *ontologischer Zeit*, *kybernetischer Zeit* etc. zu sprechen.

Mit der getroffenen Unterscheidung im Hintergrund kann man präzisieren: Der Ausgangspunkt der Betrachtung sei die *ontologische Zeit*, deren Verlauf im Prinzip unverändert bleibt und die als Bezugsrahmen dient. Die *kybernetische Zeit* sei die sich verändernde Zeit des Informationszeitalters. *"Kybernetische Zeit"* sei der Sammelbegriff, der die Veränderungen der Zeit und der Struktur der Zeit ungeachtet ihrer Art zusammenfasst. Die Veränderungen können dabei technologischer, sozialer, psychologischer oder anderer Art sein. Als Ursache der Veränderung kann man das verstärkte Aufkommen von Informationstechnologien und Medien, Automatisierung, Computerisierung, Technisierung, etc. ausmachen.

Als Kritik sei erwähnt, dass in einigen Beiträgen die Phänomene der *Annihilation der Zeit* nur festgestellt, aber nicht begründet werden. Im Übrigen gründen sich viele dieser Feststellungen und Zeit-Diagnosen, wie ich vermute, auf eine undifferenzierte Verwendung Begriffen oder auch auf eine Begriffsverwechslung, z.B. von *ontologischer Zeit* und *physikalischer Zeit*. In anderen Fällen wird eine genaue Spezifikation ausgelassen. „Wir alle wissen [...], dass die Zeit nicht in jeder Situation gleich schnell verläuft". (Schmied 1985, S. 86) In diesem Beispiel klärt sich im Folgenden auf, dass es sich um die erlebte Zeit handelt. Bei Aussagen anderer Autoren handelt es sich meiner Einschätzung nach um Metaphern. „[M]it den Datenübertragungstechniken der allgemeinen Interaktivität [treten wir] in das Zeitalters des Unfalls der Gegenwart ein" (Virilio 2001, S. 27). Als Metaphern sind sie rhetorisch wirkungsvoll, sie wären aber nicht wörtlich zu nehmen.

Ich möchte nicht behaupten, dass alle angeführten Autoren eine Veränderung der Zeit selbst feststellen wollten. Ungeachtet dessen kann man sich die Frage stellen, ob man, von einem ontologischen Standpunkt aus gesehen, von *Annihilation der Zeit* sprechen kann. Welche Bedingungen müssen erfüllt sein, damit man den Unterschied zwischen *ontologischer Zeit* und *kybernetischer Zeit*, der, wie es scheint, weiterhin besteht, außer Acht lassen kann. Und, wenn die genannten Redeweisen immer nur metaphorisch aufzufassen sind, was entspricht ihnen dann in Wirklichkeit?

Beurteilungskriterien

Ich möchte im Folgenden einige, im Prinzip voneinander unabhängige, Kriterien nennen und besprechen, wobei ich die Liste als erweiterbar ansehe.

Kriterium I: Die Zeit ist irreal. Die Irrealität der *ontologischen Zeit* wäre eine hinreichende Bedingung die Veränderungen der Zeit ontologisch zu werten. In diesem Fall wäre nämlich die einzig in irgend einer Art existierende Zeit, die wahrgenommene Zeit, die mental konstruierte Zeit, die soziale Zeit oder ähnliches. Diese Tatsache berechtigt die Frage nach der Annihilation der Zeit zu verschieben, und direkt zur Frage nach den Veränderungen der *kybernetischen Zeit* im Informationszeitalter überzugehen. Solche Veränderungen sind gut dokumentiert. Dazu, wie die Zeit in der Informationsgesellschaft wahrgenommen wird, gibt es empirische Studien, die keinen Zweifel daran lassen, dass die kybernetische Zeit als schneller erlebt wird, d.h. schneller vergeht. Diese Studien belegen sowohl ein im Großen und Ganzen erhöhtes Lebenstempo, als auch Beschleunigung in Technik, Wissenschaft und Wirtschaft, d.h. mehr Aktivitäten, mehr Produktion, mehr

Forschung und mehr Umsatz in gleichen Zeiträumen. Ob die *ontologische Zeit* irreal ist, ist jedoch heftig umstritten.

Bei den nun folgenden Kriterien (II bis V) wird davon ausgegangen, dass es eine ontologische Zeit gibt. Die Differenz zwischen dieser und der kybernetischen Zeit kann dabei unterschiedlich groß sein.

Kriterium II: Esse est percipi. Im Fall einer idealistischen Ontologie ist die *ontologische Zeit* die wahrgenommene Zeit. Auch die *kybernetische Zeit* ist die wahrgenommene Zeit. Für die Veränderung dieser gibt es, wie bereits erwähnt, hinreichend empirische Belege.

Kriterium III: Die *ontologische Zeit* hat ihre Bedeutung verloren. D.h. die *kybernetische Zeit* spielt in allen Bereichen die wichtigere Rolle. Wenn beispielsweise in einer zukünftigen, von Computertechnologie beherrschten Gesellschaft die allumfassende, weltweite Gleichzeitigkeit hergestellt sein wird und die Verschmutzung der Dromosphäre (Virilio 2001, S. 61) Realität ist, wird die ontologische Zeit keine Rolle mehr spielen. Alles wird überall verfügbar sein, es käme zu einer neuen Dimension der Gleichzeitigkeit. Hierbei können ontologische Zeit und kybernetische Zeit weiterhin grundlegend voneinander verschieden sein. Das Kriterium III ist ein pragmatisches Kriterium, es ist erfüllt, wenn für pragmatische Zwecke der Einfluss der ontologischen Zeit nicht bemerkbar ist. In diesem Fall, d.h. wenn die ontologische Zeit ihre Bedeutung verloren hat, kann und muss man sich eine neue Bedeutung von "Zeit" suchen. Die neue Bedeutung von "Zeit" ist "kybernetische Zeit", d.h. Zeit in einem kybernetischen Zeitalter.

Kriterium IV: Der Unterschied zwischen *kybernetischer Zeit* und *ontologischer Zeit* ist vernachlässigbar gering. Es gibt sowohl die *ontologische Zeit* als auch die *kybernetische Zeit*. Das Kriterius III wird dann erfüllt sein, wenn es nur zu geringfügigen, vernachlässigbaren Veränderung der kybernetischen Zeit gekommen ist. Vermutlich könnte man aber in diesem Fall nicht von einer Annihilation der Zeit sprechen, da die Veränderungen in quantitativer Hinsicht zu gering sind, auch wenn sie in qualitativer Hinsicht vorhanden sind.

Kriterium V: Die *ontologische Zeit* verändert sich tatsächlich in der Weise, wie die Diagnosen sagen, d.h. beispielsweise sie fließt tatsächlich rascher. Würde – aus welchen Gründen auch immer (aber im Gegensatz zum Kriteriums II in einer realistischen Ontologie) – die Zeit ihren Fluss beschleunigt haben, könnte man sagen, dass die Zeit im Informationszeitalter schneller vergeht als z.B. in der Antike. Auch in diesem Fall sind ontologische Zeit und kybernetische Zeit identisch. Es handelt sich um eine triviale Bedingung, doch hätten wir vermutlich gar keine Möglichkeit festzustellen, ob sie erfüllt ist, da es keinen Bezugspunkt gibt (siehe oben). Es wäre eine Situation, wie – ein Beispiel aus der Relativitätstheorie – diejenige, in der sich ein Raumschiffes nahe des Ereignishorizonts eines Schwarzen Lochs befindet, in der man Verzerrungen der Zeit beobachten würde, aber nur von außen.

Anmerkungen und Schlussfolgerungen

Alle fünf Beurteilungskriterien sind für sich allein genommen hinreichende Kriterien eine qualitative Veränderung der Zeit bzw. der Struktur der Zeit festzustellen, d.h. sie dienen einmal dazu festzustellen, wann man Veränderungen der Zeit im ontologischen Sinn verstehen darf. Ob jedoch z.B. eine leicht veränderte, eventuell auch vorübergehende Zeitwahrnehmung dafür ausreicht von der Annihi-

lation der Zeit zu sprechen ist damit nicht gesagt, es fehlt die quantitative Bestimmung.

Ist eines der Beurteilungskriterien I bis V erfüllt (qualitative Komponente) und trifft eine der oben genannten Beschreibungen der Veränderung der Zeit zu (quantitative Komponente), so kann man sagen, dass man vom ontologischen Standpunkt aus gesehen vor einem Phänomen der *Annihilation der Zeit* steht. Ist hingegen keine der Bedingungen I bis V erfüllt, so muss man vorerst feststellen, dass es im ontologischen Sinn nicht gerechtfertigt ist von Annihilation der Zeit zu sprechen. Weitere Kriterien können jedoch gefunden werden.

Eine besondere Bedeutung hat meiner Meinung nach das Kriterium III. Dieses Kriterium beschreibt, was viele Autoren im Sinn haben, wenn sie ein Phänomen der Annihilation der Zeit erörtern. Man ist sich zwar dessen bewusst, dass die ontologische Zeit unverändert vergeht, jedoch treten im Informationszeitalter Phänomene auf, die man beschreiben möchte und die wie Veränderungen der Struktur der Zeit erscheinen.

Im ontologisch strengen Sinn kann man nur dann von einem Phänomen der *Annihilation der Zeit* sprechen, wenn das Kriterium I, das Kriterium II oder das Kriterium V erfüllt ist. Sowohl das Kriterium III als auch das Kriterium IV geht von einem pragmatischen Begriff der ontologischen Realität aus, d.h. beide lassen es zu geringfügige Einflüsse zu vernachlässigen.

Die Beurteilungskriterien I bis V unterscheiden zwei Zeitebenen, die *ontologische Zeit* und die *kybernetische Zeit*. Die Erfüllung der Kriterien festzustellen in jedem Fall die Aufgabe weiterer empirischer und auch nicht empirischer Untersuchungen, was zugegebenermaßen keine triviale Aufgabe ist, beim Kriterium V vermutlich grundsätzlich nicht möglich. Vorgreifend würde ich sagen, dass sich nach der Betrachtung der Kriterien ergibt, dass es im ontologischen Sinn weder gerechtfertigt noch sinnvoll ist von Annihilation der Zeit zu sprechen. Die Kriterien I, II und V scheinen nicht erfüllt zu sein, das Kriterium III macht ein unzulässiges, pragmatisches Zugeständnis und das Kriterium IV reicht in quantitativer Hinsicht nicht aus um von Annihilation der Zeit zu sprechen.

Was entspricht den genannten Redeweisen in Wirklichkeit, wenn sie nicht im ontologischen Sinn aufzufassen sind? Die beobachteten Phänomene können nur anderer Art sein. Sie sind, ebenso wie ihre Ursachen, technologischer, sozialer, psychologischer, oder individueller Art. Aber man kann sie nicht als Veränderungen der Zeit selbst bzw. der Struktur der Zeit im ontologischen Sinn verstehen.

Literaturangabe

Bloch, Ernst 1977 *Erbschaft dieser Zeit*, Gesamtausgabe Band 4, Frankfurt/Main: Suhrkamp.

Castells, Manuel 1996 *The Rise of Network Society. The Information Age: Economy, Society and Culture*, Vol. 1., Oxford: Blackwell Publishers.

Heidegger, Martin 2005 *Bremer und Freiburger Vorträge*, Gesamtausgabe Band 79, Frankfurt/Main: Klostermann.

Lübbe, Hermann 1998. "Gegenwartsschrumpfung", in: Backhaus, Klaus und Bonus, Holger (eds.), *Die Beschleunigungsfalle oder der Triumph der Schildkröte*, Stuttgart: Schäffer/Pöschel, 129-164.

Nowotny, Helga 1989 *Eigenzeit. Entstehung und Strukturierung eines Zeitgefühls*, Frankfurt/Main: Suhrkamp.

Rosa, Hartmut 2005 *Beschleunigung. Die Veränderung der Zeitstrukturen in der Moderne*, Frankfurt/Main: Suhrkamp.

Schmied, Gerhard 1985 *Soziale Zeit. Umfang, "Geschwindigkeit" und Evolution*, Berlin: Duncker & Humblot.

Virilio, Paul 2001 *Fluchtgeschwindigkeit. Essay*, München: Fischer.

Virilio, Paul 2002 *Rasender Stillsand. Essay*, München: Fischer.

Email: georg.friedrich@stud.uni-graz.at

Medien & Bildung

Marek Graszewicz / Dominik Lewiński, Wrocław, Polen

Unsere aus der Perspektive des operationalen Konstruktivismus resultierenden Überlegungen sollen sich hier nur auf das polnische Bildungs- und Mediensystem beziehen. Wir wollen das Problem des Verhältnisses zwischen Medien und Bildung im Rahmen der Hypothese einer funktionellen Äquivalenz konzeptualisieren. Es sollte nämlich von zeitlich zusammenfallenden Prozessen und von einer steigenden Dynamik des Mediensystems ausgegangen werden, obwohl sich der Medienerfolg, wie Luhmann teils ironisch bemerkt, auf eine Krise stilisiert. Ebenso ist von einer sich verringernden Dynamik des Bildungssystems auszugehen. Aus diesem Grund, was nicht unschwer zu beobachten ist, kommt es sowohl in den Medien als auch in den Schulen zu einer Wirklichkeitskonstruktion, und sowohl Medien als auch Schulen betreiben Sozialisation. Aufgrund dessen kann man die Hypothese aufstellen, dass die Schule sich in modernen Gesellschaften durch Medien ersetzen läßt. Was mit Hilfe der Schule zu erreichen wäre, kann auch mit Hilfe der Medien erreicht werden. Die von der Schule unternommenen Bemühungen um die Ausweitung der Systemumgebung sollten uns dabei nicht trügen, da diese Bemühungen, welche sich z.B. in der Ausdehnung der Bildungszeit widerspiegeln, kein Ausdruck von Expansion sind, sondern ein mit dem Strukturwandel entstehender Versuch, auf den Rückgang der sozialen Relevanz der Schule als Ort der Erkenntnis einer konstruierten Wirklichkeit und Sozialisierung zu reagieren.

1. Die Äquivalenzhypothese:

Wir möchten jetzt kurz erklären, worin die schon erwähnte funktionelle Äquivalenz bestehen könnte. Nehmen wir an, dass die Funktion der Schule, die sie der Gesellschaft als Ganzes gegenüber erfüllt, die Produktion einer kollektiven Internalisierung von Kommunikationsgrammen ist. Die Kultur soll hier als ein Verhaltensmodell verstanden werden. Es handelt sich um nichts anderes, als um ein Sozialisierungsprozeß, in dessen Rahmen psychische Systeme Kommunikationskompetenzen erwerben. Es ist leicht zu beobachten, dass sich auch die Medien (nicht unbedingt absichtlich) mit der Gestaltung von Kommunikationskompetenzen beschäftigen. Die Schule erzieht. Die Medien „tun" nichts anderes. Wie S. J. Schmidt formulierte – „aus den Medien erfahren wir, wie man leben und sterben soll", ebenso, wie man Gefühle erleben und Emotionen inszenieren kann usf.

Der allgemeingesellschaftliche Nutzen der Schule und der Medien ist gleich: Durch die kollektive Internalisierung identischer oder ähnlicher Verhaltens- bzw. Kommunikationsmuster verringert sich in der Gesellschaft das Kontingenzpotential, das heißt, uns steht eine geringere Anzahl von Relationsalternativen des Typs Ego-Alter zur Verfügung und zur Bearbeitung an, wodurch sich auch das Konfliktpotential verringert und die Chancen auf einen Kommunikationserfolg steigern. Wir können dadurch mit einer leistungsfähigeren Koordination der Tätigkeiten der Aktanten rechnen, vor allem in prognostischer Hinsicht. Sowohl dank der Schule als auch der Medien besteht eine größere Wahrscheinlichkeit, dass wir uns ähnlich und vorhersehbar benehmen werden – und darauf können wir vertrauen. Diese zwei Wege – der Schulweg und die Mediensozialisation – jedoch sind nicht komplementär. Das

Problem lautet lediglich: Welches System wird die Bildungsfunktion im Rückblick auf die in der Gesellschaft stattfindenden evolutionären Prozesse besser erfüllen. Und vor allem – welche Bedingungen wird das System für den Bezug der Einheit auf den Prozeß der steigenden Reflexivität der Gesellschaft (Selbstreflexivität), auf den Prozeß der Kommunikation, auf die Kommunikationsthemen, mit einem Wort – auf den Prozeß der Metakommunikation der modernen Gesellschaften schaffen. Die Medien sind für das Phänomen der Intensivierung und der Ausdehnung der Kommunikation verantwortlich. Dafür, was sie selbst tun, bilden sie auch selbst aus.

Die mangelnde Komplementarität besteht darin, dass die Schulbildung im Gegensatz zur Medienbildung viel weniger Angebote an Verhaltens- oder Kommunikationsalternativen zur Verfügung stellt. Außerdem ist das mediale Sozialisierungsangebot um einen sehr wichtigen Bestandteil reicher als die Schule, nämlich um eine Perspektive der Beobachtung höherer Ordnung. Die Medien relativieren; die Medien-Angebote werden von den Medien als Angebote selbst beschrieben und die hinter diesen Angeboten stehenden Gründe und Motivationen (Prämissen) werden kund getan. Die Schule verlangt bestimmte Verhaltensweisen; die Medien zeigen sie.

Die Effektivität der Medien rührt im Hinblick auf die Erziehung auch von der Schwäche der Ziele der Schulerziehung her, die nicht nur normativ, sondern auch träge sind. Die Stabilität der 'Erziehungsziele' ergibt sich auch aus der Traditionalität und Konservativität der Schule als eines Systems, welches sich derart auswirkt, dass die von der Schule bevorzugten Normen und Angebote im Verhältnis zu den Problemen, die außerhalb der Schule auftreten (vor allem der Art: 'wie man sich benehmen soll'), ganz unwichtig werden, obwohl sie diese Probleme eigentlich bedienen sollte. Die Medien halten mit dem Kulturwandel nicht nur Schritt, sondern schaffen auch die komplexen 'Lifestyles'. Dies kann man sehr deutlich an den von den Medien 'erzeugten' Bezeichnungen der Generationen beobachten, wie z.B. 'Frugo-Generation', 'X- Generation', 'Yuppies' usf., die zwar lediglich Medien-Status besitzen, manchmal aber auch zu realen und ausrichtenden Faktoren werden. Die Schule thematisiert diese Probleme sehr oft als eine Frage der Werte, die sie selbstverständlich verteidigen muß, d.h. sie muß sich für die erwartungsgemäßen und vom Programm der Erziehungsziele vorausgesetzten Verhaltensmuster aussprechen, oftmals gegen den stattfindenden Kulturwandel. Daß dies ein Scheinkampf ist, der bereits im Vorhinein zum Scheitern verurteilt ist, braucht nicht betont zu werden. Die von den Medien angebotenen Verhaltensmuster passen besser zur Kulturwirklichkeit als die Verhaltensmuster der Schule. Man kann, ohne zu übertreiben, sagen, dass das funktionale Ersetzen der Schule durch die Medien hinsichtlich der Erziehung längst eine Tatsache ist, wobei man in Betracht ziehen sollte, dass die von der Schule stammende Problematisierung dessen, was bei der Erziehung relevant ist, ihren Ursprung in den Medien hat. Das Thema 'Toleranz' z.B., als Erziehungsproblem und als Problem der Erziehung, tauchte in der Schule nicht anders auf, denn als die Folge einer langjährigen Bearbeitung des Themas 'Toleranz' durch die Medien.

Eine weitere Funktionalisierung des Bildungssystems wird vom systemischen Problem der Äquivalenz auch nicht unberührt bleiben. Nämlich die Funktion der Schule als Ort der Wirklichkeitserkenntnis, also die Erkenntnisfunktion der Schule. Die Medien konkurrieren mit der Schule als einem Ort des Wissenserwerbs. Der grundlegende Unterschied in der Organisationsstruktur des Wissenserwerbs zwischen Schule und Medien besteht jedoch darin, dass die Schule das 'zu erwerbende Wissen' dem Schema der Differenzierung der Wissenschaften (Physik, Biologie, Chemie) folgend herstellt; wohingegen die Medien die Möglichkeiten des Wissenserwerbs einerseits nach dem gleichen Prinzip (siehe z.B. Discovery Chanel) andererseits aber auch im Raster der Subsystemdifferenzierung der Gesellschaft anbieten. Die Schule führt Fächer ein, welche sich auf die Popularisierung des wissenschaftlichen Wissens orientieren. Die Medien dagegen können sowohl diese Popularisierungen anwenden als auch – sozusagen – ein eher praktisch orientiertes Wissen anbieten. Wir lernen (z.B.) Mathematik und folglich sollten wir ein Wissen erwerben, das uns die Teilnahme an den unkomplizierten Austauschprozessen erleichtert, die Teilnahme am Wirtschaftssystem. Die Medien erlauben uns (z.B. dank Internet), ein solches Wissen zu erwerben. Sie bieten uns aber (z.B. im Wirtschaftsteil der Printmedien oder des Fernsehens) unvergleichlich mehr Wissen über die Wirtschaft an (an der auch jeder auf irgend eine Art teilnimmt. Und nur aus den Medien können wir das entsprechende Rechtswissen erwerben. Auch die sogenannten Gesellschaftswissenschaften werden durch die Medien komplexer behandelt, als es das knappe und allgemein für unwichtig gehaltene Schulfach vermag. Abgesehen vielleicht vom Wissen über die menschliche Sexualität. Die Schule bereitet uns auch für die Teilnahme am Kunstsystem vor (vor allem für die sozial marginale Literatur, kaum jedoch für den Film). Aber auch hier ist das von den Medien angebotene Wissen komplexer und aktueller. Wir werden darüber, was in der Literatur geschieht, aus Dem Spiegel (und in Polen aus Polityka) schneller und mehr erfahren, als im Klassenzimmer. Man könnte hier den Zweifel äußern, dass sich die von den Medien geleistete Popularisierung des wissenschaftlichen Wissens in der Tiefe deutlich von den schulischen Popularisierungen unterscheidet. So kann Animal Planet kaum das Wissen über die Natur bereitstellen, welches das Biologiefach in der Schule liefert. Man sollte also nicht von Äquivalenz, sondern von Komplementarität ausgehen. Von Äquivalenz zu reden, wäre dann angebracht, wenn die Erkenntnisziele auch tatsächlich erreicht würden, und zwar nicht nur auf dem Papier oder im Bildungsdiskurs. Wir hatten in Polen bereits die Gelegenheit zu beobachten, wie viel die Schule davon, was sie annimmt, dass sie lehrt, auch tatsächlich lehrt, und zwar am Beispiel der Ergebnisse des Versuchsabiturs im Fach Polnisch. Das Problem der Ineffizienz der schulischen Welterkennung hat, unserer Meinung nach, ihren Ursprung in einer spezifischen Eigentümlichkeit der Schule, nämlich jener, daß die Erkenntnisse in ihr Kontrollprozessen (Tests, Prüfungen, Abitur) unterworfen sind, während mediale Erkenntnisse vor allem der Erkenntnis selbst unterworfen sind. Wir lernen in der Schule, weil wir lernen müssen; aus den Medien dagegen lernen wir, weil wir es wollen.

2. Gegenseitige Beobachtung

In welchen möglichen Konfigurationen – so unsere nächste Frage – läßt sich das Bildungssystem im Verhältnis zum Mediensystem beobachten? Man kann grundsätzlich nur vom Reagieren des Bildungssystems auf die steigende Dynamik des Mediensystems reden. Dieses Reagieren ist im Grunde genommen ein Versuch der Absorption und der Adaptation des 'Medienproblems' und des Problems mit den Medien durch die Schule und in der Schule. Die Medien situieren sich nicht in einem gekoppelten (gar vernetzten) Verhältnis zum Bildungssystem (wenn man die Angelegenheit aus der Perspektive der Medien betrachtet). Die Medien beobachten die Schule nicht anders als aus der Kalender-Perspektive (Prüfungen, Abitur usf.), der Sitten-Perspektive (Skandale), gegebenenfalls aus einer politischen Perspektive. Versuche, die Art der Leistungen zu bestimmen, welche die Schule von den Medien erhalten sollte, gestalten sich ebenfalls problematisch. Das meist unklare Kommunikationsparadoxon in der polnischen Kommunikationswirklichkeit sind die strategischen Beziehungen zwischen Medien und Bildung. Denn sofern die Kommunikationsstrategien in den meisten uns bekannten Kommunikationssystemen expansiv sind, ist die Strategie des Bildungssystems, die institutionell dadurch vertreten wird, was die Schule lehrt, eine klassische Exklusionsstrategie. Die Schule würde die Medien, sowohl was den Informationsaspekt (je weniger über die Schulen in den Medien erscheint, desto besser ist es), als auch was den Erkenntnisaspekt (je weniger Medien in der Schule erscheinen, desto besser) betrifft, am liebsten meiden.

Wie versucht das Mediensystem mit den Problemen der medialen Äquivalenz zurechtzukommen? Es hat sich eine spezifische Art der Reaktion auf Medien herausgebildet, die man mit der populären rhetorischen Floskel 'Chancen und Risiken' umschreiben könnte. Die Chance besteht vor allem in der Idee 'des Hineinziehens' der Medien in die Schule, und also darin, dass man die Medien als Technologie, die man nutzen, 'zähmen' oder für die Realisierung der eigenen Ziele anwenden kann, postuliert. Wir lernen also in der Schule das Internet, die Presse und das Fernsehen zu benutzen, und benutzen sie dann auch. Die 'Chancen'-Rhetorik ist ein leises Bekenntnis der Schule zur tatsächlichen Erkenntnisäquivalenz der Medien, da das Wissen über die Welt mit Hilfe des Internets, des Fernsehens und der Presse ja auch außerhalb der Schule erworben werden kann. Die Rhetorik des Risikos ist dann eine Anerkennung der Äquivalenz der Medien als Sozialisationsort, der vorteilhafter ist als die Sozialisation in der Schule. Beide Rhetoriken erreichen ihren Höhepunkt in dem komplexen Konzept des 'Mit-den-Medien-Zurechtkommens', nämlich im Konzept des Bildungswegs unter dem Motto – 'Medienbildung'. Die Rhetorik der 'Bildungschancen', welche die Medien in ihrer technologischen Funktion sehen, ist dabei natürlich unwichtig. Man kann vermuten, dass diese Rhetorik ins Leben gerufen wurde, um den Eindruck einer negativen Einstellung den Medien gegenüber zu kaschieren oder zumindest abzuschwächen, wie er in der Bedrohungsrhetorik zum Vorschein kommt. Wie sich zeigt, will und kann die Schule (was auch nichts außergewöhnliches ist) nicht öffentlich zugeben, dass die Medienbildung nur deswegen entstanden ist, um die Konkurrenz der Massenmedien zu bekämpfen. Man hat deshalb während der Implementierung des Programms 'Medienbildung' anfangs zwei Hauptziele angenommen: 'Die Vorbereitung der Schüler auf einen richtigen (kritischen) Empfang der Medien' und 'Die Vorbereitung auf die Benutzung der Medien als eines Werkzeugs für Beruf und intellektuelle Entwicklung'. Aber bereits in den Programmangeboten sind diese zwei Ziele nicht gleichberechtigt, auch die Zeitzuteilung für die Realisierung dieser Ziele ist nicht gleich, das heißt, man betrachtet die Medien eher als eine Technologie denn als Gefahr. Wenn es nämlich um die Geschicklichkeit in der Bedienung eines DVD-Players oder des Surfen im Internet geht, hat die Schule nicht mehr viel zu leisten, da die

Schüler in diesen Bereichen oft über höhere Kompetenzen verfügen als die Lehrer.

Die Einführung des Fachs Medienbildung erfordert selbstverständlich eine Motivation. Die Motivationsprogramme für die Medienbildung (mit Erkenntnischarakter) sind voller Floskeln über die Globalisierung, über das globales Dorf, über medienbezogene Alltagsvorstellungen und vor allem voller Sorgen über ihren Einfluß und ihre Wirkung, die rede ist von 'zivilisatorischem Wandel', mit welchen die Bildung nun Schritt halten soll. Die Erkenntnisleistung dieser Motivationsprogramme ist jedoch nur scheinbar. Z.B. aus Rücksicht auf ihre außergewöhnliche Popularität, aber auch deshalb, weil die Meinung, das Bildungssystem halte mit dem Wandel Schritt, ein Mißverständnis ist. Das Bildungssystem folgt keinen Ereignissen. Als geschlossenes, selbstreferentielles System reagiert es nur auf die eigenen Zustände und Prozesse. Motivationen, welche wir aus Rücksicht auf ihre offenkundige Schwäche Erkenntnismotivationen genannt haben, tauchen im Bildungsdiskurs allein sehr selten auf. Sie werden von einer stärkeren Motivation begleitet – von der Angst. Wir haben meistens mit einer Anfangsdiagnose zu tun, nämlich jener über die zunehmende Bedeutung der Medien in der modernen Welt (was man ja akzeptieren kann). Auf einem derart vorbereiteten und legitimierten Grund stoßen wir in der Regel auf die aus dieser Diagnose rhetorisch resultierende Litanei: der Risiken, der Gefahren, der Verformungen, der Manipulationen, welche von den Massenmedien ausgehen sollen.

Wer also steht hinter dieser Psychose der Angst, die zum Ausschluß oder zur Einschränkung des Einflusses der Medien auf die Bildung aufruft? „Es entsteht auf dem Globalniveau das ernsthafte Risiko einer neuen Form der sozialen Isolierung für jene Menschen, die nicht imstande sind, mit Hilfe der Medien zu kommunizieren und/oder die von den Medien verbreiteten Inhalte nicht kritisch einschätzen können. Deshalb besteht ein Bedarf an ständiger Medienbildung, um ein kritisches und entwickeltes Verhältnis zu den Medien zu schaffen, und ein Bedarf an Bildung jener Bürger, die aufgrund der zugänglichen Informationen, ihre eigene Einstellung zu formulieren, imstande sind" (Sokołowski, 2003). Wir fürchten, dass der diagnostische Teil dieser Äußerung leider falsch ist. Der Zugang zu den Medien ist heute gar kein Problem. Schwierig hingegen fällt es uns, zu den fordernden Aussagen Stellung zu nehmen, obwohl es logisch ist, dass eine schlechte Diagnose einer guten Prognose eher nicht vorausgehen kann. Wenn es so ist, dass wir es hier mit einer Exklusion oder einer Einschränkung zu tun haben, dann ist die Forderung der nächsten Exklusion oder der nächsten Einschränkung keine gute Forderung. Aber hier muß und sollte man diskutieren, u.a. darüber, ob die Schule ein guter Ort ist, um aus den Medien bzw. über die Meiden zu lernen. Man sollte deswegen auch darüber diskutieren, dass (wie wir schon erwähnt haben), wenn es um Erkenntnisse geht, die Medien heute eine Kommunikationsart sind, die der Bildung zumindest äquivalent ist. Sie übertreffen die Bildung jedoch erheblich im Hinblick auf den Technologie- und Kommunikationsaspekt. Es wäre also zu fragen: Auf welcher Grundlage kann man heute behaupten, die virtuelle Wirklichkeit, welche ja im Grunde genommen lediglich eine Metapher ist, eine Flucht vor der realen Welt sei? Ist die Welt der Literatur, aus der man bis vor kurzem noch die Welt erkannt hatte, keine virtuelle Wirklichkeit? Der Wandel ist keineswegs revolutionär, er ist höchstens quantitativ, kaum qualitativ.

Wir behaupten also, es gibt zu viele Risiken, Gefahren und Manipulationen. Es gibt zu wenig Chancen, welche die Modernisierung der Bildungskommunikation mit

sich bringt, wenn man sich schon an diese stark abgedroschenen rhetorischen Floskeln hält. Es ist doch selbstverständlich, dass das Bildungssystem diese Chancen nicht bemerken will. Würde sie sie bemerken, bedeutete das die Notwendigkeit der Anerkennung mindestens einer Erkenntnisäquivalenz zwischen dem Bildungssystem und dem Mediensystem. Kann man heutzutage noch daran glauben, dass „die technisch-mediale Wirklichkeit der Zeit die Lebensdesintegration und die Erzeugung von Wünschen dominiert" (Bis, 2002)? Kann man zur Äußerungen Stellung nehmen, die behaupten, dass „die prinzipielle Quelle der Notwendigkeit einer Erziehung zur verantwortlichen Nutzung der Mittel der sozialen Übermittlung (Massenmedien), die Spezifik ihrer Sprache ist", wobei sich „diese Sprache durch ein Falsch-Sein charakterisiert, da die Massenmediensprache nur scheinbar ganz verständlich scheint" (Bis, 2002)

Auch ernst zu nehmende Medienwissenschaftler sind mit dem Problem der Mediensprache bis heute nicht fertig geworden. Aber auch wenn sie damit fertig geworden wären, würde das Paradigmatische an diesem Wissens eine Einführung gerade dieser allgemein geteilter Theorien in die Schule nur schwer erlauben. Auch im Lichte einer als rückständig zu bezeichnenden Medienwissenschaft sind diese Ängste unverständlich. Die Programmbasis des sogenannten didaktischen Wegs dient, unter dem Motto 'Leser- und Medienbildung', sehr deutlich zur Katalysierung eigener Ängste der Bildungskommunikation. Man konserviert hier induktiv die eigenen Adaptationsweisen, sowie die selbstreferenziellen Prozesse, die auf die Reproduktion des status quo gerichtet sind, das Einhalten der Erkenntnis- und Sozialisierungsmuster und -normen in unveränderten Form. Die Medien haben unsere Einstellung zur Kultur geändert, sie haben die Kompatibilität der schulischen Kulturprogramme entwertet, sie haben ihre Relevanz zu allen Ausdrücken der Kommunikationswirklichkeit herabgesetzt. Ihre Ziele, wie z.B. 'das Bewahren der eigenen Kulturidentität gegenüber der Globalisierung' oder 'das Gestalten einer respektvollen Einstellung dem polnischen Kulturerbe gegenüber im Bezug auf die Massenkulturglobalisierung' (als ob die Massenkultur eine Heimat hätte - M.G./D.L.), weisen sehr deutlich auf die Einstellung der Schule hin. Wenn man noch wüßte, wie das zu machen ist? Man kann doch aber immer die Medien entwerten, indem man über ihre Marktorientiertheit belehrt, die doch immer in höchstem Masse verdächtigt ist.

Die Bildung müsse sich gegen die Medien wehren, da letztere für sie im Hinblick auf ihr Bildungsangebot eine tödliche Bedrohung darstellen. Auch diese öffentliche Manipulation und das Nutzen der Autoritäten sind nicht seltsam oder unverständlich, obwohl es besser wäre, wenn die Schule sich modernisieren würde. Wenn aber die Reform einen tiefen Wandel bedeutet, besteht der tiefste Wandel der Schulwirklichkeit in den Projekten der Verlängerung der Bildungszeit. Dies selbstverständlich aus dem Blickwinkel des Systemerhalts, der auf diese Art für eine ständige Systemerweiterung sorgt. Ein Wandel der Zeitstruktur wird jedoch von einem Wandel in den Schulkommunikationskodes nicht begleitet.

Keine Medienbildung oder ähnliche Konzepte werden den fortschreitenden Prozeß des Ersetzens und der Äquivalenz der Schule durch die Medien hemmen können, und was damit zusammenhängt – die soziale Relevanz der traditionellen Schule verringern. Wenn man die Angelegenheit evolutionär betrachtet, wird die Schule entweder ein ritualisiertes System, eine Art Kirche, die sich auf ihre feste Organisationsstruktur stützt, oder sie spezifiziert ihre Funktionen in eine Richtung um, die heute noch nicht bekannt ist. Dies alles wird aber ohne Wissen und Willen der für diese Prozesse zuständigen Aktanten laufen.

Literaturangabe

Bis, Dorota,2002: „Edukacja medialna w dobie przemian edukacyj-nych", in: *Przemiany w naukach o wychowaniu – idee, koncepcje, rzeczywistość edukacyjna.* Red: Wiesława Korzeniowska, Kraków.

Graszewicz, Marek 2007: „Komunikacja, manipulacja, edukacja", in: *Manipulacja – media – edukacja.* Red. Bronisław Siemieniecki, Toruń

Graszewicz, Marek, Lewiński Dominik 2005 Kompetencja komuni-kacyjna a edukacja, in: *Aspekty kompetencji komunikacyjnej.* Red. Beata Sierocka, Wrocław

Graszewicz, Marek, Lewiński Dominik 2005: „Edukacja a media", in: *U progu wielkiej zmiany. Media w kulturze XXI wieku. Nurty-kategorie-idee.* Red. Marek Sokołowski, Olsztyn

Sokołowski, Marek 2003: „Media, edukacja, globalizacja", in: *Media i edukacja w globalizującym się świecie. Teoria, praktyka, oddziaływanie.* Red. Marek Sokołowski, Olsztyn

Email: mgraszew@dziennikarstwo.uni.wroc.pl /
        dominiklewinski@o2.pl

Internet as a medium

Maurycy Adam Graszewicz, Wrocław, Poland

1. Internet as medium

One general reservation should be expressed at the beginning of this paper. Phenomena described below are based rather on specificity of Polish Internet, although this cannot be done without taking into account sub-system character of Internet treated as an element of media communication. The analysis itself is based on the constructivist theory of communication.

Irrespective of the fact whether we look for information on an Australian duck-billed platypus or a self-made atomic bomb such information will be found for sure. As mentioned by Luhmann "The society does not consist of people; it consists of interpersonal communicative systems". This assumption is then further developed by him into a statement that social development can be understood as increase of communicative capabilities. Therefore each new technology creates additional communicative opportunities between people (Luhmann 1981, 31). As a consequence of this, release of communication causes development of civilisation and differentiation of other social functional systems.

Specificity of Internet as a medium includes among others such concepts as cyberspace or virtual reality and finally not fully understood influence on a social system. There are individuals who analyse matters related to differentiation of this medium in ontological categories and forewarn of pernicious influence of development of the informatic society on even disappearance of social bonds, dehumanisation of human relationships or threatening cultural colonialism. (see: among others Lem 1999, Kiepas 2003). However, the same individuals admit after a while that they do not know exactly what this influence is like and what scenarios will be carried out in the future. In the light of the system an access to the medium itself remains the only crucial problem as this access requires competences different than only linguistic ones, for example ability to operate technical equipment and thirdly ability / possibility of joining the network. The fact that someone has a computer (as it is not only a computer that serves as an Internet Access Device) does not mean use of this medium and its system limit is specifically defined by the fact that somebody is or is not the internet user. I do not think that the lack of Internet is a big problem for non-users of this medium. Internet as a medium is important not in relation to the content it conveys but as a conveyance medium, platform used for carrying current communication offers relevant to receivers of the text.

2. Reality of the Internet

The world of people who read only books is different than the world of those who read papers and magazines and this world is in turn different from the one of those who use Internet (Hörisch 2001, 71). The use of a certain and also new medium and socializing with it cause mental and cognitive revolution in every Internet user and its effects are among others changing collective memory of the society, hierarchy of one's knowledge or individual structure of reality understood in an individual sense.

Mass media remain the source of our knowledge about our society or generally about the world in which we live – expresses Luhmann. This refers not only to our knowledge about the society and history but also to our knowledge about the nature (see: Luhmann 1996, 9). In Africa with approximately 14.2% of global population there are only 3% of Internet users as compared to the whole World (see: http://www.internetworldstats.com). When we consider the Iraqi nuclear programme on which none of us individually has any influence whatsoever the inhabitants of Africa consider rather issues related to drought or local arm conflicts.

However, as expressed by some people, we should prepare ourselves for meeting of two worlds because „creation of constructive elements of reality understood as a main activity in the world of media is not indifferent to the matter of human subjectivity. Following continuous globalisation and commercialisation together with standarisation related to it the tension important for a human being as a subject appears between virtual reality created and disseminated in the world of media and the real world in which the human being lives". Therefore if I read books or newspapers, watch TV or listen to the radio at the same time each of these media should cause cognitive chaos in my brain and overproduction of separate realities should cause huge tension. Is then the reality of Internet the sum of realities of other media or is it maybe the totally different reality? While talking about the reality of mass media I understand it following Luhmann's ideas as media creation of reality inaccessible to human beings in a cognitive sense. Therefore the following question is a starting point: what is then the Internet or what is it not in a sense of construction and cognition? First of all the Internet is a huge database. It is a public generally available „net of nets" with heterarchic or policentric construction (see: www.wikipedia.org). It remains a huge source of knowledge, texts or books. One can use the comparison that the Internet is a huge library where the increase of data goes in line with geometric progression. If we printed off the whole content of the Internet today we would be belated right in the moment of commencing the printing process due to the increase of data. As expressed by Fleischer from the system point of view the Internet as well as other mass media is a subsystem and a superstructure for natural communication not aimed at naively understood information disseminating but it is a platform and a system "plot" for establishing and passing communication offers (Fleischer, 2005, 12). Thus the Internet is on one hand a platform for disseminating communication from other media (radio, newspapers or TV are in fact commonly known phenomena in the Internet) and on the other hand it created outwardly specific communication forms such as Internet forums or chats discussed below in this article. Irrespective of the above mentioned division for some users the Internet remains simply a communication medium and for others it is also a specific and totally new market for products and services.

As mentioned by Graszewicz and Lewiński the reality created by the Internet is thus different from the one created by „old" media. On one hand the Internet similarly to them participates in differentiation of our reality structures but on the other hand strong differentiation tendencies can be fund in its own internal structure. (Graszewicz, Lewiński 2005). The Internet is a medium specific to that extent that the number of current communication offers

provided by it is much higher than in case of „old media". Increase of complexity is, however, limited by biological mechanisms of perception. Each Internet user is capable of absorbing only a part of the net resources relevant to his needs and requirements.

3. Internet as a mass medium

Mass media as material carriers of signs are designed for presenting, gathering and disseminating specifically coded information. From the perspective provided by constructivism all that we know about the world surrounding us we know exactly from mass media (see: Luhmann 1996, 9). Niklas Luhmann presents the following definition of a mass medium in his work Die Realität der Massenmedien: „By mass media one can understand all units of a society that use technical measures of duplication in the process of disseminating communication. (...) The dissemination technology itself corresponds exactly with the way in which the medium of currency contributed to differentiation of the economy: the technology only constitutes the medium that creates certain forms. Later these forms differently than the medium create communicative operations for differentiation and for operational closure of the system. In all cases a decisive fact is that there can be no interaction between the sender and the receiver. Interaction is excluded because of technical indirect connection and this issue has serious consequences that define a concept of mass media for us." While talking about the mass nature of mass media and following the previously made assumption we do not mean such forms as telephone connection between participants of a radio programme, letters sent to magazines editorial staff or videoconference between certain viewers commonly used by TV. The Internet as a platform servicing other media meets this condition of lack of interaction; however, as a communication medium it does not. When we use Internet communicators, chats or forums we communicate with specific individual net users. Even if they use nicknames like „tommy24" or „hotlinda77" they are specific users and interaction is a part of the communication process. The Internet gives wider opportunities to disseminate communication and get access to it but in this particular case it does not fulfil conditions for mass character of mass media.

The main function of mass media is to make / create the state of being well-known and famous, which brings acceleration of the communication process (see: Luhmann 1996, 30). From the system point of view this function guarantees demand for the next item of information. Whilst the „old media"using Internet as a communication platform are capable of making somebody famous the Internet itself cannot do it. The best example here would be Krzysztof Kononowicz – a Polish marginal but funny candidate for a position of the mayor in one of Polish towns. For purely financial reasons he communicated with voters mainly in the Internet but only „old media" made him well-known and met the condition of creating the state of being famous.

4. Specific forms of communication

While considering the specific nature of new ways of communication offered by Internet one cannot ignore the issue of what the communication is. In the light of the constructivistic theory communication is based on mutual stabilizing, negating and adjusting cultural elements and in the communication system everything is a cultural element. If natural communication (daily, face-to-face) produces intersubjective, established and consensually operating common areas of senses, reasons and communica-

tion offers that create a basis all other subsystems of the communication mechanism. The difference lies then first of all in the fact that as opposed to „face-to-face" communication we are deprived of all the communication feedback (see: Fleischer, 2005, 12). While knowing what somebody looks like we know with high probability to what social group he / she belongs and also while seeing a grimace on somebody's face or hearing somebody's tone of voice we can more easily adjust our current communication offer. Communication feedback in the Internet is partially replaced with a proper combination of signs in the form of emoticons that party help establish the context and make the whole communication slightly more precise. As long as cultural elements are adjusted between the sender and the receiver and there is peculiar feedback between them through the Internet the communication will be successful. Chats and Internet forums remain a specific form of communication. From the typological point of view all communicators of any type that enable us to communicate in the real time can be classified to the first group. In majority of cases (i.e. when additional technical devices such as a camera or a microphone are not used as they cause a situation where there is no textual communication any more) we deal with a sort of a textual version of a telephone conversation. Internet forums remain the second kind of specific communication – textual one, sometimes with many trains of thoughts carried out not in the real time. In this case we are not interested in the use of communicators and Internet chats for the purpose of discussing with famous celebrities although it is specific for this communication form that we are never sure about it. In these cases the Internet is simply treated as a medium for individual communication. While communicating we always refer to what we were previously taught under a given cultural system during a process of socialization with media and natural communication. Communicative schemes created by every person from the childhood through organising certain structures on the basis of observed phenomena are aimed first of all at reduction of communication complexity. The influence of both anonymity and lack of communicative feedback and sociocultural background cause the only difference that a problem of social communication limits is decreased. At this point we need to return to the problem of access. Every person with certain technical capabilities and language competence is able to communicate with any other people with the same technical capabilities and language competence. The problem of access remains here the largest social trap of the Internet. If every person can communicate with any other people such a situation must inevitably lead to breaking schemes and social communication framework. "Internet flame wars" may serve as an example here. If everyone is allowed to tell other people that they are stupid without referring to a social framework (a student will not say this to his / her professor and the professor will also rather use a word „imprudent") so why should not we do it? Let us refer to Garrett Hardin's text „Tragedy of the Commons" and mention that in case of any type of resources (and for the Internet the resource is attention / interest) there is a conflict between individual and common interests. Relations of this type always define social communication frames that are upset in the Internet for the reasons mentioned above. The most important issue in the social system is that communication connects with communication. As mentioned by Luhmann it is not people who communicate but the communication itself. In these circumstances cognition is internally oriented. If the communication is to be successful under certain framework it is primarily most important that one act of communication corresponds with another (see Luhmann, 1996, 171).

And the next question arises here: does the Internet build societies? Even if it provides a platform for people with similar interests, views or common identities to organise together this medium itself only helps them do so. Social services of any type are organised around certain topics. Profiling and thematization allow us to find a specific person or a group that will fulfil requirements specified by us. However, in majority of cases we will do our best to meet someone „face-to-face" and to learn from certain behaviour who we actually deal with as we do not give credence to "out of frames" communication. The Internet thus only helps organize and supports the process of building societies but does not build them itself.

Literature

Fleischer, Michael 2005 *Media w perspektywie konstruktywizmu.* (eds.) 2K – Kultura i Komunikacja, Wrocław.

Graszewicz Marek and Lewiński Dominik 2005, *O nieistnieniu cyberprzestrzeni,* in: Agnieszka Dytman-Stasieńko and Jan Stasieńko (eds.), Język @ multimedia, Wrocław.

Hardin, Garrett 1968 *The Tragedy of the Commons* (eds.) Science 162, 1243-1248.

Hörisch, Jochen 2001 *Der Sinn und die Sinne Eine Geschichte der Medien*, Frankfurt am Mein.

Kiepas, Andrzej 2003 *Podmiotowość człowieka w perspektywie rozwoju rzeczywistości wirtualnej*, Olsztyn.

Lem, Stanisław 1999 *Bomba megabitowa*, Kraków.

Luhmann, Niklas 1981 *Politische Theorie im Wohlfahrtsstaat*, München.

Luhmann, Niklas 1996 *Die Realität der Massenmedien*, Opladen.

Email: m.graszewicz@tfgroup.pl

On the Very Idea of an Information Society

Hajo Greif, Graz, Austria

In the social sciences as well as in public discourse, the notion of an "information society" is widely used as a description of contemporary society in general. Like many fashionable terms, its meaning proves to be utterly elusive. Even if one wisely chooses to leave aside the ubiquitous platitudes about life in a world of ubiquitous information technologies, there still seems to exist a disparate variety of more sensible meanings offered for that term. Let me pick out what seem to be the best recognisable strands in current debates within the social sciences, admitting to the charge of gross oversimplification:

(1) An information society could be a society in which the main commodity is information. What information consists in, and how it is produced and processed, is relegated to secondary importance. This kind of definition is to be most readily found in economics and innovation studies (e.g. Bell 1973).

(2) An information society could be a society in which information technologies have become the primary medium, or tool, of most or all kinds of social interaction – whether or not these have information as their topic themselves. This type of definition find its natural home ground in science and technology studies (e.g. Edwards 1994).

(3) An information society could be a society in which informational relations are its main structuring feature, in that its organisational logic and patterns are largely derived from information technology based networks of communication. This is what Castells (2000) prominently argues for.

Cutting discussion of these definitions short, they all revolve around the question of whether information is the *topic* or the *resource* of social interaction, or whether it is both – that is, whether what counts in the first place is that people act upon, and interact through, units of information, and/or whether it is that they use information technologies as means of their (inter)actions. My purpose here, of course, could not be to determine, once and for all, what the term "information society" means. What I would like to try instead is to make a suggestion towards a conceptual link between the basic interpretations (1-3) that may be interesting and useful to the inquiry into that phenomenon.

The route to my suggestion begins with a look at the notion of information itself. It is not only tempting, but also would seem to be the natural choice for the student of society to think of information as information-for-an-interpreter, and therefore as essentially subjective and already invested with meaning. However, the fact that this is so commonly done may be part of the semantic problem with the information society. So it should not strike the reader as odd that the following interpretation is instead based in the camp of of naturalism and realism, namely on Fred Dretske's concept of information in (1981) and some of the debate following it (especially Millikan 2004).

On Dretske's account, information is a certain correlation between two affairs s_1 and r_1 (things, events, properties, or a combination thereof) that may be interpreted by some system. This system may, but need not be a cognitive one, since it could also be a biological system or technological device, and thus it may, but need not have prior knowledge k about s_1. Dretske described that correlation as follows:

> "A signal $r_{[1]}$ carries the information that $s_{[1]}$ is F = The conditional probability of $s_{[1]}$'s being F, given $r_{[1]}$ (and k), is 1 (but, given k alone, less than 1)." (Dretske 1981, p. 65)

Thus, in order for r_1 to carry the information of s_1 being F, r_1 (rather than $r_2,..., r_n$) may only obtain if s_1 (rather than $s_2,..., s_n$) is the case. The relation between s_1 and r_1 need not be a relation of s_1 *causing* r_1, but is more likely to be one of covariance due to a (prior) common cause, given stable "channel conditions" under which the correlation holds. r_1 should not (or perhaps even *must* not) obtain if, for example, s_2 is the case – which would not be problematic at all in the case of a causal relation, since identical effects may have different causes. On the other hand, s_1 *may* also correlate with another affair q_1 in a fashion analogous to its correlation with r_1, again given a certain set of stable channel conditions, which however will not be the same as for the relation between s_1 and r_1. In fact, the correlation between s_1 and r_1 may become part of the route to q_1, so that the latter correlation builds upon another informational relation. To an interpreting system within the environment in which those conditions hold, the occurrence of r_1 and/or q_1, with a certain degree of probability will result in some behaviour with regard to s_1, namely as being (having the property, being of the kind) F.

Nothing has been, and needs to be said, at this stage about the meaning of information. To some extent, but not exclusively, that meaning depends on conditions within the interpreting system, its dispositions, needs (if applicable), and knowledge (if applicable), while the information as such is independent of these conditions. Most certainly, following this account, the meaning of an information is not determined by conventions. This holds, and only partially so, for a subset of informational facts, namely those for whom content and channel conditions are being defined by design. Instead of starting from this specific subset, with all of its implications and limitations, all kinds of information, whether biological, machine-generated or other, are viewed as continuous with basic natural information as defined above, and they could, but need not come in the form of symbolic language.

This kind of openness in the definition of information may come at a cost, and it certainly misses the nuances between different kinds of information, but the benefit of generality is that this basic concept of information may be embedded in an evolutionary history of systems encountering themselves in an environment within which they have to steer, from marine bacteria in their limited ecosystem to human beings in a complex society. The most refined types of information ultimately build up upon, and are derived from, the most simple ones.

According to the Dretskean account, information is an objective affair, and therefore generality is essential to the concept. At the same time, great importance is given to the context in which a correlation of the above kind occurs, and to the specific relations between signal, sender, and receiver. Some interesting dissent has emerged on the nature of the probability with which the above correlations has to hold. While sheer accidental co-occurrence of s_1

and r_1 can be ruled out with certainty as a suitable correlation, however perfect it may be, the question remains whether the correlation has to be held in place by the laws of nature and of logic (as Dretske himself argued), or whether a statistical correlation, established in a history of co-occurrence for a common cause, and obtaining within a circumscribed domain – a certain, relatively stable spatio-temporal section of the world that is defined by the specific environmental conditions relevant to an interpreting system's proper functioning – would be sufficient (this is, roughly, what Millikan argues for in 2004, ch. 3).

The answer to this question may depend on the perspective one prefers to adopt as a theorist of information: If one focuses on the general, objective conditions under which information is generated and transmitted, stability and predictability of these general conditions are essential. They are the major premise of a naturalistic theory of information. However, if one focuses on the perspective of the interpreting system as the "consumer" of information, it is obvious that the *relevant* conditions in each specific case may be very different for different systems, and that, although they need to be considerably stable for the sake of the systems' persistence, and although focus on the consumer does not imply subjectivism, the conditions in question may change over time, thus requiring adaptations from the systems.

Living in an environment in which the only relevant information concerns the location of waters suitable to one's survival and reproduction, and where there is precisely one channel through which that information may be transmitted, seems to be the most straightforward case: The correlation is between "the direction to which the magnetosomes point" (namely downwards, in alignment with the geomagnetic fields, given the bacterium is placed on its proper hemisphere) and "the direction of lower oxygen content" (which is the condition suitable to the bacterium), yielding the information (not explicit to the bacterium) that there is lower oxygen content to be found in that direction (Dretske 1986).

The case becomes more complex if there is more than one possible cue to the state or event about which information is gathered. A bird of prey overhead may be recognised by the characteristic shadow it casts, or by a characteristic sound it makes – or by the warning call another member of the group has uttered on having been informed about the predator's presence by way of one or both of the former cues. In this case, different channels are available for information of the same content – namely that there is a predator overhead –, whose reliability may vary with specific circumstances (e.g. clouds obscuring the sun or error on the side of the member of the group who utters the warning call).

For an information-processing system of the artificial kind, on the other hand, correlations, relevant transmission conditions and rules by which to operate upon a given input are a matter of intended function and technical constraints. A signal produced by some such system carries the information that F if there is a suitable algorithm reliably operating upon a given input. Questions such as how the information has to be coded in order to be sufficiently reliable become important in this case, since these matters have not been settled in advance by way of natural selection.

The two most important differences between these cases and human life-worlds are, firstly, the complexity of the relevant environmental conditions, that is, the quantity of correlations that need to be mapped informationally, and the possible interactions between these correlations. Secondly, the mode of their selection has changed, as intentional actions and their consequences (social facts, technical artefacts) have become part of the conditions under which further informational correlations will be established. While a stable and largely predictable background of possible correlations as well as of channel conditions is an essential prerequisite for information to obtain, and for interpreters to make use of it, they are increasingly modified – either purposefully or as a side-effect of certain courses of action. Such modification has become a characteristic of the environment human beings live in, thereby becoming an environmental condition to be taken account of in its own right.

The point of modified environmental conditions gains particular significance when information about the environment of human beings is generated and/or processed by technological means. This already holds for technologies whose time of introduction predates the advent of information technologies proper, like the printing press or the mechanical clock. All of these technologies are marked by effects that set them apart from technologies for the production, processing or transportation of tools or consumable goods in at least one important respect: While the latter technologies are likely to modify the environment within which people interact, and perhaps also affect the perception thereof, by giving access to new resources, by enabling new courses of action, by requiring certain economic or labour regimes, or by generating new risks, technologies for the production and processing of information directly address, and are likely to directly modify, human beings' mode of access to their environment: Not only is there more information available, quantitatively speaking, which requires strategies of organising, selecting and retrieving it in order to make use of it (to constitute knowledge, to guide actions). It is, firstly, the establishment of new correlations between hitherto unconnected affairs that modifies the environment for further (inter)action. Secondly, the channels of information retrieval themselves are altered, and probably multiplied by the establishment of new media of communication.

Whatever these changes amount to, they do so in relative independence of their material substrate, since the condition still holds that the same informational content (that s_1 is F) can be transmitted in different ways, by different means (resulting in r_1 or q_1). This simply means that content, in the ideal case, should not depend on the storage, processing or interface technologies employed. It is the identity of pragmatic effects that counts.

Now, if the term "information society" shall be meaningfully applied on this background, it will, in a first approximation, refer to a society in which generating, processing, distributing and interpreting information in the broad sense outlined above takes precedence, qualitatively and quantitatively, over the traffic in conventional material goods. Of course, even a subsistence-based agrarian economy could not possibly function without information (about the organisation of labour, or about possibly adverse natural events etc.), but its main substrate are material goods, where no such independence and interchangeability is given as it is for informational content. Things may already begin to look different in a monetised economy, where *representations* of things are traded. However, in the case envisioned here, information itself becomes the most valued good – whose value, interestingly, does not increase in correlation with its scarcity (as it would for conventional goods), but with its proper selection and identification as being relevant.

In a second approximation, an information society would be a society in which information, as defined above, is the main topic *and* resource of social action at the same instance, and with the same import. It is the primary commodity to be acted upon, and the ways of acting upon it depend on appropriate methods, devices and infrastructures of information processing, that is, on techniques and technologies of generating, storing, transmitting, retreiving and properly selecting units of information. More precisely, a necessary condition for information to become the primary commodity has been the advent of capable information processing technologies. However, if this hypothesis is tenable, the very distinction between topic and resource of action will become problematic in a certain way: If information *is* the primary means by which one gains access to one's environment, and if, at the same instance, information is the primary topic of one's acting within and upon that environment, the modes of access and the modalities of action change in the very process of that action – not as a secondary consequence, but intrinsically.

On the other hand, the material, that is, the technological basis of such action may find itself being neglected in an analysis that emphasises the importance of the nature of information as such. Yet, just as information itself, technological artefacts and infrastructures, once established, become part of the environment in which to act, imposing conditions on further courses of action that may not be ignored. The mere fact that information technologies are used to process information rather than more graspable commodities does not cancel out this effect. Happily ignoring these two latter facts – the interaction between topic and resource and the resilience of the technology – seem to be characteristic of all the hype-laden talk about the information society, and the immaterialisation it allegedly implies (e.g. in Hardt/Negri 2000). Taking those facts into account may not only be a remedy against all that hype, but also be helpful in describing the information society as a truly interesting and unique phenomenon.

Literature

Bell, Daniel 1973 *The Coming of Post-industrial Society. A Venture of Social Forecasting*, New York: Basic Books.

Castells, Manuel 2000 *The Rise of the Network Society. The Information Age: Economy, Society and Culture*, Volume 1, Cambridge: Blackwell. 2nd edition.

Dretske, Fred 1981 *Knowledge and the Flow of Information*, Cambridge: MIT Press.

Dretske, Fred 1986 "Misrepresentation", in: Radu J. Bogdan (ed.), *Belief. Form, Content, and Function*, Oxford: Clarendon Press, 17-36.

Edwards, Paul N. 1994 "From Impact to Social Process. Computers on Society and Culture", in: Sheila Jasanoff et al. (eds.), *Handbook of Science and Technology Studies*, Thousand Oaks: Sage, 257-285.

Hardt, Michael and Antonio Negri 2000 *Empire*, Cambridge/London: Harvard University Press.

Millikan, Ruth 2004 *Varieties of Meaning. The 2002 Nicod Lectures*, Cambridge: MIT Press.

Email: greif@ifz.tugraz.at

Language Games and Serious Matters:
Cultural Pluralism, Relativism and Rituals in the Media

Ora Gruengard, Ramat-Gan, Israel

Supporters of cultural pluralism like to rely on Wittgenstein's claims with regard to the plurality and the variety of "language games". They pretend, e.g., (Lyotard, 1979) to find there support for their claim that different cultures or "communities of meaning", are "incommensurable" and therefore no "dominant group" should impose its "meta-narratives" on other groups. But Wittgenstein's claims are not about cultural plurality. He referred mainly to the plurality *within* the culture that he shared with his addressees: the variety of different "games" in which the individual, in different context, takes part.

In (Wttgenstein, 1958) he asks us, indeed, to imagine all sorts of tribes with "funny" languages-games, but the point of those examples is not to suggest that such "games" are beyond *any* criticism, but to illustrate the *picture* of plurality of games: An act that counts as a move in one of them is not a move in another; a similar move that can be taken in two different games counts as a legitimate in one but not in the other; a move that is legitimate in both of them may be justifiable in one but not in the other, etc. Chess and checkers exemplify such relations. They are different games, different rules of *action* and therefore different "forms of *life*" (rather than *abstract meanings*), but they do not represent different *cultures*. There can be more than one culture in which one can "play" sometimes Euclidian and sometimes non-Euclidean geometrics, but no culture *consists in* "playing" either. There is more than one culture were both chess and checkers can be played; there is no culture that *consists in* playing either. And, of course, no individual, not even the craziest chess fan, is always playing – talking, thinking – chess.

Wittgenstein's tribes are as hypothetical than the that has a name for undetached rabbit parts but not for a rabbit (Quine, 1960). When the example of that tribe (which might fit the claims in (Whorf, 1956) about the connection between languages and worldviews) is detached from its context, it might seem to express a cultural pluralist and relativist position. Quine had brought it, however, in connection to the discussion in (Wittgenstein, 1958, II.xi, pp. 165-166) of the rabbit-duck picture, a classical example for an ambiguous figure that causes instability of perspective, so that *every* observer acquainted with those patterns sees it *sometimes* as a rabbit and *sometimes* as a duck. Wittgenstein uses it in order to argue that words are not names of "private" perceptions: We cannot know to which of the possibilities the speaker of a foreign language might refer when we show him the picture and ask him whether what he sees in the picture is what he means by the word. Quine adds the apparently "savage" perspective in order to argue that translation is under-determined even when there is no problem of a pattern ambiguity. He could have used another perspective, e.g., seeing it as a piece of paper, but his (anti Whorfian) point is that unless there are practical implications to the difference between seeing a rabbit as a whole or as undetached parts, the translator's decision depends on his theory and not on empirical evidence. But even if those examples were relevant to the cultural *relativist*'s claim they would not serve his *cause*, for both refer to cultures with apparently limited horizon, whose members, unlike us, do not see the scientific ad-

vantage of the whole rabbit perception, cannot count or calculate beyond 6, etc. They might reinforce the prejudice that *they* play only football, and even if *we* could succeed in teaching *them* to play a simple version of checkers, chess will always be beyond *their* capacities. The "savage" perspective mentioned by Quine might, however, have practical implications in our own culture (e.g., for a butcher); and, as we shall see, Wittgenstein does not assume that observers whose language is totally alien to us are *incapable* of "our" perspective shifts.

The analyses of simple words like '*same*' or '*see*' (Wittgenstein, 1958) are more instructive: They show that Wittgenstein was concerned with different "language games" that are "played" *within* the culture that he shared with his audience. As the picture's example is supposed to show, the question whether the perception that is described by the English speakers "the color white" is the same *perception* as that of the Eskimos is a *nonsensical* question. He is convinced, however, that what counts as "the same" in the "language game" of the meteorologists (in the description of the weather conditions), in that of the microbiologists (in their description of microscopic sights), in that of logicians (in their discussion of identity or synonymy) and in that of art critics (when they are comparing films) is not precisely the same "same". He thinks that we, moreover, see that 'seeing' in the "language games" of physicists and optometrists, is not used by the same rules in the description of mystical illuminations or in the present "language game", where we use the verb 'see' in order to say that the difference is clear. It is clear in the English (or Eskimo) version, although Wittgenstein wrote German that is not always translatable to other languages word by word.

Wittgenstein, like some of his contemporary, criticized atomistic empiricism, linguistic nominalism, and the Lockean intolerance for "unnatural associations of ideas" and "idle talks". That camp included Gestalt psychologists and non-inductivist philosophers of science. It included also linguists (who were interested in the multiplicity of non-descriptive "functions" and "games" of language), students of cultural phenomena (who sought to differentiate between seeing events as social and historical and seeing them as physical, or between seeing something as a ritual object or a work of art and not, say, as a commodity or as a natural object) and "life-philosophers" (like the later Husserl and his follower Schütz). All of whom insisted that we live in "multiple realities" or "worlds", those of work, fiction, day-dreaming, religion, jokes and sometimes also the hypothetical, abstract and "ideal" realms of science and mathematics. All of them were convinced that the classical conceptions of logicians, mathematicians, physicists and the positivistic perspective of the engineer should not dominate our approach to the other domains.

Such a position implies, of course, a criticism of the "colonialist's" positivistic approach to foreign cultures, which judges them according to the "irrational" otherness that it attributes to their myths, cults etc., but ignores aspects of their life in which they do not differ from "us". Wittgenstein would, accordingly, accept the approach of (Lévi-Strauss, 1962), rather than that of (Winch, 1958): For the

former the "otherness" of the other is often only apparent while the latter insists that the "otherness" is real and comprehensive. The former maintains that the so-called "primitives" share, in their own styles and environmental context, the "mature" Western attitudes – the practical, the technical, the critical and the ironic, beside the "infantile", "dream-like", "mythical" and "magical" attitudes, and the West takes part - in its own myths, totems, taboos and rites - in "their savage thinking". He maintains that one cannot understand properly their – and our – tradition as well as everyday communication unless we realize that all functions of language - the "logical" referential and the meta-linguistic as well as the "psychological" emotional and connative, the "social" phatic and the "spiritual" poetic (cf. (Jakobson, 1968)) are present in their myths and rites - and our theories and ceremonies – and in their everyday communication. Winch puts the stress on the need to interpret the other culture *as a whole*, and follows (Collingwood, 1946) rather than Wittgenstein. He insists, like (Geertz, 1973) that the interpreter should adopt the role of a participant, and thereby misses the distinction (Wittgenstein, 1958) between the child's acquisition of (first) language and translation from another language, where one observes the *speaker's* "following of a rule". Winch assumes, moreover, that the other culture *as a whole* could be studied from that perspective as a coherent *"form of life"*, which seems to fit the views of (Lyotard, 1979) or (Foucault, 1966) but it ignores Wittgenstein's distinction between a "language game" as a "form of life" and the "mythology" that is the "riverbed" (Wittgenstein, 1995, §§96/99) of a variety of "meanings" that are constituted by the various "language-games" that are "played" in a given culture, and, despite possible incoherence, are somehow connected in a way that allows the "inter-games" shifts of jokes and irony (cf. (Wittgenstein, 1958. §23). Had Wittgenstein lived today, he would probably oppose the current pretensions of some researchers and critics that pretend to have discovered the (coherent) "codes" that are specific to entire cultures or peoples, and their claim to know their "regime of truth" (Foucault, 1980), and the motives that allegedly stand behind it

We should, in particular, distinguish between his notion of "mythology" and Foucault "regime of truth" that is specific to a given society. The presuppositions, attitudes and practices that constitute the "riverbed", or "mythology", have no truth value; they are "pictures". While the metaphor of a "background' can mislead us to see cultures as standing separately, each before its wall, the metaphor of a "riverbed" allows them to have common sources, to cross or run alongside each other, to converge as well as diverge. Wittgenstein does not speak of a "dominant group" that seeks to impose its "regime of truth" on other groups, but of a common net of connected meanings in terms of which people may have different, and sometimes opposing "language games" and attitudes. His approach is therefore compatible with the possibility that in some respects some people, conservatives as well as modern ones, whose Jewish, Moslem or Christian "riverbeds" have common sources and are constantly in some or other kind of interaction, are closer to each other than to members of their respective groups. (In fact, he himself a Catholic son of converted parents that was considered as a Jew by the Nazis, was quite perplexed about his own identity.) In a dialogue cited by (Phillips, 1986, p. 30) he speaks of a ritual of the ancient Hebrews and says: "*The scapegoat on which sins are laid and which goes out into the wilderness with them, is a false picture"*, and thereby makes an allusion to a "picture" that has a central place in Christianity. While Phillips explains that the Hebrew "picture" (taken literally) is nonsensical while the Christian picture (taken figuratively) speaks of a familiar phenomenon and therefore makes sense as a metaphor, Wittgenstein himself does not continue to say "like all the false pictures of the Hebrews", but says, rather ironically: "*and like all the false - explained latter as misleading - pictures of philosophy*" . He, unlike Phillips, does not say that Christian "mythology" *is* basically different and makes more sense than the Hebrew one, for both can be seen either *as* a nonsensical method of transference of sins and responsibility and both can be seen *as* a symbolic rejection of sins. He, on a meta-level, sees both *as* "pictures" that are "like …pictures of philosophy". He concludes by relating to a non-misleading philosophy: "*Philosophy might be said to purify thought from a misleading mythology*". Cultural relativism is a "misleading mythology" and not a purifying philosophy.

The cultural relativist sticks to the level of the "games" and denies the possibility of "meta-games" were "mythologies" are judged to be "misleading". He insists that one cannot judge a move in checkers by the rules of chess. But this truism is relevant only in a "language game" that permits – and according to Wittgenstein any permission of that sort is a matter of an underlying "mythology" - only intra-game judgments. Wittgenstein, who judges "mythologies", does not limit himself to such "games". Though he does not mention "meta-games" (which in his context of discourse could hint at a superiority of abstract logical meta-languages over the "ordinary" ones) he does not hesitate to point to the superiority of "ordinary" discourses over the "grammatical jokes" of philosophers (Wittgenstein, 1958, §111). The linkage between "jokes" and "misleading" is perhaps inspired by the linguistic analysis of witty puns and jokes, dreams and neuroses in (Freud, 1900, & 1905), which shows "illogical" *shifting back and forth between a variety of "language-games"* with the ironic pretension (or self-deception) to "play" one and the same "game". Lévi-Strauss (1962) shows how such a "metaphoric" or "metonymic" shifts (which he calls "savage" but not "illogical") work in myths and rituals, and hint, like Freud's jokes, at denied conflicts and contradictions that are apparently resolved. Myths, like jokes, are not misleading *as long as the audience is aware of their "poetic" character*, and does not take them as statements of facts. The "grammatical jokes" of philosophers are "jokes" because they make wild shifting between "language-games" but pretend to be statements of facts. They are therefore "misleading mythologies", and the role of (purifying) philosophy is to warn against the misleading and prevent it. Such "purification" is a "meta-game" that compares "language-games" and judges them, although the playing of the misleading philosopher and his ironic, poetic, joking, myth-telling and neurotic accomplices (including Wittgenstein himself in all those roles) is perhaps too anarchic and idiosyncratic to be considered as *rule-governed* social "language game". It is, moreover, a "meta-game" that allows challenging the player, asking why he chooses to play it and, as Wittgenstein says with regard to a conversation with an imaginary king from an imaginary (inferior) culture: he "would be brought to look at the world in a different way" (Wittgenstein, 1995, §92)

The same approach can be applied to the "grammatical grotesques" and audio-visual "burlesques" that today's mass-media, internet blogs and mass-production of dissertations and publications enable and encourage: advertisement, political propaganda, and other statements that are apparently statements of facts, but the "rules of their game" are rather the rules of a ritual. Rituals, like myths, jokes and neuroses, do not respect any boundaries, and shift "illogically" between "language-games". with disrespect for scientific or commonsensical criteria for

causation, temporal and special order, object or subject identity etc. They are tolerant to irrelevance and incoherence, and contradictions play in them a major role. Rituals create, moreover, "sacred objects" with contrary poles and contradictory qualities, that are supposed to have symbolic or magic powers and effects, such as the ability to be malevolent even in their benevolence, knowing in their ignorance, or *vice versa*, and with capacities of transference of evil or salvation, responsibility or guilt, repentance or stubbornness to others. Whether their "unification of oppositions" by such shifting and absurdities helps the managements of denied personal or social conflicts or whether it does not, Wittgenstein, as cited above, insists that picking a "*scapegoat on which sins are laid"* in order to send it with them "*into the wilderness*" is a "false picture".

The classical scapegoat is not the Se'ir le-Azazel of the ancient Hebrews, but the Jew in the religious or racist anti-Semite "mythology". Wittgenstein's enlarged approach is therefore the answer to the claim of (Feyerabend, 1975), according to which humanitarianism and anti-Semitism are incommensurable coherent language-games, and both are beyond any external criticism: They are different "games" on the background of different "mythologies", but they *are* comparable and the humanitarian can criticize the anti-Semite in a "meta-game" that flows in a "riverbed" that is common to both. Anti-Semitism as a form of racism is only one version of an "essentialist" marking of a group as the "goats" from which one can pick arbitrary the "scapegoats". In other versions the "goats" are nations, religions, classes, genders, professions etc. The "sacred object" may, alternatively, be a "shepherd", usually a member of an ideological group that encourages the "sheep" to yell at the "wolves" for past wrong (as it is done nowadays, e.g., in some of the "post-colonialist" rituals), or a group of reconciliatory "lambs", whose ritual consists in bringing opposing groups each to listen to the "narrative" of the other and teach both to co-exist in the alleged "incommensurability". According to Wittgenstein's approach they are all "mythologies" that are neither ":true" nor "false", but some are nevertheless more "misleading" than the others because of their pretension to deal with facts while they express and foster attitudes. As the metaphor of the king shows, Wittgenstein would prefer to substitute the rituals with conversations about "mythologies" and one's reasons to adopt or reject them, in which the participants will be brought to *reconsider* their "narratives" and "*look at the world in a different way*."

Literature

Collingwood, R.G. (1946) *The Idea. of History*, Clarendon Press, Oxford, 1995

Feyerabend, P.S. (1975) Against Method *Outline of an Anarchistic Theory of Knowledge*, London: Versa

Foucault, M. (1966) *Les mots et les choses :une archéologie des Science humaines*, Paris : Gallimard.

Foucault, M. (1980) *Power/knowledge : selected interviews and other writings, 1972-1977* / ; ed. C. Gordon ; trans. C. Gordon [et al.] Brighton, Sussex : Harvester Press

Freud, S. (1900-1901) "The Interpretation of dreams", trans. & ed. by James Strachey, *Standard Edition*, London: Hogarth Press, vol. IV-V.

Freud, S. (1905*)*: "Jokes and their relation to unconscious, trans. & ed. by James Strachey, *Standard Edition*. London: Hogarth Press, vol. VIII.

Geertz, C. (1973) *The Interpretation of Cultures: Selected Essays*. New York: Basic Books.

Jakobson, R. (1968): "Closing Statement: Linguistics and Poetics", in: T.A. Sebeok (ed.), *Style. In Language*. Cambridge, Mass.: MIT Press.

Lévi-Strauss, C. (1962) *La pensée sauvage*, Paris :Plon.

Lyotard, J.-F. (1979). *La condition postmoderne: rapport sur le savoir*. Paris: Minuit.

Phillips, D.Z. (1986) *Belief, Change and Forms of Life* , London: Macmillan.

Quine, W. Van O. (1960) *Word and Object*. Cambridge, Mass.: MIT Press, Ch. 2.

Winch, P. G. (1958) *The Idea of a Social science and its relation to Philosophy*, London: Routledge and Kegan Paul.

Wittgenstein, L. (1958), *Philosophical Investigations*, trans. G.E.M. Anscombe, Oxford: Blackwell.

Wittgenstein, L. (1995) *On Certainty*. Edited by G.E.M. Anscombe and G.H. von Wright. Trans. Denis Paul and G.E.M. Anscombe. Oxford: Blackwell..

Whorf, B. L (1956) *Language, Thought, and Reality: Selected Writings*. Ed. J. B. Carroll. Cambridge: MIT Press

Email: orag@mail.shenkar.ac.il

Ornamentality: A New Puzzle for the New Media

Eran Guter, Emek Yezreel, Israel

The term 'ornamentality' is commonly reserved for certain fixtures in our daily life such as Persian rugs and tacky wallpaper. For obvious historical reasons, aestheticians tend to downplay the philosophical import of ornamentality. Still a number of recent leading thinkers, from Ernst Gombrich (Gombrich 1979) to Kendall Walton (Walton 1990), have become acutely aware of the cognitive value of ornamentality and of the fact that ornamentality is an aesthetic phenomenon much more widespread in art and in life than is usually acknowledged in the literature. In this paper I pursue this strain of contemporary thought as I claim that ornamentality is pervasive in that cluster of various technologies, processes and practices, normally bound together by the loose term 'new media'. I shall first offer reasons in support of this claim and then explore some of its ramifications, which yield, I shall argue, an interesting puzzle.

So why, how and when are the new media ornamental? One answer, taken squarely from ordinary experience, readily suggests itself: at least some of these technologies are conducive to audio-visual stylization; hence they serve a clear decorative purpose as fixtures in our daily life. The intertwining of such technologies as digital television, the internet and mobile telephony decorates simply by virtue of contributing to and shaping one's environment in very much the same way that Persian rugs or flowery wallpaper do. The activated technology often becomes simply part of the space in which it is located. This point may be reinforced by observing the habitual frenzy of zapping and surfing. Such common practices often serve the clear decorative purpose of creating or adjusting one's ambience. Therefore, this aspect of the ornamentality of the new media is part and parcel of their essential characteristic of dispersal: the interweaving of the new media into daily life at the levels of consumption, production, and participation.

Yet there are further reasons for the claim that the new media are ornamental. Here I would like to refer to Kendall Walton's theory of ornamentation, which offers an insightful account of ornamentation in terms of inhibition of participation in games of make-believe (Walton, 1990). Contrary to the standard case of fully-fledged pictorial representation, decorative representations present us with fictional worlds in which other fictional worlds are embedded. This puts us at a certain psychological 'distance' from the embedded world, since we participate only in the first-order game of make-believe, while imagining that there is another game, which we could participate in. In Walton's words: "We stand apart from the internal fictional world and observe it through its frame" (ibid.).

Insofar as a representation is decorative, we inevitably find ourselves withdrawn to the point of being merely spectators, rather than participants in a game of make-believe. We oscillate between the tempting fictional richness of the internal world and the overpowering sparseness of the framing world, which consists of "scarcely more than the work itself together with, by implication, its artist and his creative activity" (ibid.). This is also true of *bona fide* representations. Consider, for instance, Van Gogh's *Starry Night*. According to Walton, the physical properties of the painting—the bold brush strokes, the cracking of the paint, the swirling frenzy of the artist's pictorial language—pull us back from a particularly seductive internal world into a more 'objective' perspective, which might yield more significant connections with our lives. A clear advantage of Walton's account is the way it shows how widespread ornamentality really is. It can be temporary or partial, coexisting with genuine representationality.

We may readily see how Walton's theoretical apparatus can be deployed for our purposes. Most of our experiences with new media can be described unproblematically in terms of using props in a variety of games of make-believe, perceptual or other, wherein such props can be, for instance, other network users (real or fake), mere texts, visual images, graphics of all sorts, computer icons, navigational objects, sound effects, audio-visual clips, live feeds and other stuff that new media dreams are made of. Our various games of make-believe with these props generate fictional truths about the props themselves, about the fictional worlds, which they inhabit, and about us, the participants.

The observation that the new media are conducive to audio-visual stylization hence to decoration readily maps onto Walton's idea that ornamentality is to be explicated in terms of inhibition of participation in games of make-believe. For stylization simply draws one's attention to the way the representation is actually produced hence away from any fictional truth it may generate. This is eminently clear in the case of the pervasive audio-visual stylization in the new media. However, even in the realm of mere text, we can observe pervasive stylization, namely, hypertextuality, undoubtedly one of the key features of the new media

Hypertextual navigation is an instance of another key feature of the new media, interactivity, which can be defined as the ability of the individual members of the new media 'audience' to directly intervene in and change the images and texts that they access. Interactivity amounts to world-building activity—simply put, the viewer becomes a user—which means that when we interact with the medium, we patently refer back to the features of the medium itself, we are withdrawn to the way the representation is actually produced. In this sense, interaction in general, and hypertextuality in particular, inhibit participation in games of make-believe, contrary to common wisdom.

Taking a step further in our argument, and deeper into the ornamentality of the new media, we ought to consider now our use of new media as conduits of real life, not just as mere entertainment and decoration. By 'real life' I mean not only describable facts, but also, perhaps primarily, moods, inclinations and innuendos. Whether by means of text or image, the new media are most widely used to gather information about the world, in and around us. It is crucial to observe here that the medium in itself— the technology merely 'being on'—amounts to an open channel, an unbounded equilibrium. That is, insofar as we bring into consideration the specific hybrid origins of the new media in earlier technologies of distant seeing and facsimile, we may speak of their fundamental epistemic transparency in the sense that they are capable of presenting perceptual information that is caused by and

counterfactually dependent upon its subjects (Walton 1984). In other words, the technology in itself has been designed to be absolutely inert with regards to the contents, which it channels. Indeed we tend to perceive the many idiosyncrasies of the medium—such as electronic distortions, blurring or unnatural coloring of the image, which are rampant nowadays in video transmissions carried by third-generation mobile telephony—as having no bearing on the status of events and objects in the world.

These considerations suggest the philosophical significance of any introduction of boundaries into the clear medium, of the interactive compromising of the open channel. A prime example is the framing or cropping of the photographic image. After all, the real life channeled by the new media is a framed real life, truncated by the technical specifications of the equipment used and set to fit our gadgets. As Stanely Cavell pointed out, the significance of the photographic frame lies in the brute fact that the photograph comes to an end: "When a photograph is cropped, the rest of the world, and its explicit rejection, are as essential in the experience of a photograph as what it explicitly presents" (Cavell 1979). That is, the frame has a meaning internally related to the meaning of the image it encloses.

It may be instructive to recast this idea using the distinction between the *phrastic* and the *neustic* of an utterance, made famous by R. M. Hare (Hare, 1970). The phrastic of the photograph would be its propositional content; the neustic of the photograph would be the attitude the 'author' of the image—the photographer, the sender of the image, or anyone else for that matter— wanted us to take toward that content, including the commitment to its factuality. Inasmuch as the frame puts us in some kind of relationship to the phrastic content of the photograph, it performs a neustic function. It enfolds and engulfs not so much the photograph as us, together with what the photograph shows. My upshot is this: the mediumal elements, which eventually deflect us back to the features of the actual representation, hence inhibit our participation in games of make-believe with its phrastic content, perform a neustic function. Thus ornamentality, as explored here, hinges upon the neustic. I suggest that this is actually what Kendall Walton means by saying that ornamental representations pull us back to a more 'objective' perspective, which might yield more significant connections with our lives (Walton 1990).

Now, as Hamlet says, "there's the rub". If the new media are ornamental, then, insofar as they serve as conduits of real life, they are ornamental in a sense very different from flowery wallpaper or Persian rugs, for they uniquely exemplify ornamentality without abstraction. A pinkish wallpaper flower may be an abstraction of a particular flower, exemplifying all flowers of its kind, yet none in particular. The new media, on the other hand, are all about particular things: names, faces, and events. Granted, we can now put Walton's theory to an interesting use. If we understand ornamental representations in terms of fictional worlds in which other fictional worlds are embedded, hence the effect of standing apart from the internal fictional world and observing it through its frame, that is, a second-order fictional world, which is in a sense more 'objective' or more 'real', then new media representations confront us with a puzzle: their internal worlds are inhabited by real life denizens, which become somehow 'less real' by virtue of our withdrawal into a more 'objective' perspective.

We may call this puzzle 'the ornamental erosion of information'. The new media present us with real life cased with a distancing neustic frame-world that sustains a manifold of mediumal devices, some are essential, like interactivity and hypertextuality, while other are purely decorative and evocative, like audio-visual and graphic effects. Unfolding in time and spread out graphically in virtual space, bits of real life materials, plucked from the flux of daily commotion, are set in elaborate, dazzling designs, like precious stones set in a glittering piece of jewelry. The result—kaleidoscopic, audio-visually stimulating, and seductive in many ways—leaves us oscillating between the fictional and the real.

Insofar as we use the new media as conduits of real life and as means for gathering information, the excessive density of what I referred to as the distancing neustic frame-world, especially in such cases as the internet or multi-user domains (MUDs), forces us to conduct our inquiries under conditions of neustic uncertainty, that is, uncertainty concerning the kind of relationship we, the users, have to the propositional content mediated. In other words, new media users operate behind what we might tentatively call 'a veil of ignorance', although in a sense importantly different from the one John Rawls had conceived for his purposes (Rawls 1971). Whereas Rawls's original 'veil of ignorance' assumes ignorance of particular real life situations, the condition of new media ornamentality leaves them in tact—carefully selected or utterly made-up—to serve as an opening move in a game of information-seeking or inquiry (see Hintikka 1999). Yet the very nature of the game—some of its definitory rules, its goals and desired strategies—would become ambiguous, if the inquirer's attitude toward his information sources turns out to be ambiguous as well.

This is clearly the case in new media environments such as MUDs, which exploit the full potential of digitality, that is, the complete malleability of data by users, and of virtuality, which is the ability to fabricate to some extent immersive environments by digital means. Within such new media environments, which are often inhabited by 'chatter-bots'—software applications designed to emulate human interaction—and which commonly involve intense role-playing, the identity of the user is patently rendered ambiguous (Turkle 1995).

In conclusion, I would like to point out that the basic philosophical thrust behind the puzzle of the ornamental erosion of information corresponds to Bar-Hillel and Carnap's idea that information is the elimination of uncertainty (Bar-Hillel and Carnap 1952). The newness of the puzzle lies in the fact that the current problem centers on the notion of the inquirer as a user, which is unique to the new media, and that it is generated primarily by aesthetic concerns. The puzzle calls upon us to consider what would be a viable logic of virtual discovery. In particular, it shows us a theoretical need to seek out strategic rules for the evaluation of sources of information and for the delineation of inquiries under the conditions of new media ornamentality.

Literature

Bar-Hillel, Yehoshua, and Rudolf Carnap 1952 *An Outline of a Theory of Semantic Information*, Cambridge, MA: MIT Research Laboratory of Electronics.

Cavell, Stanley 1979 *The World Viewed: Reflections on the Ontology of Film*, Cambridge, MA: Harvard University Press.

Gombrich, Ernst H. 1979 *The Sense of Order: A Study in the Psychology of Decorative Art*, Ithaca, NY: Cornell University Press.

Hare, Richard Mervyn 1970 *The Language of Morals*, London: Oxford University Press.

Hintikka, Jaakko 1999 *Inquiry as Inquiry: A Logic of Scientific Discovery*, Dordrecht: Kluwer.

Rawls, John 1971 *A Theory of Justice*, Cambridge, MA: Harvard University Press.

Turkle, Sherry 1995 *Life on the Screen: Identity in the Age of the Internet*, New York: Touchstone.

Walton, Kendall 1984 "Transparent Pictures", *Critical Inquiry* 11, 246-277.

Walton, Kendall 1990 *Mimesis as Make-Believe: On the Foundations of the Representational Arts*, Cambridge, MA: Harvard University Press.

Email: erang@yvc.ac.il

Nichtsein und Grenze bei Wittgenstein

Włodzimierz Heflik, Krakau, Polen

In der transzendentalen Philosophie wird das Problem des Nichtseins in der subjektiven Erfassung betrachtet. Der Bezug auf das Subjekt bringt die Frage des Nichtseins mit der Frage nach der Grenze in Verbindung. Die transzendentalen Untersuchungen des Rätsels des Nichtseins, die von Kant und Wittgenstein durchgeführt wurden, sind sehr tief in der von Parmenides und Plato bestimmten Tradition gesetzt. Der Streit zwischen den beiden großen Philosophen der Antike bestand darin, wie das Nichtsein zu verstehen ist. Parmenides nahm ein radikales Verstehen des Nichtseins als das absolute Nichts und das, was unmöglich ist, an. Plato hingegen schwächte diese parmenidesche Verstehensweise des Nichtseins ab. Die Grundfrage lautet: In welchem Zusammenhang steht die Negation zum Nichtsein? Ist das Nichtsein (das Nichts) etwas Primäres, und die Negation hingegen etwas Sekundäres, oder umgekehrt? Ist die Negation ein rein konventionelles Zeichen, oder eine authentische Wirkung (!), wie es beispielsweise Heidegger glaubte? Außerdem: In der Diskussion über das Nichtsein sind wir dazu gezwungen, dem Paradoxon zu begegnen. Viele Philosophen behaupteten, mitunter Parmenides und Wittgenstein, dass jeder Versuch einer begrifflichen Erfassung des Nichtseins, und auch in Konsequenz das Sprechen von dem Nichtsein zu einem Widerspruch oder gar einem Unsinn führt.

Dieser Vortrag hat zum Ziel, darauf aufmerksam zu machen, dass die subjektive Erfassung der Nichtseins-Problematik auf ihren Zusammenhang mit dem Begriff der Grenze hindeutet. Während dieser Zusammenhang bei Kant im Begriff des transzendentalen Gegenstands als Nichts und der Grenze der Erkenntnis begründet ist, ist bei Wittgenstein die Erfassung von der Grenze und dem Nichtsein durch das Hervorheben von der Rolle der Sprache und der Logik in den metaphysischen Überlegungen modifiziert.

Im Folgenden werde ich den Versuch unternehmen, die Position Wittgensteins gegenüber der Nichtseinsfrage und unter Berücksichtigung der Ansichten Kants vorzustellen. Es unterliegt keinem Zweifel, dass in der Einstellung Wittgensteins diesbezüglich die Überlegungen zum Wesen der Sprache eine wesentliche Rolle spielen. Eine Reflexion über die Sprache ist bei Kant hingegen gar nicht vorhanden. Wittgenstein transformierte die Transzendentalphilosophie Kants von der Ebene der Vernunft auf die Ebene der Sprache (vgl. Stegmüller, 1989; I 555). Ich will dem Problem der negativen Tatsachen meine besondere Aufmerksamkeit widmen, weil an diesem Beispiel das ganze Wesen und die Schwierigkeit der Nichtseinsfrage deutlich werden.

Es scheint, dass die von Kant vorgeschlagene Klassifikation der Verstehensweise des Nichtseins universell ist (vgl. Kant, 1923; A291/B347); und aus diesem Grund müsste sie ihre Anwendung in der Ontologie Wittgensteins *Tractatus* finden. Also beachten wir den ersten Fall des Nichtseins, der von Kant unterschieden worden ist, und zwar den leeren Begriff ohne Gegenstand (*ens rationis*). Das Beispiel dafür ist Kant zufolge das *noumenon*. Wenn wir jetzt auf die ontologischen Voraussetzungen des *Tractatus* aufmerksam werden, können wir die Gegenstände im Sinne Wittgensteins als Äquivalent des *noumenon* erkennen. So wie Kant auf den negativen Aspekt des *noumenon*

hinweist, stellt Wittgenstein die Gegenstände ebenso jenseits der Grenze des Beschreibbaren und der Darstellbarkeit, d.h. außerhalb der Grenze der Erfahrung. Es ist bezeichnend, dass Wittgenstein niemals das Beispiel eines Gegenstands nennt. Wir können Wittgenstein zufolge keinesfalls über einfache Gegenstände oder über eine direkte Kenntnis verfügen; sie können jedoch als Punkte, als Grenze bzw. das Ende logischer Analyse der Sachverhalte und der Elementarsätze betrachtet werden. Das leere Objekt des Begriffs (*nihil negativum*), von Kant als Mangel bezeichnet, ist der zweite von Kant angegebene Fall des Verstehens vom Nichtsein. Im *Tractatus* entsprechen diesem Fall die so genannten negativen Tatsachen. Mit anderen Worten sind die negativen Tatsachen die nicht bestehenden Sachverhalte. An dieser Stelle haben wir mit einer eindeutig existenziellen Form der Nichtseinsfrage zu tun. An dritter Stelle der Kantschen Tafel tritt die reine Anschauung ohne Objekte (*ens imaginarium*) ein. Man könnte meiner Ansicht nach annehmen, dass dies in der Ontologie des *Tractatus* dem Begriff des logischen Raums entspricht. Der logische Raum als Begriff kann in folgender Begriffsserie behandelt werden: logischer Raum - Wirklichkeit - Welt. In dieser Serie nimmt der logische Raum die primäre Position der Wirklichkeit und der Welt gegenüber ein. Der logische Raum an sich wird zu einer Möglichkeit der Wirklichkeit und der Welt (vgl. 2.013). In diesem Sinne kann er also als das Nichtsein gelten - ähnlich wie im Allgemeinen das, was potentiell dem Wirklichen (dem Aktuellen) gegenübersteht. Als letztes kommt die Frage: Was kann das Äquivalent für den Kantschen leeren Gegenstand ohne Begriff (*nihil negativum*) im *Tractatus* sein? In diesem Fall kommen ernsthaftere Zweifel als in den vorherigen Fällen auf. In der *Kritik der reinen Vernunft* lesen wir, dass es sich dort z.B. um einen eckigen Kreis handelt. Des Weiteren ist auch der transzendentale Gegenstand ein Beispiel für das widerstreitende Objekt, welches folgendermaßen begriffen wird: „ohne sinnliche Bestimmung derselben und unabhängig von empirischer Bedingung" (A 279/B335). Eine analogische Rolle spielt wahrscheinlich das Subjekt als Grenze der Welt im *Tractatus*.

Jetzt gehe ich zur Erörterung von der Natur negativer Tatsachen über. Diese Problematik ist besonders eng mit den grundsätzlichen ontologischen Annahmen des *Tractatus* verbunden. Der Begriff negativer Tatsachen erscheint am Anfang des *Tractatus* und dies auf eine ziemlich seltsame Weise:

1. Die Welt ist alles, was Tatsache ist.

1.11 Die Welt ist durch Tatsachen bestimmt und dadurch, dass dies *alle* Tatsachen sind.

1.12 Die Gesamtheit der Tatsachen bestimmt, was Tatsache ist, und all das, was keine Tatsache ist.

2. Das, was Tatsache ist - die Tatsache - ist das Bestehen von Sachverhalten.

2.04 Die Gesamtheit der bestehenden Sachverhalte ist die Welt.

2.05 Die Gesamtheit der bestehenden Sachverhalte bestimmt auch, welche Sachverhalte nicht bestehen.

2.06 Das Bestehen und Nichtbestehen von Sachverhalten ist die Wirklichkeit.

2.063 Die gesamte Wirklichkeit ist die Welt.

Im Lichte dieser Thesen scheint das Verhältnis zwischen den negativen und den positiven Tatsachen rätselhaft zu sein. Alles deutet darauf hin, dass sich die negativen Tatsachen auf einer anderen Ebene als die positiven befinden. Positive Tatsachen gibt es in der Welt, negative hingegen gibt es keine. Sowohl die negativen Tatsachen als auch die positiven gibt es in der Wirklichkeit. Es scheint dann, dass im gewissen Sinne die Welt in der Wirklichkeit enthalten ist. Allerdings stellt Wittgenstein deutlich fest, dass die gesamte Wirklichkeit die Welt ist, was auf diese Weise konsequent so verstanden werden sollte, dass die Wirklichkeit in der Welt enthalten ist. Wenn Wittgenstein gesagt hätte, dass sich die ganze Welt in der Wirklichkeit befindet, wäre seine mit anderen Thesen kohärent gewesen. Wenn er das Gegenteil behauptet, scheint es auf den ersten Blick inkonsequent zu sein.

Bei der Berücksichtigung der These 4.0621 wird die Verstehensweise Wittgensteins des Wirklichkeitsbegriffs eindeutiger:

„Dass aber die Zeichen 'p' und '-p' das gleiche sagen können, ist wichtig. Denn es zeigt, dass dem Zeichen '-' in der Wirklichkeit nichts entspricht. (...)

Die Sätze 'p' und '-p' haben eine entgegengesetzte Bedeutung, aber es entspricht ihnen ein und dieselbe Wirklichkeit"

Daraus lässt sich schließen, dass die Wirklichkeit eine doppelte Erfassung bedingt. Um diese Doppeldeutigkeit darzustellen, bedienen wir uns der Negation, d.h. des Zeichens '-'. Am Ende erweisen sich negative Tatsachen als Ergänzung der Welt zur Wirklichkeit. Die Wirklichkeit ist demzufolge nicht das, was auch 'außerhalb' der Welt ist, sondern die Welt samt deren Auffassung. Die Welt, d.h. die Tatsache, ist mit deren Deskription die Wirklichkeit. Die These 4.0621 kann auch so aufgenommen werden, dass jedes Paar widersprüchlicher Sätze 'p' und '-p' die ganze Wirklichkeit als seine Referenz inne hat. (Diese Sätze ergänzen sich gegenseitig.) Dieses Satzpaar umfasst nicht nur die ganze Wirklichkeit, sondern bestimmt den logischen Ort. Dieser logische Ort kann gefüllt werden ('p') oder leer bleiben ('-p'). Demzufolge sind negative Tatsachen leere Orte im logischen Raum.

In der Diskussion über den Status der negativen Tatsachen geht es auch darum, ob wir von elementaren Sachverhalten oder von Komplexen sprechen, die logische Produkte der ersteren sind. Elementare Sachverhalte und die ihnen entsprechenden Elementarsätze sind Wittgenstein zufolge immer positiv (vgl. Brief an Russell, Cassino, 19.08.1919). Folglich kommen negative Tatsachen auf der elementaren Ebene nicht vor. Daher ist Negation etwas Sekundäres.

Das Problem der elementaren Sachverhalte ist mit der Frage nach deren gegenseitigen Unabhängigkeit verbunden. Diese Sache ist sehr subtil. Die These 6.3751 weist darauf hin, dass Sätze über Farben nicht elementar sein können:

„Dass z.B. zwei Farben zugleich an einem Ort des Gesichtsfeldes sind, ist unmöglich und zwar logisch unmöglich, denn es ist durch die logische Struktur der Farbe ausgeschlossen.

Es ist klar, dass das logische Produkt zweier Elementarsätze weder eine Tautologie noch eine Kontradiktion

sein kann. Die Aussage, dass ein Punkt des Gesichtsfeldes zur gleichen Zeit zwei verschiedene Farben hat, ist eine Kontradiktion" (6.3751)

Wenn zwei folgende Sätze: (1) „Dieser Punkt ist rot" und (2) „Dieser Punkt ist grün" wesentlich gegenseitig kontradiktorisch sind (genauer gesagt: sich gegenseitig ausschließen), dann können sie nicht elementar sein (vgl. Stenius, 1960; 41). Diese Tatsachen, die mit diesen Sätzen ausgedrückt werden, sind „logische Produkte", d.h. Produkte elementarer Sachverhalte. Wenn wir zudem wüssten, dass der Satz (1) wahr ist, würde automatisch Satz (2) falsch sein. (vgl. Morrison, 1968; 92) Das Ergebnis wäre ein Verstoß gegen das Prinzip gegenseitiger Unabhängigkeit der Elementarsätze.

Und genau an diesem Punkt weist die Konzeption der negativen Tatsachen ihre Verwendbarkeit auf. Das Prinzip gegenseitiger Unabhängigkeit kann durch die Voraussetzung bewahrt werden und diese lautet (5.513) folgendermaßen:

„Jeder Satz hat nur ein Negativ, weil es nur einen Satz gibt, der ganz außerhalb seiner liegt"

Diese negative Tatsache lässt sich auf die Summe der positiven Tatsachen, die vorher die gegebene positive Tatsache ausschließen, nicht reduzieren (vgl. Morrison, 1968; 102).

Die folgende Analogie kann sich als das überzeugende Argument für das Bedürfnis der Einführung der negativen Tatsachen in der *Tractatus* Ontologie erweisen. Ziehen wir ein Sachbeispiel in Betracht. Das Schachbrett ist wie der logische Raum, dessen Felder sind logische Orte. Ein elementarer Sachverhalt ist in diesem Modell eine bestimmte, auf einem bestimmten Feld stehende Figur. Es ist eindeutig, dass zwei elementare Sachverhalte, d.h. zwei verschiedene, von zwei verschiedenen Figuren besetzte Felder, voneinander unabhängig sind. Wenn wir uns auf ein bestimmtes Feld des Schachbrettes konzentrieren, kann ein elementarer Sachverhalt, z.B. ein weißer Springer auf dem Feld e5, von dem Elementarsatz 'p' beschrieben werden. Wenn sich dieser Springer tatsächlich dort befindet, besteht dieser Sachverhalt 'p' - das ist eine positive Tatsache. Wenn auf demselben Feld statt einem Springer ein schwarzer Turm steht, ist das auch eine positive Tatsache, die mit Satz 'q' beschrieben ist. Aber Satz 'q' ist keine Negation des Satzes 'p'. Die Negation des Satzes 'p', d.h. '-p', ist der Satz „Auf dem Feld e5 steht der weiße Springer nicht". Diese Negation des Satzes 'p' ist nur eine (!) und soll folgendermaßen verstanden werden. Zum einen als Mangel des Springers auf diesem Feld, und zum anderen als leeres Feld, auf dem jede beliebige Figur stehen kann. In diesem Sinne bildet die negative Tatsache eine Grundlage oder Basis, auf der sich ein anderer Sachverhalt, d.h. eine positive Tatsache aufbauen lässt. Diese neue positive Tatsache schließt die frühere positive Tatsache aus. Wittgenstein zufolge ist dann das Nichtsein eine Basis für anderes Sein. Also befinden sich Sein und Nichtsein auf unterschiedlicher Ebene (vgl. Tgb, 25.11.1914). Diese Deutung hebt die existentielle Auffassung Wittgensteins als Problem der negativen Tatsachen hervor.

Das Problem der Relation: 'Wirklichkeit -Welt' und die Frage nach der negativen Tatsache kann auch in der subjektiven Perspektive dargestellt werden. Die subjektive Auffassung ermöglicht es, die Frage nach dem Nichtsein in einer einzigartigen transzendentalen Weise aufzunehmen. Das Subjekt ist die Grenze der Welt - lautet die These 5.632, und: in der Welt gibt es kein Subjekt (vgl. 5.633). Also ist das Subjekt keine Tatsache, kein Seiendes, daher

ist es Nicht-Sein. Demzufolge ist das Subjekt die Bedingung der Welt und deren Ergänzung. Die Welt samt dem transzendentalen Subjekt bildet die Wirklichkeit. Das Subjekt, welches die Möglichkeit der freien Gestaltung, d.h. des Hervorhebens möglicher Sachverhalte aus dem logischen Raum - als Sinn - und des Projizierens dessen auf die Welt, hat, ist, könnte man annehmen, der Urheber der negativen Tatsachen. Dass nicht alle im Satz ausgedrückten Projektionen des Sinns die bestehenden Sachverhalte treffen, ist Grundlage und die Erklärung der negativen Tatsachen. Diese Projektion samt dem Zeichen '-', die die Operation der Negation ausdrückt, stellt die negative Tatsache fest. Ohne Subjekt gäbe es diese Projektionen nicht, die nicht verwirklicht werden. Dies stimmt mit der Behauptung überein, dass die Negation einen sprachlichen Charakter hat (vgl. Pippin, 1979); in diesem Sinne ist eine Sprache (genauer gesagt - ihre Grenze) das Subjekt. Wittgenstein hebt hier hervor, dass dem Zeichen '-' das Nichts in der Wirklichkeit entspricht (vgl. 4.0621). Ein Aspekt der subjektiven Operationen bewirkt jedoch, dass die Wirklichkeit zur Wirklichkeit wird. Das heißt: die Wirklichkeit besteht auch in dem Durchführen der Operation des Verneinens. Der Wirklichkeitsbegriff weist ein Merkmal der Handlung, bzw. *des Wirkens* (!) auf, das sich (selbst) enthält. Kurz gesagt: das Subjekt als Sprache/Logik und die Grenze der Welt ist die Basis für das Konstituieren der Wirklichkeit. Von der subjektiven Perspektive aus betrachtet, lassen sich im *Tractatus* zwei Verstehensweisen des Nichtseins unterscheiden: ursprüngliche oder radikale und sekundäre oder schwache. In der ersten Verstehensweise ist Nicht-Sein Prinzip, d.h. Wirkung als Negation. Die zweite bezieht sich auf die Resultate dieses Prinzips, was wiederum die negativen Tatsachen sind.

Wittgenstein erwähnt auch das, was ganz außerhalb der Grenze der Welt und außerhalb des logischen Raumes ist (vgl. Tgb. 27.05.1915 u. Wittgenstein 1984/VB; 16). Der Bereich außerhalb der Welt und der Logik ist das Nicht-Sein im stärksten und ursprünglichen Sinne. Das Nicht-Sein kann man als radikale Negation der Welt, d.h. als deren Überschreiten und Durchkreuzen betrachten. Unter Berücksichtigung der Unbestimmtheit und Unbegreifbarkeit des Nicht-Seins sind alle Versuche dieser Aussage, die sich auf dieses Gebiet beziehen, unsinnig. Diese Ansicht bringt Wittgenstein somit der Einstellung von Parmenides näher.

Literaturangabe

KANT, I. 1923 *Kritik der reinen Vernunft*, Berlin u. Leipzig

MORRISON, J. 1968 *Meaning and Truth in Wittgenstein's Tractatus*, The Hague

PIPPIN, R. 1979 Negation and Not-Being in Wittgenstein's *Tractatus* and Plato's *Sophist*, *Kant Studien* 70, s. 178-194

STEGMULLER, W. 1989 *Hauptströmungen der Gegenwarts-Philosophie*, Band 1, 7. Aufl., Stuttgart

STENIUS, E. 1960 *Wittgensteins* Tractatus, Oxford

WITTGENSTEIN, L. 1984 *Wittgenstein - Tractatus logico-philosophicus*. Werkausgabe Band 1, Frankfurt am Main.

WITTGENSTEIN, L.1984 *Vermischte Bemerkungen/Culture and Value,* ed. G.H. von Wright, Chicago

Email: wheflik@yahoo.co.uk

Synergetic information society: from analogue to digital mind

Marek Hetmanski, Lublin, Poland

1. Introduction

Whichever type of society we consider, information is the core of its structure and functioning. Information is, firstly, the content of the messages conveyed among and between individuals, groups, countries, nations, institutions and organizations. Secondly, it is also the measure of significance of messages, for those who solve problems and make decisions on the basis of the information being gathered, processed and stored. The more commonly and frequently people self-consciously and responsibly decide, plan or forecast, the more information one can attribute to their knowledge, ideas, theories etc., however, this might be inversely proportional to (quantitatively measured) amount of information (news) they find in messages.

Information society, as we have experienced and conceived it up to now, is a complex system in terms of its elements, structure, dynamics as well as the knowledge one can have about its future development. There is an urgent need to describe and forecast what the complex, self-organising and emerging system like the information society really is, and what might it be? Although many information processes are complex and chaotic (not-ordered) and even ostensible, there are some real mechanisms in the infostructure of the information society that one can find and successfully describe by the rich theories and simple models; the complex systems approach and synergetics are some ot them.

2. Models of information and communication in complex systems

The complex systems approach, cybernetics and synergetics prevail in the recent interdisciplinary studies of dynamics of such phenomena as the nature, mind, and society (Mainzer 1995). They can help describe and forecast the changes of any system, especially a social one, where control and communication are the essential elements of its structure and functioning (Hetmański 2005).

The term "system" describes the structural properties of all types of "wholeness" (physical, biological, psychological, social, technological or cultural, both natural and artificial) whose elements interact dynamically and reciprocally with one another within a given entirety. The basic classification of systems distinguishes between two basic types – closed and open. The basis for such a distinction is a system's internal organization and the role which information plays in it. A closed system (considered from the thermodynamical point of view) is a system in which the overall direction of changes is irreversible, and differentiation of elements and parts tends to decrease (the distribution of events tends to assume the most probable state), which leads to an increase in entropy. In other words, the system becomes less ordered and chaotic. At the same time the system's information (defined as negentropy) becomes dispersed.

Owing to the external inputs (additional supply of energy and information) such a system may nevertheless show a tendency to temporarily and locally increase its differentiation and organization. This phenomenon relies on the mechanism in which information from the system's

effector (output) is fed back to the receptor domain (input). In such specific and peculiar situations a closed system shows partial self-organization and operational stability; in fact, it becomes an almost open system. Subsequently, such a system assumes a state of homeostasis in which its entropy decreases and negentropy (information) increases.

Information is namely a measure of a system's organization (of its decreasing entropy) with a relation to the probability of its internal states which are its own messages (media). Their efficiency and ways in which they control and steer the system's functioning, determine the system's balance, in other words, its homeostasis. The latter is always a state of relative balance which fosters efficient and significant communication between different parts of a system. This happens due to a negative feedback which allows the system to regulate itself and control its activity. In short, the properties of a social system structure - its "openness", i.e. readiness and willingness of individuals and groups to metabolize information, make decisions, solve problems and tackle enormous amounts of signals - eventually decide what is in fact information in society. As Norbert Wiener stated: "Properly speaking, the community extends only so far as there extends an effectual transmission of information. It is possible to give a sort a measure to this, by comparing the number of decisions entering the group from outside with the number of decisions made in the group. We can thus measure the autonomy of the group" (Wiener 1948, 184). In other words, information is a model of what a man or people are able to do of his or their own, what can do as free and responsible subjects.

3. Synergetic effects in network society

The behavior and functioning of any elements in the complex social system is characterized by many (tremendously huge numbers) degrees of freedom of their realization. In modern liberal, democratic and market information societies the number of possible states, and therefore, possible directions of individual's and group's actions dramatically increases; they constitute so-called spaces-states with different attractors that are perfect models describing information functioning in the society.

Information conveyed and circulating across communication networks can be easily fed back and metabolized by individuals and groups. But neither forecasting nor tracing back all of the informational effects that take part in the information (network) society is possible. Although forecasting of what will happen in complex information systems is theoretically ambiguous, its practical role is evident and there is an urgent need of it; and it is exactly fulfilled by synergetics.

Synergetics (*syn* and *ergon* implies synchronical action) is a theory which has recently arisen from interdisciplinary studies in physics, biology, and sociology and deals with manifold and different (as regards their ontological status) phenomena displaying similar features. These phenomena arise spontaneously and constitute a long range and new order of the system. "According to the synergetic approach, a socio-economic system is characterized on two levels, distinguishing the micro-aspect of indi-

vidual decisions and the macro-aspect of collective dynamic processes in a society" (Mainzer 1997, 291). The subject matter of synergetics is therefore the self-organization that takes place in systems' co-operative development and reveals on many systems' levels and areas. One of the important aspect of it are specific informational effects that occur in the individual's mind which is shaped by digital technologies. These effects concern synergetic information processing.

As production of any kind of information must be paid for by an equivalent free energy degradation, it means that any complex system is able to maintain its low entropy (or even decrease its entropy value) at the expense of the information coming form its environment. In other words, one portion of information (message, news, opinion, theory or any type of knowledge) can be obtained only at great (or relatively small) expense. We can then gain information only at the costs of other information; our information feeds on other's information. The final and global cost of information in the society depends, however, on the scale or level on which we make calculations and final clearings. Besides there are some ways to manage ("synergized") it effectively.

4. Analog versus digital

The real problem of any information society is: how to recognize and strengthen the synergetic effects occurring in it? As complex systems approach, cybernetics or synergetics are only theories and models that merely say what might happened under certain (limited) circumstances, we need more practical conclusions and perspectives. We need the diagnoses telling us how to cause and exploit synergetic effects in the cognitive domains.

The survey of distinguished opinions, mentioned below, would help us to understand the essence of "digital turn", evaluate it properly, and finally recognize tendencies and threats which result from it. Generally speaking, information technology gives us the way and instruments that amplify as well as weaken our natural cognitive capacities, and all that happens mutually in our minds and in the society.

As Fred Dretske says: "Digital conversion is a process in which irrelevant pieces of information are pruned away and discarded. [...] It is successful conversion of information into (appropriate) digital form that constitutes the essence of cognitive activity" (Dretske 1984, 141-142) The undertakings, simple, at least from the technological point of view, that are performed owing to computers, are nevertheless realized in many ways and they demand complex users' faculties and abilities. Mental states of the computer users (their perception, reasoning or imagination) become more and better digitalized what is evident in the computer games, simulations, models and virtualizations. One question arises then: how to acquire and develop new cognitive faculties that are required by the information technology? What people and institutions are needed to that undertakings?

"[W]e need a new pedagogy" – Manuel Castells answers the above question – "based on the interactivity, personalization, and the development of autonomous capacity of learning and thinking [...] the intellectual capacity of learning to learn throughout one's whole life, retrieving the information that is digitally stored, recombining it, and using it to produce knowledge for whatever purpose we want" (Castells 2001, 278). But customs and habits that have long and effectively supported the process of our

natural growing up, hitherto existing institutions of education, science and entertainment, slowly cease to continue. They are not long enough in the digitalized environment. The analog ways of acting and thinking as well as their manifold products (pictures, speech, writing, memory etc.) now turn into digital forms that live in the information society (owing to the global digitalization of virtually everything). The world and we ourselves become less real but more virtual; everything becomes simulated, duplicated and then conveyed across the internet.

Analogue and digital ways in which information is functioning demand their multiplying and reinforcement; in other words, they must be synergized in order to create new and rich presentations of the world. In Johan Galtung's opinion: "Picturacy (tv, video) in principle mirrors reality and in practice constitutes a virtual reality, an 'as if' (*als ob, comme si*) reality. The choice has been made for the viewer, as subjectively as any choice. Synchronic perception complements the diachrony of oralcy and literacy, but is also more easily confused with reality 'out there'. This, then, adds to detachment in dehumanized structures and relativized cultures" (Galtung 1995, 22). The results of the occurring changes are however neither evident nor explicit.

5. Conclusions

What follows from the above opinions? While the overall situation is not totally clear, it is possible to draw several general conclusions.

The systems approach and synergetics perspectie call our attention to the fact that information processing and communication are complex phenomena that are now realized and carried out in many different, unforeseen ways. Forecasting what will happen in the network society is theoretically impossible in long term. Nevertheless, one can expect some important informational effects that may occur (but not always) in the "nodes of communication networks" (Castells 2001) – in individuals and groups who would (using chemical terminology) absorb, metabolize and synthesize information. But only these portions of information which were not "pruned away and discarded", as Dretske says, and then transformed into digitalized knowledge.

The real and particularly difficult practical issue would be how to counteract the decay of an individual's cognitive abilities and faculties? This is a destructive psychical and social fact of our digitalized life, experienced especially by children whose lack of concentration on the content and meanings of words and news is due to the information overload. This is the most disturbing issue in the information society. One of its aspects is the psychological effect of attention deficit, i.e. limitation of the individual's perceptual and intellectual abilities to process the large amount of signals, symbols, news etc. These limitations have a two-fold characteristic: biological (psychological) as well as social, and are not easy to overcome .

Technology cannot amplify an individual's cognitive capacities infinitely, in particular, it cannot augment the total amount of human attention. Despite its pervasive and democratic character, it brings about certain social and economic inequalities. The costs (not only economical) that people pay for information and knowledge acquisition are differentiated: while some overpay, others underpay as regards their attention, individual efforts and the time they want (or are obliged) to dedicate. The social standing of those who own information resources and the instruments

for processing and communicating it is privileged contrary to those who are only receivers. Finally, as argued (Heylighen, 2005), where the costs in the networked society for the sender are minimal, the costs for the receivers, while individually almost negligible, are collective huge. They also involve many social and political problems, i.e. may cause the cultural exclusion of those who are unskilled in computer usage.

The solution of these problems depends on the proper use of the information technologies that would cause the synergetic effects between the three main factors of the information society: individuals or groups, technology and institutions. Any individual's or group's cognitive abilities as well as demands for information and knowledge, no matter how they are technologically involved, will not be successfully realized if they are not supported by institutions such as education, science, public opinion or even entertainment.

Literature

Bertalanffy, von Ludwig 1968 *General System Theory: Fundantions, Development, Applications*, New York, George Brazillier.

Castells, Manuel 2001 *The Internet Galaxy. Reflections on the Internet, Buisness, and Society*, Oxford, Oxford University Press.

Dretske, Fred 1981 *Knowledge and the Flow of Information*, Oxford, Basil Blackwell.

Galtung, Johan 1995 *On the Social Costs of Modernization. Social Disintegration, Atomie/Anomie and Social Development,* Geneva, United Notions Research Institute for Social Development, 1-32.

Hetmański, Marek 2005 "Internet and Electronic Democracy", in: Leszek Koczanowicz and Beth J. Singer (eds.), *Democracy and Post-TotalitarianExperience*, Amsterdam-New York, VIBS, vol. 167, 139-147, Rodopi.

Heylighen, Francis 2005 "Tackling Complexity and Information Overload: intelligence amplification, attention economy and the global brain", http://pespmc1.vub.ac.be/HEY.html.

Mainzer, Klaus 1997 *Thinking in Complexity. The Complex Dynamics of Matter, Mind, and Society*, Berlin-New York, Springer Verlag (Third edition).

Wiener, Norbert 1948 *Cybernetics or Control and Communication in the Animal and the Machine*, Paris-Cambridge: The Technology Press.

Email: hetman@ramzes.umcs.lublin.pl

Reasonable and Factive Entitlements

Jih-Ching Ho, Taipei, Taiwan

1. The Argument from Illusion

The argument from illusion infers from the fact that we can have illusion which is phenomenological indistinguishable from perception to the conclusion that the state of appearance — subjective phenomenal awareness — is fundamental to all cognitive state which deserves basic epistemological status. The following is a brief formation of the argument from illusion:

(1) Our sense perception can be deceptive: it can appear to one exactly as if things were a certain way when they are not.

(2) A deceptive case can be experientially indistinguishable from a veridical case.

(3) One's phenomenal awareness is the same in both deceptive and veridical cases. In other words, perception and illusion include the same state, namely appearance.

(4) In illusion, one's phenomenal awareness falls short of the fact. The objects of subjective experience cannot be facts but appearances.

(5) Likewise, in perception, the objects of experience are not facts but appearances.

Here, the argument employs an unorthodox method by explaining standard situations in terms of non-standard ones, that is, explaining perception in terms of illusion. One main motivation underlying this method is to isolate a concept of epistemological justification — as I shall explain, an *internalist* conception, according to which epistemological appraisals depend essentially on what is internal to a perceiver. On this view, an agent's epistemic status is determined solely by his internal mental conditions such as what he is consciously aware of, what he takes to be true, and what he deems reasonable. Given that these internal conditions are completely the same, there seems no ground to attribute different epistemological entitlements. For instance, if an agent having an illusory experience about a blue vase is in exactly the same subjective phenomenal states as he would be were he to perceive one, then he is no less entitled to assert "There is a blue vase" than he were in a genuine perceptual situation. In this sense, two phenomenally indistinguishable mental states are said to share the same epistemological status.

The internal conception of epistemological entitlement makes clear why the analysis must start from a failed case rather than a successful case. There is an important type of epistemological evaluation that can be made intelligible only in a failed case.[1] Basically, a failed perceptual case is a situation in which there is a split between the inner mental conditions and how things are in the world, e.g., when someone has apparently good reason for his belief which happens (or turns out) to be false. In such a case the internal condition is met but not the external condition; and since the external condition is out of one's control, the epistemological status seems to depend crucially on whether the person takes up his responsibility in a blameless manner. If he does not commit any mistake on his part, he must deserve entitlement of some sort. This type of epistemological entitlement is too important to be ignored and, moreover, it boasts a major theoretic attraction — it can be attributed to both illusory and perceptual subjects: whereas an illusory subject enjoys this entitlement, a perceiving subject receives extra credit on top of it. The argument from illusion hence attributes *basic* epistemic entitlements to appearance and *derivative* ones to perception.

2. Two Types of Epistemological Justification

The argument from illusion suggests that appearance, as the unit of all states of phenomenal awareness (veridical and deceptive alike), occupies a basic epistemological standing. On this view, one obtains this basic epistemic status simply by having the appearance that things are thus and so. When S has the appearance that P, he is entitled to believe or assert that P, whether or not it is a fact that P. Given that S believes that P on the basis of his appearance that P, he is epistemologically responsible. Thus, when S's belief turns out to be false, he is blameless, since there is nothing S can do to improve his epistemological situation: S is in exactly the same appearance state as he would be were it a fact that P. S's belief is, in this light, reasonable. We may therefore call this normative status associated with appearance *reasonable entitlement*.

There are of course other cognitive states that deserve epistemological statuses. The idea of *factive states* has gradually attracted considerable philosophical attentions. Roughly speaking, a factive state is a state in which a subject perceives, or "takes in," a relevant fact. As Wittgenstein writes,

> "I know" has a primitive meaning similar to and related to "I see." . . . "I know" is supposed to express a relation, not between me and the sense of a proposition (like "I believe") but between me and a fact. So that the *fact* is taken into my consciousness (Wittgenstein 1969, § 90).

Seeing, knowing, and remembering are typical factive states, states whose existence implies the obtaining of relevant facts. For instance, that one *remembers* that it snowed yesterday entails that it snowed yesterday; one *knows* that there is a blue vase entails that there is a blue vase. Factive states are not basic mental states — at least they are not as *minimal* as appearances are supposed to be. Factive states, however, are *central* to mental states since they indicate a "matching relation" between mind and the world (Williamson, 2000: 40).

Wittgenstein provides a vivid picture of the matching relation between mind and world, when he addresses the immediate connection between meaning and facts. He states, "When we say, and *mean*, that such-and-such is the case, we — and our meaning — do not stop anywhere short of the fact; but we mean: *this—is-so*" (Wittgenstein

---

[1] The internal entitlement is basic in the sense that it is "pure." Kant's view on moral worth suggests something along this line: it is possible that one performs a moral duty which coincides with one's emotional inclination; that is, one may satisfy moral and self-interest demands at the same time. Thus, one's moral sense is faced with real challenge when his duty and interest are in conflict. Kant seems to hold that we can see the true moral worth of having a certain virtue only when all inclinations are deprived. In his scenario, a calm benefactor reveals higher moral worth than a sympathetic helper because the former *acts on duty* and the latter merely *acts in accord with duty* (Kant 1959: 398-399).

1951, § 95). This stance is in direct contrast with a traditional picture of mind, according to which mind and objects are made of difference substance such that what one sees is not normal physical objects but something representing them. Wittgenstein denies such gap between mind and the world. McDowell elaborates this to the effect that in veridical experience the content of thinking is a fact; in his words, a perceiving subject has the fact "in view." He suggests, "To paraphrase Wittgenstein, when we see that such-and-such is the case, we, and our seeing, do not stop short of the fact. What we see is: that such-and-such is the case" (McDowell 1996, 29).

There are various accounts of the matching relation; for present purposes, we need only a very mild version that what we are experiencing (or thinking, in general) and what is the case can, in principle, be in agreement. The matching relation points toward the perceptual contact (perceptual success) between mind and world, and is therefore fundamental to the possibility of thought, language, and action — the matching relation must be presupposed in any account of the contentfulness of thought, the acquiring of language, and the practical reason for action. In this paper I will begin with practical reason, which in my view is the best way to illustrate the matching relation that underlies factive states.

Factive states, so understood, enjoy a certain type of entitlement. When one is in a factive state, that is, when a fact is taken into one's consciousness, the obtaining of the fact is constitutive of his epistemological entitlement — it enables him to make a relevant assertion which precludes the possibility of falsehood. This feature is absent in reasonable entitlement: one can have reasonable entitlement even when one's belief turns out to be false. For example, when one forms a belief on the basis of appearance alone, one is reasonably entitled to his belief, but being reasonably entitled does not guarantee the belief to be true. Let's call the type of entitlement one enjoys when one is in a factive state *factive entitlement*.

The argument from illusion of course would not deny the characterization of factive states and the relevant entitlements. Nevertheless, it would insist that reasonable entitlements has explanatory priority over factive entitlements — factive entitlements have to be understood in terms of reasonable entitlements. In the following I will try to show why the order of explanation should be reversed, by considering some issues about practical reasons.

3. Two types of reasons for action: belief and fact

In order to explain the contrast between reasonable and factive entitlements, I will start with a similar distinction between two types of practical reasons. It is usually claimed that what constitute reasons for action are *beliefs* rather than *facts*. Compare the following two cases.

(i) S believes correctly that it is raining, and he takes an umbrella on the way out.

(ii) S believes that it is raining — in fact, it is not raining — and he takes an umbrella on the way out.

In the first case, the reason for S's action of bringing an umbrella is obvious: he knows the fact that it is raining. The fact (or, more precisely, S's being in this factive state) explains and justifies his action. In the second case, S's reason for action is not fact but belief — he believes that it is raining and thus performs the same action in the absence of fact.

The question concerning us is, "in the two cases, does S have the *same* reason for action?" It is tempting to reply that S has the same reason for action, for he has the same belief in both cases, even if the belief has different truth-value in the two situations. The idea is that one acts in accord with one's belief and whether the belief is true is a further question: Given the same belief, the agent would perform the same act. On this theory, what explain action is belief rather than fact; or alternatively put, belief is the proximal reason for action, while fact distal.

An immediate problem with this approach is that it can explain the sameness of the cases but not their difference, since it implies that the two actions do not have essential difference — they are the same type of actions caused by the same reason (namely the same belief). What makes the two cases different is something *accidental*: the belief in the first case happens to be true, and its being true does not play a role in the rational explanation of the action. On this account, belief exhausts the explanation and leaves no room to truth in practical reason. This consequence is perplexing because believing is basically a *take-true* attitude. S believes that Prozac can reduce depression only if S takes it as true that the medicine can actually cure his disease. For what is essential to the explanation is that he has the belief *whose truth* rationalizes his action. Belief rationalizes action only in an elliptical way; facts provide the ultimate source of justification for action.

This point can be further supported by the following fact: in a deceptive case, the subject may have reason of some sort, but he does not have *the* reason he thinks he has. The reason he thinks he has is the fact-related reason, i.e., the reason that he can have when he is in a standard factive situation — the situation in which he thinks he sees the fact and acts accordingly. In general, a practical explanation in terms of belief *presupposes* a practical explanation in terms of fact: a belief-rationalization makes sense only if a corresponding fact-rationalization is in place.

What reason does S have, given that he does not have the fact-related reason for action? In the deceptive case S thinks he acts on a fact-related reason but he doesn't; nevertheless, he acts according to his belief, and his belief is supported by his phenomenal state in exactly the same way the belief in a veridical case is supported by the phenomenal state. Accordingly, S's action is deemed reasonable. In other words, the justification of an illusory subject's action comes from a (prospective) fact-related reason *via* phenomenal indistinguishability. In sum, both the explanations of veridical and misleading cases make reference to the fact-related reason; thus, belief-related reason relies on fact-related reason for its intelligibility. In this sense fact-related reason is said to be more basic than belief-related reason.

4. Factive and reasonable entitlements

The relation between fact-related and belief-related reasons for action can shed light on the relation between factive and reasonable entitlements. Again, let us consider the following contrast:

(i) S believes that it is raining because he sees it.

(ii) S believes that it is raining because he has a mere appearance which is indistinguishable from seeing that it is raining.

In the first case, S's perceptual belief is justified because he perceives the fact. His being in this factive state explains and justifies his belief. In the second case, S's reason for his belief is not fact but the mere appearance that it is raining — he believes that it is raining on the basis of the appearance but in the absence of fact.

The question concerning us is, "in the two cases, does S have the *same* entitlement or reason for belief?" It is tempting to reply that S has the same entitlement for belief because he has the same appearance state in both cases, except that in the first case the appearance happens to be veridical. The idea is that one forms a belief in accord with one's appearance and whether the appearance is veridical is a further question: Given the same appearance, the agent is equally entitled to form the same belief.

An immediate problem with this view is that it can explain the sameness of the cases but not their *difference*, since it construes the two perceptual beliefs as essential the same — they have the same content that is based on the same appearance. What makes the two cases different is something *accidental*: the appearance in the first case turns out to be veridical and its being veridical is external to the entitlement of perceptual belief. On this account, appearance alone determines epistemic entitlement, in which veridical experience does not play a role. The consequence is confusing because the ultimate source of justification for perceptual belief traces back to veridical experience, i.e., experience directly connected with what is the case. The point of the epistemological appraisals of perceptual experiences is to reflect the extent of a subject's sensitivity to the world surrounding him, and the point goes missing if the evaluation is done in a way that is indifferent to veridical experiences. Furthermore, the content-fulness of perceptual belief seems to presuppose veridical experience. According to a widely accepted theory of thinking, the content of perceptual belief is determined by its *normal causal connection* with the relevant features of the world, and this connection can be located or established only in a context of successive veridical experiences.[2]

This point can be further supported by the following fact: in case (ii), S may have entitlement of some sort, but he does not have *the* entitlement he thinks he has. The entitlement he thinks he has is the *factive* entitlement, that is, the entitlement that he can have only when he is in a standard factive situation — a situation in which his belief is based on the fact he has in view. What entitlement does S have to his belief, if he has no factive entitlement? In deceptive case S thinks he has a factive entitlement (he thinks he sees the fact) but he doesn't; however, his belief is based on his appearance in exactly the same way that a belief in a perceptual case is. In this light, S's belief is regarded reasonable. In brief, the justification of an illusory subject's belief comes from a (prospective) factive entitlement *via* phenomenal indistinguishability. Thus, both the explanations of veridical and misleading cases make reference to factive entitlement. It follows that reasonable entitlements depend on factive ones for their intelligibility. In this sense factive entitlement is said to be more basic than reasonable entitlement.

5. Concluding Remarks

In this paper we adopt an approach combining Wittgenstein's elucidation of factive mental states and his construal of the identity relation between what can be thought and what is the case, according to which factive entitlements are shown to be explanatorily prior to reasonable ones. Hence the argument from illusion offers only a partial notion of epistemic credit and thus fails to confer fundamental epistemological standing to the state of appearance.

Literature

Burge, Tyler 1988 "Individualism and Self-Knowledge" *Journal of Philosophy*, 85, 649-663.

Davidson, Donald 2001 "Externalism" In Kotako, Pain, and Segal (Eds.) *Interpreting Davidson* (pp. 1-16). California: CSLI publications.

Kant, Immanuel 1959 *Foundations of the Metaphysics of Morals*. White Beck (Trans) (Indianapolis: Boobs-Merrill Company)

McDowell, John 1996 *Mind and World*. (Cambridge: Harvard University Press)

Williamson, Timothy 2000 *Knowledge and Its Limits*. (Oxford: Oxford University Press)

Wittgenstein, Ludwig 1951 *Philosophical Investigations*. Trans. G. E. M. Anscombe. Oxford: Basil Blackwell.

Wittgenstein, Ludwig 1969 *On Certainty*. Oxford: Basil Blackwell.

Email: jcho@sinica.edu.tw

---

[2] T. Burge's perceptual externalism emphasizes the necessary connection between the contents of thoughts and the relevant features of the world. From his viewpoint, the content of thought is determined by "the history of causal interactions with the environment" (Burge, 1988: 200). This theory, according to D. Davidson, shows "how particular contents can be assigned to our perceptual beliefs, and so explains in part how thought and language are anchored to the world" (Davidson, 2001b: 2). While Burge identifies the content of a perceptual belief with its "normal cause," Davidson takes a step forward in proposing the concept of "common cause" as an essential condition of empirical thought.

From netocracy to network-shaped thinking

Philip Jones, Brasilia, Brazil

What is Netocracy?

Netocracy is the English name of the book by Alexander Bard and Jan Söderqvist, published in Swedish in 2000 that attempts to fit many observed phenomena of the information age into a coherent framework.

Bard and Söderqvist's avowed intention is to argue against two common views of the late 1990s. The first is a skeptical view that the arrival of a widespread ubiquitous digital information network is not a significant event, but merely a continuation of business (or capitalism) as usual; the other, a techno-utopian view that the new information technologies will revitalize a liberal democratic ideal by giving everyone equal access to information, equal economic opportunities and equal participation in a more civil society.

The authors' contention is that there is, indeed, a radical shift to a genuinely post-capitalist economic mode, analogous to the shift from feudalism to capitalism; and that much of the ideological superstructure of the world will be reconfigured as a result. However, far from being a utopia, the new economic mode will continue to feature distinct economic classes, inequality will be exacerbated, secrecy will be rife, and an elite minority will oppress and exploit a powerless majority.

The basis of the new economic order will be a new kind of wealth, understood not in terms of ownership of property, but in terms of *connections* - especially membership of privileged networks and exclusive access to sources of information and other resources. Naturally, such things are already highly valued under capitalism, but today they are still secondary to material wealth.

In Bard and Söderqvist's view, as the transition from capitalism to netocracy progresses, power will increasingly shift away from the capitalists to the connection-rich "netocrats" who will be able to acquire capital, as and when needed. But capital itself will hold decreasing attraction.

A key insight of Bard and Söderqvist, one which sets their story apart from many similar accounts, is that in addition to selling connections and *attention*[1] for money (an activity they call "exploitation") the netocrat will *also* trade in connections and access to acquire further connections and access (an activity they call "imploitation").

This is the hallmark of the netocrat : just as the capitalist can invest capital in a venture to acquire more capital, so a netocrat will manage her portfolio of links with the explicit aim of increasing them. She will introduce A to B in order to strengthen her connection with both of them. She will tell C about an obscure but valuable resource in the hope that next week he will return the favour.

Of course, this is nothing new. Just as buying and selling of property existed long before capitalism, so the art of networking existed long before netocracy. What *is* new, is the weight that this activity carries in the new economy.

Contrasted with the netocracy is an underclass (or "consumtariat" in Bard and Söderqvist's terminology), relegated to producing and consuming more or less at the whim of the netocrat.

The evidence for Netocracy

There are several things which make the Bard and Söderqvist account plausible, or at least add some verisimilitude to their narrative.

Netocracy is not specifically an "internet theory" but rings true to many trends in the media and entertainment industries where journalists must cultivate both their sources, editors must know who to call when they need the story, and designers, session musicians, proof-readers etc. must all continually worry about staying in with the right people in a system evolved to efficiently primarily to route the attention of the end reader or viewer (consumtariat) to the advertiser.

Although the book says relatively little about the specifics of the web, in the seven years since the book was published, the web has thrown up many telling examples of phenomena highly compatible with Netocratic theory. The search engine Google has popularized the notion that links have value and through its AdSense service, created a accessible market for trading attention for money. There has been an explosion of both self-publishing tools such as weblogs (allowing individuals to act like media organizations) and social networking sites.

In summary, the definitive characteristic of the web in its second decade is the shift from being a medium primarily for distributing "content" (text documents, sound or image files) to a tool for people to manage their portfolio of an increasing number and variety of social connections.

Information as oppression

Turning to the darker side of the informationist economy, the authors diagnose the use of information overload as weapon of oppression. The netocrat is a child of a time when the capacity of electronic networks to pipe raw information has outstripped the capacity of the recipients to interpret and judge its worth.

Consider, for example, a 24-hour television news channel, which must produce 24 hours of news each day, regardless of whether there's anything interesting going on in the world. For this channel, the value of the news to the viewer is nearly irrelevant. It only matters that the news is able to hook the audience not "importance" or "veracity".

For the poor viewer there is no respite, never enough time to take stock and analyze the situation fully. So the media always has some prepackaged comment and interpretation available.

This is the zone in which the netocrat operates. Her role is to continuously find new sources of information through her network of contacts. But when the information

---

[1] Attention is a key idea in several theories of the information economy. Because information is neither scarce nor excludable, many commentators have noted that it can't be a good basis for an economy of exchange. The idea that "attention" is the inverse of information i.e. it's what I pay when I receive information, goes back at least to Herbert Simon. But the idea of an "attention economy" has been particularly prominent in recent years, for example by Michael Goldhaber.

is truly valuable, the netocrat may not immediately sell it on to the consumtariat but initially "imploit" it - i.e. invest it to strengthen existing connections that will provide access to yet more valuable resources in the future. Only when the netocrats have extracted what imploitational value is to be had from the knowledge, and it is commonly enough known so as not to have much leverage for further bargaining, do they hand it down to the consumtariat as the "next big thing". By that time, of course, in order for the consumtariat to know that it is the next big thing, the netocrats will have to have done sufficient work digesting, packaging and interpreting it.

I hope the above account and examples will have sufficiently driven our intuitions to understand that the netocrat depends on flows of ever new and changing information. The cultivation of networks to find the new flows is the netocrat's "work" within this economy; while the overload of information that is its by-product, helps to keep a consumtariat underclass passive.

Knowledge and Information in Netocracy

Bard and Söderqvist's characterize the netocrat as philosophically "mobilist" (The purpose of such a philosophy is not to answer questions but to keep thought supple by always finding new questions lurking within the existing ones.) The mobilist rejects any "fixed point" or stable world view.

This fits the economic requirements of the netocrat who seeks a constant supply of novel information streams. Her position is more or less equivalent to the capitalist manufacturer who does not want to see the day when customers feel they have "enough". The netocrat needs there to be a general epistemic instability, where the only thing that other agents (both consumtariat and rival netocrats) can be sure of is that what they know today will be out-of-date tomorrow if they don't keep paying attention to *her*.

Networks become a significant organizing metaphor for how we think about the world[2]. Of most interest to us here is how the metaphor of the network is permeating our thinking about knowledge and how knowledge is starting to look increasingly "network-shaped" as we enter the new economic mode.

Network-shaped Knowledge

The most conspicuous attribute of a network-shaped theory of knowledge is that *position* within the network is significant. In the pre-netocratic world, the same knowledge is, in principle, available to everyone. Nature can be independently investigated. Results of scientific experiments can be corroborated or falsified by another scientist who repeats the experiment.

Critiques of this assumption can be made by arguing that the *types* of agents are significant and that perhaps knowledge must be considered relative to type. Knowledge may not, for example, be the same for women as for men, or for the indigenous peoples of Amazonia as for the citizens of Paris.[3]

This kind of structuration of the population by agent-type is not what I would call "network-shaped". But we can imagine a different kind of structuration where all members of the population are (potentially) identical, but where, nevertheless, their position within a network structure creates different knowledge effects. If such was our model, network topology would become a crucial issue for epistemic explanation.

I believe we are starting to see exactly such models appearing in certain social and organizational sciences.

One example Ronald S. Burt's studies of the correlation between the quality of ideas produced by an organization's employees, and the employee's position within a social network inside the company. (Burt 2003, 2004) Good ideas are had by those who play a brokerage role, spanning the "structural holes" between dense clusters that are otherwise disconnected.

Intuitively we see why. The broker is possessed of a rare perspective; he has access to the knowledge in both clusters. And so he alone has the opportunity to match the problems of one cluster with the solutions of the other. Note that this goes beyond simply observing the number of links an employee has; another employee may have more links, but because all come from other employees within the same cluster, he enjoys no special insights or new perspectives from these links. Hence topology and position explain the goodness of the ideas better than the intrinsic properties of the agent[4].

This research illustrates a shift in thinking that is occurring across many of the social sciences. Network topology is increasingly invoked in explanations while the characteristics of the individual or the social type are downplayed.

A second example, the use of networks, both social and other to find good information. Google's PageRank is one example. Pages that are the recipient of many in-links are considered as having higher importance than others.[5] In fact, as people try to "optimize" (i.e. cheat) Google's system, the PageRank algorithm is continuously modified. So, in fact, it is only in-links of the right type, from the right sources that count. Meanwhile, trusted social networks are offered as the solution for filtering spam, finding appropriate product recommendations and

Conclusion

Bard and Söderqvist's Netocracy theory doesn't appear to have become popular in the English speaking world, but seems to offer a coherence that is missing from some accounts of the emerging information society. (In addition their work covers many parts of society not mentioned in the current paper.)

Their working out of some of the details and implications of a true link-based economy is intriguing. And the ongoing technological and social evolutions on the web seem to be corroborating their ideas. If they are right, then many of the institutions and ideas of the modern, capitalist era may be challenged and radically transformed. This includes the knowledge producing institutions such as the academy and the media.

---

[2] Blogger Lion Kimbro uses the term "The Era of the Graph" for when network-diagrams become visual shorthand for a range of ideas, including "modernity", "technology" and "success".
[3] In some of these cases, the claim turns out to be no more than an assertion that the concepts which are relevant in the lives of one type are not relevant in the lives of another. In other cases, the claim is that the concept works in the interest of one type and against the interests of the other. In a third group situation, the claim may be that a concept which exists for one group is in-

commensurate with, or untranslatable to, the concepts held within another and so ideas of the first group will be incomprehensible to the second.
[4] Education was also measured and turned out to be less well correlated with good ideas than position.
[5] Library and Information scientists have been using citation networks for academic papers in a similar way.

Central to their thinking is that the ruling class will arise through their aptitude for managing, trading and filtering information streams, while the underclass have little control over the streams to which they are connected, and are effectively bamboozled into subservience. The netocrats use all the tools and abilities of managing network connections to both protect themselves from the overload, and to search for valuable new resources. They will value novelty and dynamism for its own sake, above any intrinsic value knowledge has. And, to a certain extent, their evaluation of knowledge will depend on the network of connections it forms. In a world ruled by netocrats, knowledge dynamics becomes more valuable than most products that knowledge can deliver.

Literature

Bard, Alexander, Söderqvist, Jan 2002 Netocracy : The New Power Elite and Life After Capitalism, Reuters

Burt, Ronald S. , 2003 Social Origin of Good Ideas, *draft.*

Burt, Ronald S. , 2004 Structural Holes and Good Ideas, *American Journal of Sociology*, volume 110 (2004), pages 349–399

Goldhaber, Michael H., 1997, The Attention Economy and the Net, First Monday:
http://www.firstmonday.org/issues/issue2_4/goldhaber/

Email: interstar@gmail.com

Die Helsinki-Edition der *Philosophischen Untersuchungen*

Peter Keicher, Karlsruhe, Deutschland

Die von Georg Henrik von Wright und Heikki Nyman herausgegebe *Helsinki-Edition* erschien 2001 in neuer Bearbeitung von Joachim Schulte als *Kritisch-Genetische Edition* der *Philosophischen Untersuchungen* im Frankfurter Suhrkamp-Verlag. Die ursprüngliche *Helsinki-Edition* wurde nicht veröffentlicht, sondern von den „Herausgebern" nur wenigen Bibliotheken und Forschungseinrichtungen zur Verfügung gestellt. Um dem Leser einen Vergleich mit der veröffentlichten *Kritisch-Genetischen Edition* zu ermöglichen, werden in diesem Beitrag die fünf Teile der *Helsinki-Edition* mit Inhaltsangaben der Einzelbände aufgeführt. Bei der Beschreibung werden vor allem die terminologischen Kennzeichnungen der Typoskripte berücksichtigt.

1. Helsinki-Edition und Kritisch-Genetische Edition

Das früheste Vorwort der *Helsinki-Edition* – auch als *Nyman/von Wright-Edition* bezeichnet – ist auf 1979 datiert, das späteste auf 1981. Georg Henrik von Wright beschäftigte sich seit 1973 mit der Rekonstruktion der *Philosophischen Untersuchungen* (vgl. Schulte, 2001, S. 10); da seine Forschungsarbeiten – neben denen von Heikki Nyman, Andre Maury, Heikki Kannisto und Erkki Kilpinen – maßgeblich waren, könnte man die Arbeit an der *Helsinki-Edition* auf etwa 1973 bis 1981 datieren. Die ursprüngliche *Helsinki-Edition* wurde im eigentlichen Sinne jedoch gar nicht veröffentlicht; bei von Wright heißt es dazu:

> Zu Anfang hatten wir keine Pläne, das (...) Material zu veröffentlichen. Kopien der Nymann/von Wright-Edition wurden einigen Bibliotheken in Europa und den Vereinigten Staaten zur Verfügung gestellt. Einzelne Wittgenstein-Forscher erhielten Teile des Ganzen. Wir gewannen den Eindruck, daß unsere Arbeit der Forschung von Nutzen war. So entstand der Gedanke an eine Veröffentlichung im Druck. (Schulte, 2001, S. 10f.)

Der Einfluß der *Helsinki-Edition* sowohl auf die Erforschung als auch auf die Sichtweise des Wittgenstein-Nachlasses ist kaum zu unterschätzen, obwohl, oder vielleicht auch gerade weil diese besonderen Forschungsdokumente bislang nur Spezialisten zugänglich waren, die diese Arbeiten „aus erster Hand" mit großem Interesse verfolgten. Die *Helsinki-Edition* glänzte allerdings nicht unbedingt durch Benutzerfreundlichkeit, und für ihre Publikation waren zahlreiche Ergänzungen, Kürzungen und Korrekturen erforderlich. Joachim Schulte erläutert dies in der *Kritisch-Genetischen Edition* im Kapitel „Zur Entstehung der Edition":

> Fehler und Versehen mußten korrigiert, neue Erkenntnisse mußten berücksichtigt werden. Vor allem mußte der Text möglichst einheitlich dargeboten werden. Dabei wurde der in der Zwischenzeit erfolgte technologische Wandel spürbar: Die Helsinki-Ausgabe war mit der Schreibmaschine erstellt worden. (...) Der in Bielefeld eingesetzte Computer reizte durch die gegenüber traditionellen Verfahren enorm gesteigerten Vergleichsmöglichkeiten von vornherein zum Streben nach einer gewissen Uniformität. (...) Nach Abschluß dieser Arbeit lag eine ergänzte und in vieler Hinsicht überarbeitete Fas-

sung der ursprümglichen Helsinki-Ausgabe vor. (Schulte, 2001, S. 45)

Die „Umarbeitung" der *Helsinki-Edition* war sicherlich mit einem kaum zu unterschätzenden redaktionellen Arbeitsaufwand verbunden. Über 2500 Seiten mußten am Computer neu erfasst werden, die Korrekturen und Kontrollen führten im Grunde genommen zu einer neuen Transkription der Originale. Die Vereinheitlichung der heterogenen formalen Prinzipien der *Helsinki-Edition*, des komplizierten Systems der Kommentare und der Methoden der wechselseitigen Referenzierung einzelner Stücke erforderten neue Editionsprinzipien und deren praktische Umsetzung den Vergleich Tausender von Bemerkungen auf feinste Abweichungen. Von Wright faßt das Verhältnis der beiden Editionen wie folgt zusammen:

> Die von Schulte angefertigte Ausgabe fußt auf der Edition, die wir in Helsinki erstellt haben, ist aber stilistisch wie sachlich ein neues Werk. (Schulte, 2001, S. 11)

2. Allgemeine Beschreibung der Helsinki-Edition

Das Exemplar der *Helsinki-Edition* am Wittgenstein Archiv der Universität Bergen besteht aus insgesamt zehn, recht umfangreichen, in blauen und beigen Karton gebundenen Bänden im Format Din A4.[1] Die einzelnen Bände bestehen aus Kopien von Schreibmaschinenseiten, denn die *Helsinki-Edition* wurde nicht am Computer, sondern noch mit der Schreibmaschine erstellt. Diese schwergewichtigen Konvolute maschinenschriftlich getippter Seiten sind Dokumente der Grundlagenforschung und waren in dieser ursprünglichen Form nicht zur Publikation bestimmt.

Die Unterteilung der *Helsinki-Edition* in fünf „Teile" folgt jenen Erläuterungen, die von Wright nicht innerhalb der Edition, sondern an anderer Stelle gegeben hat, ohne dort allerdings die Edition unter diesem Titel zu nennen (von Wright, 1986, S. 17-21). Alle fünf Teile der *Helsinki-Edition* enthalten ein Vorwort der Herausgeber mit entstehungsgeschichtlichen Erläuterungen, den maschinenschriftlich transkribierten Text der entsprechenden Stücke aus dem Nachlaß und ein sehr umfangreiches System von Einzelstellenkommentaren. Im zweiten, dritten und vierten Teil finden sich zusätzliche „Anhänge", die aus Listen, Konkordanzen und seltener aus Kopien von Originalen bestehen. Hinsichtlich ihres formalen Aufbaus weichen alle fünf Teile voneinander ab. Die maßgeblichen editorischen Prinzipien veränderten sich offenbar sowohl hinsichtlich der jeweiligen Anforderungen der einzelnen Teile als auch hinsichtlich der während des Editionsprojektes gewonnenen praktischen Erfahrungen.

Im ersten und dritten Teil wird mit jeder neuen Bemerkung Wittgensteins eine neue Seite begonnen. Der Kommentar folgt auf separaten Seiten im Anschluß an jede Bemerkung, d.h. transkribierter Text und Kommentar wechseln sich hier auf separaten Seiten ab. Im vierten und fünften Teil folgen die Bemerkungen durch Leerzeilen getrennt unmittelbar hintereinander und der Kommentar zu

---

[1] Diese der vorliegenden Beschreibung zugrundeliegende Fassung der *Helsinki-Edition* könnte zwar von weiterer Fassungen an anderen Forschungseinrichtungen leicht abweichen, doch im wesentlichen dürfte sie vollständig sein und eventuell fehlende Dokumente betreffen vermutlich nur einzelne Anhänge.

jeder einzelnen Bemerkung folgt erst im Anschluß an den gesamten Text. Im zweiten Teil enthält der erste Band den edierten Text, der zweite Band den Kommentar. Ähnliche Unterschiede gibt es auch bei der Seitenzählung. Die Bände der ersten drei Teile enthalten keine eigenständige Paginierung. Diese wird durch die Bemerkungsnummerierung ersetzt. Auf den Seiten mit transkribiertem Text kommen die Nummern vor jeder Bemerkung zu stehen, auf den Kommentarseiten rechts oben am Seitenrand. Wo Text oder Kommentar mehrere Seiten umfassen, bleiben zusätzliche Textseiten ohne Nummer, auf den Kommentarseiten wird die Nummer wiederholt. Erst der vierte und fünfte Teil enthalten eine eigenständige Seitenzählung.

Die Abweichungen im formalen Aufbau der Kommentarsysteme der unterschiedlichen Bände sind so kompliziert, daß diese hier nicht beschrieben werden sollen. Der Leser ahnt vermutlich bereits, wie mühevoll die Arbeit mit der *Helsinki-Edition* sich gestalten konnte. Vergleichende Arbeiten zwischen unterschiedlichen Vorstufen der *Philosophischen Untersuchungen* wurden mitunter zu gymnastischen Übungen, denn hierfür war es bisweilen erforderlich, vier bis fünf der schweren Bände gleichzeitig zu „wälzen", die zudem ganz unterschiedliche Formen der Bemerkungsnummerierung, der Seitenzählung und des Kommentars enthielten.

3. Die fünf Teile der Helsinki-Edition

Die von Georg Henrik von Wright und Heikki Nyman für die *Helsinki-Edition* getroffene Auswahl einzelner Stücke des Nachlasses und deren terminologische Kennzeichnung prägt die Erforschung des Wittgenstein-Nachlasses bis heute. Rückblickend benennt von Wright die wichtigsten Aufgaben der Edition:

> Die erste Aufgabe, die es zu lösen galt, war das Auffinden der ‚Quellen' im handschriftlichen Teil des Nachlasses. (...) Noch schwieriger war die Rekonstruktion der verschiedenen Fassungen und Vorstufen des als ‚Teil I' gedruckten Typoskripts – von der Frühfassung der Vorkriegsjahre über die von uns so bezeichnete Zwischenfassung von 1945 bis hin zur abschließenden Zusammenstellung der Bemerkungen eines im Grunde druckfertigen Texts. (Schulte, 2001, S. 10)

Im folgenden werden die fünf Teile der Edition aufgeführt, Inhaltsangaben und Terminologie folgen bewußt ausschließlich der *Helsinki-Edition*. Nach den für die vorliegende Darstellung vereinheitlichten „Kapitelüberschriften" folgen die Originaltitel und Inhaltsangaben zu den einzelnen Bänden. Kursive Schrift wird für zitierte Inhaltsangaben aus der Edition verwendet, Normalschrift für Ergänzungen, die sich nicht in der Edition finden. Danach folgen Erläuterungen zu den einzelnen Stücken und deren terminologischer Kennzeichnung.

3.1. Frühversion

Philosophische Untersuchungen. Frühversion 1937-1938. TS 225, TS 220, TS 221 mit MS 141 als Anhang. Mit Kommentaren. – 1. Band, S. 1-9, 1-3 paginiert (256 Seiten); *Vorwort der Herausgeber* (Helsinki, Mai 1979), S. 1-9 (2-10); *Philosophische Untersuchungen. Frühversion. Vorwort* (TS 225), S. 1-3 (11-15); *Philosophische Untersuchungen. TS 220. Edierter Text mit Kommentaren,* TS 220, Nr. 1-106 (16-256). – 2. Band (256 Seiten); *Philosophische Untersuchungen TS 220. Edierter Text mit Kommentaren,* TS 220, Nr. 107-161 (1-130); *TS 221. Edierter Text mit Kommentaren,* TS 221, Nr. 162-221 (131-256). – 3. Band

(459 Seiten); *TS 221. Edierter Text mit Kommentaren*, TS 221, Nr. 222-442 (1-459).

TS 220 und TS 221 werden als „Frühversion" der *Philosophischen Untersuchungen* bezeichnet. TS 225, das dritte in diesen Teil aufgenommene Typoskript, ist ein Vorwort von 1938. Die „Frühversion" wird im Nachlaßverzeichnis auch als „Vorkriegsfassung" bezeichnet. In der *Helsinki-Edition* werden TS 220 und TS 221 als „zwei Hauptteile" der „Frühversion" bezeichnet, im Nachlaßverzeichnis als „Erste Hälfte" und „Zweite Hälfte" der „Vorkriegsfassung". TS 220 entstand vermutlich 1937 und endet mit Seite 137, TS 221 beginnt mit Seite 138 und entstand vermutlich 1938/39.

3.2. Umarbeitung der Frühversion

Philosophische Untersuchungen. TS 239. Edierter Text mit Kommentaren. – 1. Band, S. 1-2 paginiert (223 Seiten); Vorwort der Herausgeber (Helsinki, Juli 1979), S. 1-2 (2-3); *TS 239. Philosophische Untersuchungen. Edierter Text*, TS 239, Nr. 1-206 (4-223). – 2. Band (209 Seiten); *Philosophische Untersuchungen. TS 239. Kommentar* (1-209); in Form loser Seiten, S. 1-6, 1-8 paginiert (16 Seiten): *Anhang I. Die Entsprechungen zwischen den Bemerkungen in der Frühversion der PU (TS 220) und im TS 239 der PU*, S. 1-6 (2-7); *Anhang II. Die Entsprechungen zwischen Bemerkungen im TS 239 der PU, in der Frühversion (TS 220) und in der endgültigen Fassung der PU*, S. 1-8 (9-16).

TS 239 wird als „Umarbeitung der ersten Hälfte der Frühversion" der *Philosophischen Untersuchungen* bezeichnet. Im Nachlaßverzeichnis wird TS 239 als „Typoskript einer bearbeiteten Fassung von TS 220" bezeichnet. TS 239 entstand vermutlich 1943, Teile der Umarbeitung vielleicht auch schon früher. TS 239 ist eine teils zerschnittene und neu collagierte Kopie – genauer: eine Kombination aus Originalseiten und Durchschlägen – des TS 220 mit handschriftlichen Ergänzungen und neuer Numerierung der Bemerkungen. TS 222, gewissermaßen eine „Umarbeitung der zweiten Hälfte der Frühversion", wurde nicht in die *Helsinki-Edition* aufgenommen, obwohl eine Verbindung zwischen den beiden „Umarbeitungen" von TS 220 in TS 239 und von TS 221 in TS 222 durchaus nahe liegt. TS 222 wurde aber später nicht für die *Philosophischen Untersuchungen* verwendet.

3.3. Mittelversion

Philosophische Untersuchungen. Mittelversion 1945. Mit Kommentaren. – 1. Band, S. 1-4, 1-3 paginiert (340 Seiten); Vorwort der Herausgeber (Helsinki, August 1979), S. 1-4 (2-5); *Motto, Vorwort*, S. 1-3, unpaginierte Kommentarseiten (6-14); edierter Text der Mittelversion Nr. 1-156 mit Kommentaren (15-340). – 2. Band (214 Seiten), edierter Text der Mittelversion Nr. 157-300 mit Kommentaren (1-207); *Anhang I. Entsprechungen zwischen den Bemerkungen in der Mittelversion (MV) der PU und in der endgültigen Fassung der PU*, S. 1-5 (208-212); *Anhang II. Entsprechungen zwischen den Bemerkungen in der Mittelversion (MV) der PU und in den Bemerkungen über die Grundlagen der Mathematik (BGM)* (213-214).

Das Typoskript der „Mittelversion" erhielt keine Nachlaßnummer. Dieses Stück entstand 1944 oder 1945 und bestand aus einer maschinenschriftlichen Abschrift von TS 239 sowie weniger Bemerkungen vom Beginn des TS 221, und aus einer Abschrift des TS 241 von 1944. Die Seiten der „Mittelversion" wurden fast alle zur Herstellung

des Textträgers TS 227 verwendet, wo sie um neu getippte Seiten ergänzt wurden. Die aussortierten Seiten erhielten die Nummer TS 242, im Nachlaßverzeichnis als „Typoskript einiger Seiten zwischen S. 149 und 195 der sogenannten Zwischenfassung der *Untersuchungen*" bezeichnet. Die „Mittelversion" wird demnach auch als „Zwischenfassung" bezeichnet. Von Wright nennt die „Mittelversion" eine „Rekonstruktion". In der Forschung ging man deshalb häufig von einem verschollenen Typoskript aus. Tatsächlich sind alle Seiten des Stücks erhalten, und um den maschinenschriftlichen Text der „Mittelversion" zu „rekonstruieren" genügt es, die in TS 227 verwendeten mit den aussortierten Seiten (TS 242) zu verbinden.

3.4. Philosophische Untersuchungen I

Philosophische Untersuchungen I. (TS 227) Der edierte Text mit Kommentaren und Anhängen. – 1. Band, S. 1-5, 1-303 paginiert (309 Seiten); *Vorwort der Herausgeber.* (Helsinki, Juni 1981), S. 1-5 (2-6); Motto, Vorwort, S. 1-3 (7-9), edierter Text, TS 227, Nr. 1-693, S. 3-240 (9-246); *Kommentar*, S. 241-303 (247-309). – 2. Band, S. 1-29, 1-7, 1-5, 1-15 paginiert (118 Seiten); *Anhänge: Anhang I. Die Manuskriptquellen der Bemerkungen im Teil I der PU. Ein Verzeichnis (auf Englisch) hergestellt von Dr. Andre Maury*, S. 1.-29, (2-30); *Anhang II. Die Seiten des früheren TS, die Wittgenstein entfernt und durch Seiten des späteren TS ersetzt hat.* Faksimilekopien von Seiten der Mittelversion (31-54); *Anhang III. Die Seiten im TS 227, die dem früheren TS angehört haben.* Faksimilekopien von Seiten der Mittelversion (55-84); *Anhang IV. TS 241, die Mittelversion und die endgültige Fassung der PU. Entsprechungen zwischen den Bemerkungen*, S. 1-7 (85-92); *Anhang V. Entsprechungen in der Numerierung der Bemerkungen in der 'Mittelversion' und in der endgültigen Fassung der PU*, S. 1-5 (93-98); *Anhang VI. MS 182 und die Erläuterungen zu dem Übergang von der Mittelversion zu der endgültigen Fassung der PU*; Faksimilekopien des MS 182 (99-101) und Kommentar zu MS 182, S. 1-16 (102-118).

TS 227 wird hier als „Philosophische Untersuchungen I" bezeichnet. Die Bezeichnung des TS 227 als „Erster Teil" folgt der Entscheidung der Nachlaßverwalter, dieses Stück in der posthumen Veröffentlichung der *Philosophischen Untersuchungen* um einen „Zweiten Teil" (TS 234) zu ergänzen. Die Bezeichnung des TS 227 als „Erster Teil" der *Philosophischen Untersuchungen*, kompliziert die Kennzeichnung aller vorausgehenden Vorstufen. Diese beziehen sich dann nämlich genau genommen „nur" auf „Teil I". Die Orientierung der *Helsinki-Edition* am publizierten Text der *Untersuchungen* kommt auch in der Bezeichnung des TS 227 als „Endfassung", „Drucktyposkript", „endgültige Fassung" oder „endgültiger Text" zum Ausdruck. Im Nachlaßverzeichnis wird TS 227 als „Typoskript des ersten Teils der Endfassung der *Untersuchungen*" bezeichnet. Dies ist doppelt irreführend: Es gibt keinen „Zweiten Teil" der „Endfassung", es sei denn man verstünde unter diesem Begriff die gesamte Publikation der *Untersuchungen* in zwei Teilen. In der Forschung wird TS 227 häufig als die „Endfassung" der *Philosophischen Untersuchungen* bezeichnet, obwohl diesem Begriff eher die Vorstellung eines „Endpunkts" der Publikation zugrunde liegt, als Wittgensteins Schreibprozesse, die es kaum nahelegen dürften, TS 227 als ein „abgeschlossenes" Werk anzusehen. TS 227 entstand vermutlich Ende 1945 oder Anfang 1946. Das Stück besteht aus der „Mittelversion" und zusätzlich getippten Seiten, die auf Bemerkungen aus TS 228 zurückgehen. TS 227 ging offenbar nach der Drucklegung verloren und gilt seitdem als verschollen. Zwei Durchschläge des TS 227 sind erhalten.

3.5. Philosophische Untersuchungen II

Philosophische Untersuchungen. Teil II (MS 144) der edierte Text mit Kommentaren. – 1. Band, S. 1-5, 1-135 paginiert (142 Seiten); *Vorwort der Herausgeber* (Helsinki, September 1980), S. 1-5 (2-6); *Philosophische Untersuchungen II. MS 144. Edierter Text*, MS 144, S. 1-106, S. 1-110 (7-117); *Kommentar. Philosophische Untersuchungen II. MS 144,* S. 111- 135 (118-142).

TS 234 wird hier als „Philosophische Untersuchungen. Teil II" bezeichnet. Um diesen „Zweiten Teil" wurde TS 227 in der posthumen Veröffentlichung der *Philosophischen Untersuchungen* ergänzt. TS 234 trug offenbar keinen Titel. Die Bezeichung als „Teil II" steht nicht in Verbindung zu den beiden „Teilen" oder „Hälften" der „Frühversion", sondern soll indirekt Wittgensteins mögliche Absicht einer Fortsetzung des TS 227 zum Ausdruck bringen. TS 234 entstand vermutlich 1949 oder 1950. TS 234 ging offenbar nach der Drucklegung verloren und gilt seitdem als verschollen. Durchschläge des TS 234 sind nicht erhalten. Deshalb wurde in der *Helsinki-Edition* die Manuskriptvorlage des TS 234 ediert, MS 144. Dieses Stück steht in keiner unmittelbaren textgenetischen Beziehung zu den vorausgehenden vier Teilen der *Helsinki-Edition*.

Zusammenfassung

In dieser summarischen Beschreibung erscheint die Terminologie der *Helsinki-Edition* und des von Wright-Nachlaßverzeichnisses zur Kennzeichnung der einzelnen Stücke zwar etwas uneinheitlich, doch will man die Stücke nicht nur mit Nummern benennen, so führt tatsächlich kein Weg an solchen oder ähnlichen Bezeichnungen vorbei. Auch die komplizierte Gliederung der *Helsinki-Edition* schuldet sich nicht zuletzt der Kompliziertheit des Nachlasses selbst. Die *Helsinki-Edition* bildet einen unschätzbar wertvollen Grundstock zur Erschließung der genetischen Beziehungen zwischen den textgeschichtlichen Vorstufen der *Philosophischen Untersuchungen*. Mit Ausnahme der von Michael Nedo herausgegebenen *Wiener Ausgabe* gibt es bislang keine vergleichbar detaillierten Darstellungen vollständiger Texte und genetischer Verhältnisse zwischen den bedeutendsten Stücken des Nachlasses nach 1929. Die Orientierung der *Helsinki-Edition* an „Teil I" und Teil II" der posthumen Publikation der *Philosophischen Untersuchungen* erscheint durch die erstrangige Bedeutung dieser Publikation für die internationale philosophische Rezeption Wittgensteins begründet; von Wright selbst stand dieser Unterteilung kritisch gegenüber. Die Grundlagenarbeit der *Helsinki-Edition,* deren Studium bislang nur einem kleinen Kreis an Forschern vorbehalten war, wurde der allgemeinen Forschung erst durch die *Kritsch-Genetische Edition* zugänglich. Wer jemals selbst mit den über 2500 Seiten umfassenden Bänden der *Helsinki-Edition* gearbeitet hat, dem erscheint diese neue Bearbeitung als ein Muster an Ökonomie und als ein ausgesprochen handliches Forschungswerkzeug. Sparsamer, zuverlässiger und kompakter ist eine Edition dieser Vorstufen der *Philosophischen Untersuchungen* in Buchform kaum zu haben. Nicht nur die Texte, sondern auch die editorischen Methoden und die Terminologie der *Helsinki-Edition* wurden von ihrer früheren Sperrigkeit und Unhandlichkeit so weit wie möglich befreit, so daß die für die Nachlaßforschung maßgeblichen Grundsätze nun allgemein klar nachvollzogen und dadurch in der Zukunft auch teilweise modifiziert oder für neue Zielsetzungen weiter entwickelt werden können.

Literaturangabe

Von Wright, Georg Henrik 1969 "The Wittgenstein Papers", in *The Philosophical Review*, Nr. 78, S. 181-192, Ithaca: Cornell University.

Von Wright, Georg Henrik und Nyman, Heikki (Hg.) 1979-1981, *Ludwig Wittgenstein. Philosophische Untersuchungen, sog. Helsinki-Edition*, Helsinki (unveröffentlicht).

Von Wright, Georg Henrik 1986 *Wittgenstein*, Frankfurt am Main: Suhrkamp.

Nedo, Michael (Hg.) 1994ff. *Ludwig Wittgenstein. Schriften. Wiener Ausgabe*, Wien New York: Springer.

Schulte, Joachim, von Wright, Georg Henrik, Nymann, Heikki und von Savigny, Eike (Hg.) 2001 *Ludwig Wittgenstein. Philosophische Untersuchungen. Kritisch-Genetische Edition*, Frankfurt am Main: Suhrkamp.

Email: p_keicher@hotmail.com

Wittgensteinian Will is Rousseauist Will

Laurian Kertesz, Bucharest, Romania

My paper explores Wittgenstein's views on the Will and their social consequences. Wittgenstein did not believe that voluntary actions are caused by mental entities such as acts of will. In this, he opposed a commonly accepted mythology that separates the inner from the outer, the mental from the physical and, *avant-la-lettre,* more elaborated accounts such as Davidson's.[1] For Wittgenstein what characterizes voluntary actions is that they, unlike involuntary gestures, are performed in a certain context, in certain circumstances, in certain surroundings *(Umgebungen)*. I shall analyze two consequences of this view and try to make it more intuitive than it may look. First: what someone wants, and whether s/he behaves voluntarily, depends on the norms of acceptability current in the social context in which a wish is expressed and his/her behaviour takes place. What someone wants depends on what other people want, or let him/her want. Jean Jacques Rousseau suggested a similar idea, as he held that – in a state – any person's particular will is shaped by the General Will of the Society. Second: Wittgenstein's second philosophy appears as a model for a society without experts: an anarchy composed of several egalitarian communities. It is opposed to the social model endorsed by Putnam's *The Meaning of Meaning*.

I. Will is Meaning

When we think of the Will, we are often tempted to conceive of it on the model of a force whose point of application is in the soul and which moves the body. This image arises from a Cartesian, ultimately Platonist, mythology, that divides a person into a body and a soul and according to which acting voluntarily is having one's actions caused by one's soul (Actions, Reasons and Causes). Wittgenstein rejected this mythology and, along with it, the picture of Will as a soul-body causal connection. If voluntary actions are not characterized by their being caused by the soul (or the brain), what is their distinctive mark?

For Wittgenstein *the Will* is connected with *meaningfulness* and *normality*. To see these connections, I suggest that *to behave voluntarily is to display a meaningful behaviour*. If all we could do were to speak, willing would be the same as *meaning our words*. To mean is a particular case of to will. In most languages, except English and German, *to mean (meinen)* is rendered as *to want to say* (French *vouloir dire)*. To further support this equation, let's think of deaf and dumb people: their language consists of gestures. It is a *conceptual* matter that their meaningful gestures are voluntary. Whenever an involuntary gesture (e.g. a motor tic) occurs to a deaf and dumb person, it cannot be meaningful – even if it is type-identical to a meaningful gesture performed by someone who uses a different sign-language. The correlation between Will and Meaning appears in the *Brown Book,* where Wittgenstein discusses voluntary and involuntary speech. *Voluntary speech is meaningful speech*, contrasted with speech in one's sleep[2]. Wittgenstein compares speaking (or hearing) with understanding and acting voluntarily

> "we refer by the phrase 'understanding a word' not necessarily to that which happens while we are saying or hearing it, but to the whole environment of the event of saying it. And this also applies to our saying that someone speaks like an automaton or like a parrot. Speaking with understanding certainly differs from speaking like an automaton, but this doesn't mean that speaking in the first case is all the time accompanied by something which is lacking in the second case."

Thus also, acting voluntarily (or involuntarily) is, in many cases, characterized as such by a multitude of circumstances under which the action takes place rather than by an experience which we should call characteristic of voluntary action[3]

His later texts reinforce this equation:

> "Intentional-unintentional; voluntary-involuntary. What is the difference between a gesture of the hand without a particular intention and the same gesture which is intentioned as a sign?"[4]

That Will is Meaning must be understood by keeping in mind Wittgenstein's constant rejection of the Platonist-Cartesian dualist mythology. According to this mythology, to utter meaningful words – unlike speaking in sleep or parrot-like - is to have one's words caused by mental entities (ideas or concepts), contained in the soul-brain; to have one's words instilled with meaning by the mind. But for Wittgenstein to speak meaningfully is to speak according to certain shared rules. What holds for Meaning holds *mutatis mutandis* for Will. To behave voluntarily is to behave appropriately, according to certain tacit rules. It is to express wishes by one's gestures, as one expresses meanings by one's words

2. Will is normality

I suggest a further equation: that between Will and normality, as opposed to madness. Madmen (the "mentally ill") are said to think and behave involuntarily, to "lose control" of their behaviour. Psychologists and psychiatrists of all orientations have always assumed that mentally ill people don't behave according to their Will, but have their behaviour caused by their illness and psychotherapy should restore their voluntariness. Here *voluntariness* is tacitly equated with *normality*, obeying socially accepted norms of behaviour. Wittgenstein anticipated this equation, as he wrote that

> "Voluntary movements are certain movements with their normal surroundings of intention, learning, trying, acting. Movements, of which it makes sense to say that they are

---

[1] If one replaces "the soul" by 'the brain", one gains apparent scientific precision at the price of conceptual confusion. Obviously, all the biological processes that occur in someone's body (including involuntary reflexes) are ultimately caused by the brain. We must know what part of the brain causes voluntary actions: no *empirical* investigation can answer this *conceptual* question - as long as we don't know what voluntariness is.

[2] "Now to involuntary speaking. Imagine you had to describe a case – what would you do? There is of course the case of speaking in one's sleep. This is characterized by our doing it without being aware of it and not remembering having done it. But this obviously you wouldn't call the characteristic of an involuntary action" (Brown Book, p. 155).
[3] Brown Book, p. 157.
[4] RPP II, 182.

sometimes voluntary, sometimes involuntary are movements in a special surrounding."[5]

"Involuntary walking, going for a walk, eating, speaking, singing, would be walking, eating, speaking etc in an abnormal surrounding (*Umgebung*). E.g. when one is unconscious, if for the rest one is behaving like someone in narcosis, or when the movement goes on and one doesn't know anything about it as soon as one shuts one's eyes."[6]

To equate *voluntary* with *normal* has a social dimension. Wittgenstein has been considered close to the political current of conservatism[7]. Conservative thinkers, unlike liberal ones, emphasize the importance that people attach to following shared customs, routines, traditions and preserving a sense of familiarity. Liberalism emphasizes the "negative freedom" – the freedom to entertain any wish, without any constraint, and strive to achieve it. For the conservative, however, people are not free to want everything: any wish-expression is credible only if formulated in a certain context, according to certain tacit rules – that govern the cohesion between people. Only *normal* wishes can be credibly considered wishes. Madmen – the "mentally ill", if one accepts the claim of psychiatry to be a genuine science[8] - don't *want*: they lose control, their behaviour involuntarily "happens to" them. A somehow similar picture of the Will was suggested by Jean Jacques Rousseau.

3. Rousseauist Will

Rousseau – like Wittgenstein - was skeptical about the Enlightenment rhetoric which values the benefits of the advancement of science and of the fact that humans live in society, at least in its contemporary form. Unlike other contractualists, such as Locke, his political philosophy is emphatically egalitarian - that's why his classification as a liberal thinker is at least problematic. An important respect in which Rousseau diverges from liberalism is his postulation of a General Will[9] of the state, always directed towards the Good. It even *constitutes* the Good – the Good of the state and the good in any moral sense. Socialization brought about morality but also inequality. The General Will is Rousseau's remedy for the loss of equality brought about by socialization.

Rousseau's General Will is general in two senses: it derives from all citizens and its object is general: it is not directed towards any particular object, but towards preserving the cohesion between individuals. More importantly: it shapes any particular individual's Will. Whoever refuses to obey it must be treated paternalistically "*whoever refuses to obey the general will shall be compelled to do so by the whole body. This means nothing less than that he will be forced to be free; for this is the condition which, by giving each citizen to his country, secures him against all personal dependence.*"[10]

I suggest that Rousseau's General Will squares well with the commonsensical intuition that *what one wants depends on what other people want, on what one can be credibly said to want*. Suppose that I avow the wish to write

a good poem in Eskimo without knowing the basics of Eskimo language. If so, I could not *recognize* what a good poem in Eskimo looks like, even if it were written by me. If I "succeeded" in this wish (which is very unlikely), my success would appear *involuntary* – like that of a monkey who types a poem. It would appear involuntary as it could not be inserted into any shared practice. If I claimed to want to write poetry in Swahili without knowing Swahili, I would probably be ascribed a different intention. My avowal "*I want to write poetry in Swahili*" would look insincere and/or crazy. A conservative perspective may help us understand, better than a liberal one, why it is impossible to write good poetry in Swahili without learning the Swahili language: it is not inserted into a shared practice, it is not intelligible. A liberal perspective, pushed to its last limits, obliges us to protect even the wish to write good poetry in Swahili without knowing the Swahili language. In a Rousseauist and Wittgensteinian perspective, such a wish appears unintelligible, abnormal: it conflicts with the General Will, it is not expressed in the appropriate *Umgebungen* (surroundings).

A Wittgensteinian language-game (form of life) resembles a little egalitarian and strongly cohesive, Rousseauist society, governed by tacit rules and practices. Communication between humans assumes a little ritual, the *Umgebungen* which render it *meaningful* and in which the behaviour of the language-game players appears *voluntary*. In this analogy, a Wittgensteinian language-game is characterized by a Rousseauist General Will that instills meaning into the linguistic signs, "gives them life": this General Will is the atmosphere of familiarity characterizing a form of life. Language is a social, and not a biological or psychological affair. A language-game shapes any individual's will, by shaping the meaning of his/her words. We mean words and express wishes in a social context. Outside it, wishes are not intelligible, and voluntariness-*qua*-normality is the same as involuntariness-*qua*-madness.

As the state is built – according to contractualists – by each individual's waiving a part of his power to the common authority of each other and receiving, in exchange, certain rights and duties, so a language-game is constituted by each individual's waiving to the General Will the power to use words arbitrarily – receiving in exchange the right and duty to use words with their usual, normal meaning; like other participants to the language-game do Our wishes are – somehow paternalistically - *shaped* by the social context in which they are formulated, as our words' meaning is.

4. Rejection of Putnamian Experts

I suppose the reader is familiar with the Hypothesis of the Social Division of Linguistic Labour described by Putnam in *The Meaning of Meaning*. For Putnam the correct usage of words is and should be controlled by scientific experts, who discover essences[11]. Someone may call "water" a liquid with a different chemical structure but similar phenomenological properties to those of H_2O: s/he is wrong and does not really mean water.

Let's imagine that a Twin-Earthian – who uses the word "water" for XYZ - avows to an Earthian chemist the wish "*I want a cup of water*". The Earthian will offer him/her a cup of H_2O - not XYZ - and tell him/her "*This is what you really wanted! You wrongly believed you wanted XYZ – you really wanted H_2O*". This is an instance of paternalist treatment of the Twin-Earthian by the Earthian: of *forming* his/her wish rather than respecting it. The Earthian chemist

[5] RPP I 786, also Zettel 577, 578, 584.
[6] RPP I 992.
[7] Cf Nyiri 1976.
[8] Not everyone accepts it. For a consistent liberal rejection of this claim, see the work of Thomas Szasz, especially *The Myth of Mental Illness*. Szasz believes that madmen are always voluntary and responsible agents in the same sense as normal people are.
[9] Rousseau, II 3.
[10] Rousseau, I, 7, 8, p. 177.
[11] Putnam, p. 56.

relates to the Twin-Earthian as normal adults relate to children and to madmen. Putnam's hypothesis of the division of linguistic labour appears as the disguised plea for a scientists-governed society, who paternalistically shape people's wishes.

As we saw, Meaning is Will: whoever controls words' meanings controls people's wishes, by convincing them that s/he knows better than they do what they really want. Putnam entitles scientists to control ordinary people's wishes as they control words' meanings. Wittgenstein thought differently: he admitted no linguistic authority superior to that of ordinary language. For him, it is not scientific or philosophical expertise that can control meanings and wishes, but the standards of normality accepted in a shared form of life. He is Rousseauist rather than Putnamian.

By expanding such considerations, we can see every philosophy as implicitly political, as its linguistic assumptions elucidate its social implications. Perhaps traditional philosophers' commonest assumption is that the state should be governed by philosophers. This is the consequence of *essentialism*, of the view that ordinary words should have their meanings settled and controlled by philosophers. Essentialism expresses the utopia that philosophers should have the monopoly over words and paternalistically shape ordinary people's wishes. Putnam replaced philosophers' monopoly over words (and wishes) by that of scientists: scientists must control words' meanings and, accordingly, ordinary people's wishes. Wittgenstein's second philosophy is the implicit plea for an expert-less society, composed by egalitarian communities (forms of life): no-one can control words' usage, no experts know words' meanings better than ordinary people do, in their shared practices. It resembles *anarchism* in that the communities are egalitarian and *conservativism* in that they are very cohesive. A source of these ideas may be Tolstoy's Christian anarchism. I shall not explore here this historical issue.[†]

Literature

Wittgenstein, Ludwig 1964 *The Blue and Brown Book*, Oxford: B. Blackwell.

Wittgenstein, Ludwig 1980 *Remarks on the Philosophy of Psychology*, Chicago University of Chicago Press.

Wittgenstein, Ludwig 1967 *Zettel*, Oxford : B. Blackwell.

Davidson, Donald 1980 Actions, Readons, Causes, in *Essays on actions and events*, Oxford : Clarendon Press.

Nyiri, J.C. 1976 Wittgenstein's New Traditionalism", *Acta Philosophica Fennica*, Vol.28/1-3 (1976), pp.503-512.

Putnam, Hillary 1996 The Meaning of Meaning, in *The Twin Earth chronicles*, ed. Andrew Pessin and Sanford Goldberg.

Rousseau, Jean-Jacques 2002 *The Social contract*, New Haven: Yale University.

Szasz, Thomas 1974 *The Myth of Mental Illness: Foundations of a Theory of Personal Conduct.* New York: Harper & Row.

Email: klsaurian@gmail.com

Is There a Second Moral Life?

Peter P. Kirschenmann, Amsterdam, The Netherlands

1. Introduction

Computer technology, the internet and sophisticated programming have led to the creation of fantastic virtual worlds, megaverses or cyberspaces. Among them is Second Life (SL), with more than a million participants.

In the virtual world of SL, one can have sex with animals. Is that not disgusting or even morally reprehensible? Much more seriously, adult figures have had sex with minors. There have already been parliamentary debates about whether the portrayal of such conduct did not fall under the laws prohibiting child pornography. Furthermore, not only companies and banks have set up offices in SL for their business purposes, but also some municipal governments and governmental agencies have started allocating money to the development of potentially useful activities in SL. There have been protesters, who regard this as a waste of tax money for the participation in a virtual world in which much stealing and other dubious activities are going on.

Several commentators have said, in SL "moral norms are significantly reduced". Not addressing SL, but analyzing especially emotional aspects of cognate online romantic relationships, A. Ben-Ze'ev (2004: 116) states: "Shame is less common in cyberspace for several major reasons: (a) less strict moral norms pertain, (b) the agent is largely anonymous, and (c) there is more tolerance for unusual behavior." T. Lafleur (2007), on the other hand, experienced shame about her romantic SL activities. She did so, despite her observation that there is "a more lenient morality" in SL because : 1) we can get away with exploring our fantasies without any seeming real world consequences; and 2) we can justify doing something that goes against our usual moral norms because after all, it all just resides inside our imaginations".

SL and other virtual worlds are part of our computer culture, subcultures or arguably even alternative cultures. In their virtuality, they depart in many ways form the conditions of our real or first world (FW): in SL you can fly or get teleported. To what extent can they actually also be said to depart from morality in FW? Is conduct in SL to be judged by different moral norms? Could one even speak of a 'virtual morality'? Similar questions can and will be raised about other norms, like those of politeness and decency - maybe in SL less clearly demarcatable from moral ones -, rules of the market, and legal regulations and restrictions.

I shall explore such questions. (I leave aside other important moral issues, such as those of serious game addiction, age restrictions, virtual "sweat shops".) My approach will largely be comparative, focussing on some characteristic features of SL. We shall see that the nature of the ethical questions raised have much to do with the particular kinds of experiences and the dominant mentality in SL and their relatedness to FW.

2. Fantasies

Users of SL can be said to live out their fantasies and imaginations, through their representative figures, their "avatars". The evaluation of fantasies as such, of course, is a complex matter. In FW, they would not fall under the norms of actual behavior. Also, much of modern ethics, focussing on the assessment of actions and their motivations, has little to say about fantasies, unless they enter motivations. No doubt, we would consider fantasies of rescuing the world as somehow more valuable than fantasies of murdering people, which, though, can hardly be said to be morally forbidden as such.

The point of SL, of course, is that one not just indulge in one's purely individual fantasies, but rather make them "virtually" public and that one interact with other residents. SL is one of the "Massively Multi-player Online Role Playing Games". (This also is a marked difference with regular console games.) Still, the norms for interacting fantasies, even public as they are, can differ from those for real FW interactions. Since sexual activities are very prominent in SL, I comment on two such situations.

Acting out virtual sex with minors is offensive to most people. To make it fall under laws against child pornography, one would have to drop the clause in such laws that the presentation at issue must be true to life. As in many ethical justifications, a primary question is how much harm of what kind can be and is done by such virtual presentations – above all, harm in FW, that is, which already means that there is no self-sufficient morality of SL. An often-heard argument (similar to the one about violence in computer games) is that SL provides a training ground for would-be FW child molesters. It has provoked still unsettled debates about the risk of the virtual behavior being actualized in FW (with, alas no agreed-upon principles of risk ethics) and about "victimless crimes".

Virtual sexual promiscuity is easily practiced in SL. I suppose that most sexual partners of some avatar do not mind too much that this avatar also has sex with others, while in FW they would. In this sense, one may say that some sexual norms are weaker in SL. Yet, real partners of participants in SL having virtual sex with others have been outraged when they found this out. They obviously feel that norms of fidelity and loyalty cross the lines between FW and SL without losing their force.

3. Games, Play and Hurt Feelings

Avatars are like puppets or other kinds of children's toys. Children may either make puppets abide by normal moral rules or allow them do things not permissible in FW. While puppets themselves do not feel hurt, children might when their puppet gets broken. Thus, apart from details of the played morality, it is the relation with the users that can make interactions between puppets morally significant.

This also holds for avatars. There are many occurrences of abusive language, cheating and sexual excesses in SL. For the most part, this can be considered as role-playing between consenting adults. It could be compared to a game with the rule that he wins who can insult the others the most; or to football, with allowed types of "physical assault", not tolerable in ordinary life; or to poker, where misleading your opponents forms the essence of the game.

Yet, in SL no such game-specific rules, deviating from ordinary ones, have been laid down. Thus, many

users have been annoyed or hurt by the actions or reactions of others, depending on how much they identify with their avatar and are emotionally involved in SL interactions. The more they are, the more serious matters become: it will be no longer just a game. On the other hand, while no specific rules are given, there certainly are – given the character of SL – a number of particular expectations, like that of a great virtual sexual freedom.

All these variables complicate moral assessment. In part, such complications are familiar. For instance, some people do not mind a joke about themselves, others do. Are we obliged to abstain from hurting the feelings of the average person or also from hurting those of over-sensitive ones? (I suppose a transgression in the latter case asks for some excuse, mentioning one's unawareness of their over-sensitivity.). Similarly, many users of SL who have a romantic relationship with some other user in mind, might or do get disappointed by his or her reaction. Is that just deplorable or even morally reprehensible?

4. Insert: Relaxed Norms or Smaller Harms?

Looking back at the last two sections, one could indeed say: "In SL, some norms are sometimes relaxed." However, this statement can be ambiguous. It can be taken to mean that, for instance, a greater harm (or a greater harm/benefit ratio) than in FW must ensue from an action so as to make it objectionable or forbidden. That would mean that an insult uttered in SL must hurt the feelings of another more than in FW before it becomes objectionable.

Yet, I tend to think that in most cases concerned, the statement should be taken to mean that the harm principle is not relaxed at all, but the harm ensuing from a virtual action usually is taken to be much smaller than that from the corresponding FW action. Participants know it is a game in which one takes greater liberties in addressing others. They mind insults or disrespectful behavior less than they would in FW. And they do so partly also because most participants are anonymous anyway.

I add that, in my mind, this interpretation also holds for positive behavior – for the principle of doing good. Some seasoned participants of SL have helped newcomers to find places and their way around, others have not. Such help is appreciated; it hardly is morally required, since the stakes are low. Stakes are much higher when, in FW, a parent with a sick child (a physical distress which avatars just cannot experience) needs help in finding her or his way to the nearest hospital, whence such help is morally obligatory and, when given, praiseworthy. Helpers who want to stay anonymous are equally praiseworthy.

5. Anonymity

Users of SL can stay as anonymous as they wish with respect to other users. This means that any conduct of their avatars, however aberrant, may not be traceable to themselves. This can be compared to masquerades, where people also permit themselves freedoms and outspokenness they normally would not. Yet, a masquerade is temporally limited, while participation in SL, in principle, is not.

Anonymity in SL starts with the choice of an avatar. There are marked differences between people: Introverts tend to choose an avatar similar to themselves or one corresponding to the ideal picture of them, while extroverts are much more likely to experiment with their identity (cf. Zevenhuizen 2007). Furthermore, fifty percent of male users choose a female avatar. Such concealments of identity cause no problems, as long as everyone would consider SL as just a game.

Anonymity can even been used positively. Just as business and other institutions have set up virtual offices or shops in SL, a law professor at my university is about to teach some classes in SL (Visser 2006). The idea is that students will feel freer to ask questions through their avatars, and not disturbed by physically present fellow students.

Yet, anonymity becomes problematic in cases of misdemeanors. Attribution of moral responsibility and possibly legal prosecution require identification of the culprit. When identification is possible, the case will move to FW. There is the case of Qui Chengwei, who, in another virtual world, Legend of Mir 3, borrowed a sword to a friend, who then sold it on eBay. He reported it to the police of Shanghai, thus in FW. Sadly, the police did nothing because of the virtuality of the good alienated, and Qui murdered his friend and was sentenced to life imprisonment.

6. SL Community Standards

Within SL, avatars as such can of course easily be identified, and cases of misdemeanor can be reported to the operator of SL, the Linden Lab. SL has its own code of conduct, its "Community Standards", transgressions of which form a set of possible misdemeanors. They, for instance, demand respect for others, forbid abusing or harassing them. Note that these are just FW norms transplanted into SL.

The Linden Lab can penalize transgressors. It can temporarily imprison avatars, ban them to what is known as the "cornfield". Knowing which user has which avatar, it also can suspend users or, eventually, expel them from SL. Note that such game-related sanctions are less severe than sanctions in FW. They can be compared to disciplinary measures which associations or clubs can take against their members.

A question here is whether such sanctions are applied in all pertinent cases. As a matter of fact, the Linden Lab hopes that most conflicts can and will be settled by the users themselves, possibly through mediation.

7. Rampant Commercialism and Commodification

We have seen that most activities in SL the appropriateness of which one may want to judge, morally or otherwise, concern their relation to users of SL, thus to FW. SL is not a self-sufficient alternative world.

This is also obvious from the accentuated commercial aspects of SL. You can buy virtual islands, design and sell virtual clothing, exploit virtual sex clubs, and so on – all by means of Linden Dollars, SL's own currency. And there have in SL been cases of copying, stealing, reselling of work designed by others. As mentioned, one could say that stealing virtual things is less bad than stealing in FW. Yet, simply since Linden Dollars and US Dollars or other FW currencies are convertible, virtual business and virtual property crimes are not demarcated from FW. On eBay one can buy sundry SL goods; some sellers of them have become extremely rich – just as have the operators of SL themselves.

Some megaverses have been advertised as offering their users – of course, at varying FW costs – otherworldly or spiritual experiences. If so, such experiences could also form the grounds of an alternative morality. Yet, like SL, though providing some escape from FW factualities, they all appear to be greatly dominated by our ordinary materialistic and economic mentality (Aupers 2007). Thus, they hardly can form a cradle for such alternatives.

8. Conclusions

The norms in SL, which despite its many virtual features and possibilities is a rather restricted form of life, in many respects correspond to those in FW. In particular, one cannot generally say that in SL "moral norms are significantly reduced". Rather, our usual norms, like the harm principle, seem to apply unmitigated; only, the harms done usually are smaller. Still, moral assessment of behavior in SL is intricated by the fact of anonymity and issues of motivation, identification, emotional involvement of the users and other degrees of relatedness to FW. But something like a virtual morality is still far in the offing.

Literature

Aupers, Stef 2007 "God in cyberspace", *Filosofie & praktijk* jaargang 28, nr 1, 70-82.

Ben-Ze'ev, Aaron 2004 *Love Online: Emotions on the Internet*, Cambridge: Cambridge University Press.

Lafleur, Tulipe 2007 "My Secret Shame". Online-Resource: http://www.slatenight.com/index.php?option=com_content&task=view&id=142 (2007-04-27)

Visser, Welmond 2006 "De conflicten van elfen en avatars", *Ad Valvas* 2 November, 5.

Zevenhuizen, Marloes 2007 "Een virtueel dubbelleven", *Psychologie Magazine* 26[e] Jaargang, Januari, 46-49.

Email: jorakir@hotmail.com

Understanding Knowledge Society

Endre Kiss, Budapest, Hungary

Globalization, monetarism, and comprehensive phenomena can be considered new even in historical dimensions. We're now consequently focusing on the phenomenon of *knowledge society,* which is also comprehensive, but which is also to be considered totally new. Methodological principles and considerations used at the reconstruction of globalization (and monetarism) apply to this issue too, in a decisive way.[1] From a methodological aspect, a reconstruction and complete design of knowledge society is also a peculiar challenge of theory-making. From this general point of view, there are absolutely no principal or incompatible differences between, say, the great positivistic theory-making of the 19th Century, and a possible theory of globalization.

Therefore, when making a theory of knowledge society (or globalization, or even monetarism), really definitive science-sociological (wissenssoziologisch) problems are not of a principal, but of a pragmatic kind. These follow mainly from the *holistic* nature of the issue, which nature is not reductive or one-dimensional holism, but holism and a kind of unity which steps forward from an integration of the infinite richness and complexity of 'reality', history, present, economy, society. As the theory of knowledge society is a *positive theory,* this theory – even as a theory – is principally not allowed to overwrite the validity (Gültigkeit) of any actual function, or of any real-causal series. Yet its goal is a comprehensive, holistic theory-making, which also has a valid (gültig) objective and causal reference to the actual operation of these functions, 'actors', and causal series always leading to one whole causality – a successful theory has to integrate its object functionally, if we like, pragmatically too, which is in our case obviously of a holistic kind. In the case of globalization – staying at this topic already explicated to some extent – a multitude of functional and causal references operate and act; these make up the specific, holistic image of globalization.

Today, knowledge society and information society are only worth talking about in connection of globalization, for it's worth to make intellectual efforts to understand globalization, as they help us understand the elements of knowledge society as well. Of course, it makes sense to talk about smaller than global cycles of knowledge society. These smaller cycles definitely exist, and they shall hopefully operate in great numbers. Yet the main field of knowledge- and information society is globalization. Not only because knowledge society, as well as globalization, are

defining our present, and as such, they are connected with one another in multiple ways. The importance of globalization is made up by the fact that in the present situation, knowledge- and information society are operating globally. So it's not the case that technology shall chase the visions of utopistic and theoretical imagination, but right on the contrary: in this case, the visions of utopistic and theoretical imagination should understand and give sense to the actually existent realities of technology.

Without Utopias

Globalization can be defined and approached from many sides. From our present aspect, of the relationship of the present and the future, one of the most important starting points may come from the fact that a great mutation turned former technocratic thinking into global thinking, as functional systems and networks strongly demanded for themselves the role of a more and more total representation of actual reality. This shift has far-reaching consequences. First, among functional and non-functional elements of reality, the functional ones make up the 'relevant' reality for our approach. However, stark deficiencies also come from this, as giant sub-systems of social existence like politics or culture are primarily not functional at all. Therefore, an all-round functional approach of reality would place them between inadequate frames.

The former technocratic attitude (and its social basis) was not originally anti-utopistic. On the contrary, many utopistic ideas of the near past have developed from pre-globalization technocratic thinking. Globalization pronounces elements of the technocratic attitude, and even of the former technocratic utopia. As former technocracy transforms into global present, or the globalization of the present through the medium of functional approach, it perpetuates functional principles by making them shoreless. Functional operation leaves no space for utopia; at best each concrete functional operation does to its own particular image of the future.

From the end of the 19th century, we can find two recurrent common elements in the last eras of grand utopias. First, the imagined or real state of affairs presented in the utopia is some kind of fulfillment, the "end" of history (either in a positive or in a cathastrophic sense). Second, there are "sources" in every utopia, from which the new ideas and phenomena that carry the utopia come from. The objective basis of utopistic innovation therefore always comes from a certain field of science (like politics, technology, automatization, space travelling, pedagogy, psychology, anthropology, biology, or medical sciences, but there started some utopia-triggering impulses even from the fields of esthetics, abstract ethics, or justice). If we examine the same concrete fields today in the respect of utopia-creation, it becomes clear that in the original sense, there are no more utopistic impulses starting from them. This has several reasons. First, for example esthetics, ethics, or right justice don't launch elements of this kind any more. Second, today we wouldn't believe it even about the most fantastic discovery of biology or informatics, that one single concrete step ahead would take us straightly into a new utopistic era. Ceaseless innovation has become a natural everyday state. No kind of innovation is grand or strong

---

[1] To the theory of knowledge society see Endre Kiss- Csaba Varga, A legutolsó utolsó esély ('The Latest Last Chance' Budapest, 2001 1-384), and 'Das Archiv in den Umrissen einer Wissensgesellschaft' at: www. mondialisations. org/ 23411. php/public/art/php…DE. , and 'Six Theses About Global Media'. http://www.mondialisations.org/php/public/art.php?id=22945&lan=EN.
To globalization, we recommend the following writings: 'About Meso-Level Dimensions of Globalization'. at:
http://www.cluborome.at/news/newsflash23.html
and http://www.cluborome.at/sup2007/apr/*news/index.html,* and the following monography in Hungarian: '*Monetarista globalizáció és magyar rendszerváltás.* Társadalomfilozófiai tanulmányok'. (Budapest, 2002 1-410). See also:
'Fin de l'histoire'. in: '*Dictionnaire critique de la mondialisation'.* (Paris, 2002 181-183), and www. mondialisation.org.php./public/art.php=49198.htm, and 'Über die relevanten Bestimmungen des reifen Systems der Globalisierung auf der Meso-Ebene.' in: '*Verwestlichung Europas'.* Published by Peter Gerlich und Krzysztof Glass. Wien-Poznan, 1999 101-108; 'Der ewige Frieden im Zeitalter der Globalisation'. in: '*Erweiterung Europa's.* Published by K. Glass / R. Hettlage / R. Scartezzini. Wien - Poznan, 1998 35-42, and 'Das Globale ist das Unmittelbarwerden des Absoluten?' in: '*Hegel-Jahrbuch',* 1996 Berlin, 1997 33-41, and www.angelfire.com.

enough to make us feel that it would be able to take up a historical era significantly different from the present [2]

The fact that the deficiency in utopias slowly becomes an everyday phenomenon, carries great dangers as well. A society without utopias is a society without alternatives. It doesn't get the adequate challenges in respect of values. Its measures are not measured on the wages of utopias. The danger that one can get accostumed to the lack of utopias is not of a smaller significance either, for then the previous two dangers are even more threatening: we may not be able to imagine something different than as it appears to us. If there are no utopias, the man himself gets devaluated. It reveals about the man, that he's not a partaker of significant processes any more.

Knowledge and Archives

The term 'archivation' on the internet, i.e. building 'archives', surely doesn't belong to the terms which strike the thoughtful reader (in a positive sense). But with a more thorough examination, we may find immediately, of what a great importance this activity is.

The original concept of archivation is a classical post-modern idea. It comes from the sixties, and it got its final form in the seventies. One of its inventors was Argentinian writer Borges, the other one was French philosopher Foucault. Although they both relied on one another, the meanings they gave to the concept of the archive were totally contradicted to each other. Borges didn't specify the basic concept of archivation: it could be meant as extreme relativity showing in some concrete distribution of knowledge, as well as the unexceedable relativity of all knowledge, the inter-cultural relativity of knowledge, or as the impossibility of all archivation, i.e. the impossibility of the integration of knowledge, or as the essential integration of knowledge as well, right for such an absurd reason that knowledge is impossible to integrate – but we can't accept this. All this multitude of variations was enriched by one more meaning, according to which the measure that makes archivation impossible by inescapably tearing pieces of knowledge apart, and then still draws the consequence of essential archivation, is simply the unchangeable passing of time. Foucault – with a rough simplification – put this consequence as the all-time arbitrariness of all knowledge, and the concept of archivation built upon it. But these two totally different views – and this is typical of the philosophy of the past decades – developed before the PC, i.e. electronic networks, so these views are the controversial ancestors of today's problem of archivation. Therefore the basic concept of archivation has still kept this relativistic starting thesis which stands for the unsolvable nature of the difference, while electronic archivation is an inevitably positive and constructive undertaking – just for its technological opportunities alone. Nevertheless, the PC 'tamed' the original concept, mainly concerning Foucault's approach, whose history of science omits and 'devaluates' knowledge-integrating sciences of the 19th century, like the history of ideologies, or hermeneutical sciences, i.e. trends to which the archivation of knowledge shall inevitably get in the new conditions.

The great project of archivation carries all the conflicts and contradictions which have articulated so far between mediatization and its use, and between the system and its accessibility. We must emphasize that it's about immanent inner contradictions (not the several possible criticism from outside, so now we don't force outside criteria for judging these important dilemmas). It's obvious also in the case of archivation, that technology makes unlimited access possible, while market interests point towards limited access. As we can see, (fine) literature on the web is personal and impersonal at the same time; it breaks away from the traditional term 'author'. Despite the several new opportunities lying in the archivation of knowledge, intellectuals stick to the traditional author-role. As we can see, the archivation of knowledge creates a most comprehensive collective memory ever, which can be completely destroyed however (to bring it ad absurdum, the web multiplies the measures of written archivation).

Archivation leads to the 'socialization' of all knowledge, but socialization is being actualized by individuals, in individual ways. Archivation can lead to the socialization of all knowledge independent from any authority, while the organization of knowledge can't take place without any sense-giving which therefore requires social authority (to put it in a totally abstract way). *Archivation might seem to exceed philosophy, but it reproduces it as well.* [3]

New Knowledge about New Knowledge

The new definition of knowledge must be capital-like: it must involve valid social capacity all the time. This means – even if not in the most direct sense – that it must be marketable. (Of course, the market of knowledge should be more differentiated, more democratic, and much more open to global accessibility than today.) [4]

The first, and most important characteristic of this knowledge is its infra-structural nature. The knowledge we possess in the present must make up the infra-structure of socially relevant future intellectual achievements. [5] Such a sense of knowledge is just like the concept of infra-structure for national economy. There must not arise any claim for further explanation of the fact that infra-structural knowledge is capital-like; it has already taken too long and has had a price too high so far, until the capital-like character of knowledge was recognized in the near past of the history of economy. Yet it's of special importance that the infra-structural character of knowledge-capital is relevant on the level of society as well (that's where the issue of education comes from).

---

[2] Needless to say, there are still many utopistic ideas today, for the progress in technics, informatics, and many other fields is breathtaking. Yet – beside the causes mentioned above, there are two, seemingly contradictory main causes of the decrease in the vigorosity of utopistic ideas. One of them is the fact that real economic and social relations are gradually getting more and more *functionally organized* (the chances of an abrupt, revolutionary transformation of functional networks is actually very small). The second cause – which seemingly contradicts the first one – is the *actorial side* of globalization, i. e. the global actors' high degrees of freedom.

[3] The measure of the knowledge accumulated by archivation exceeds the measure of knowledge accumulated and synthetized in all philosophy so far. At the same time, the accumulated knowledge – with all its measure and its synergic potential – is becoming the absolute bearer of knowledge, and thus, it is evolving into a new philosophy.

[4] We all know that the thesis of the marketability of real knowledge is quite problem-ridden. In fact, marketability is not the most important characteristic of the knowledge relevant for knowledge society. The reason why we still emphasize it so consciously is the importance of a critical threshold limit. For *none* of the possible concepts of knowledge society should become the actor of the integration of socially irrelevant knowledge. We *must* keep it in mind all along, no matter how much we are aware of the dangerous and primitive character of the debates which like try to adjust socially relevant knowledge to say, the horizon of a cheese sales manager.

[5] We must point it out that among all interpretations of infrastructure in question, we consider knowledge as infrastructure mainly from the viewpoints of the *individual* bearers of knowledge, and of the *creative communities* that use knowledge in a creative way. The practical references of this view lead to the present discussions in education politics ('what to teach'). Furthermore, from this point of view, the permanent 'investment-like-character' of knowledge might also become clear ('one can acquire knowledge that can't be traded in the next day already'). The infrastructure-character of knowledge interpreted this way is capable of establishing interesting actual synergic relationships, even between genres of knowledge that differ strongly from the point of knowledge society's view.

Second, capital-like knowledge is also parallel with capital in the everyday sense in a respect that it's venture capital, in an original and unchangeable manner.

All kinds of knowledge are originally risky (this can be stated especially about the totality of the new circumstances of globalization), for one can never be sure whether the individual elements of acquired knowledge (or the larger surfaces randomly made up of them) would be used any time at all, and even if they would, in what circumstances, and by what kind of actors.

The third decisive characteristic of capital-like knowledge is that in principle, it's limitlessly transferable. Knowledge that is successful on the market (which shall hopefully become much more progressive than today) is made up by several fields, methods, languages, and cultures all transferred into one another, and this new and unique variant becomes realizable capital right in its singularity evolved through this long row of knowledge transfers. As the transferability of individual pieces of knowledge is not only limitless but mostly unconscious as well, this characteristic of knowledge capital will appear sooner in practice than in theory.

Infra-structural, venture, and limitlessly transferable knowledge-capital is not the same as education's concept of knowledge, nor as the traditional R+D (Research and Development) concept. Yet this concept of knowledge – no matter how elaborated it might be – can neither replace the concept of traditional education, nor that of traditional R+D. For these are socially regulated concepts of knowledge, upon which an elaborated social requirement has been built, so they can't directly operate with the parameters of capital-like knowledge.

Therefore, the present forms of institutional knowledge can't be disqualified by the new concept of knowledge-capital. But we shouldn't make the opposite mistake either: legitimate institutional knowledge shouldn't be taken as realized knowledge-capital. Therefore, knowledge society means that institutional knowledge is in fact the 'basis' of knowledge that functions as social capital. And this relation is the same as in the case of real capital.

Ignorance Society (Unwissensgesellschaft)

Shortly before the creation of knowlege-based society, there started an unexpectedly fierce international discussion about the nature of knowledge, and whether its multiple contrast with information is a decisive factor at all. We can't be surprised about the fact that there started an international discussion about the definition of knowledge

In the international discussion, there has been a high-level criticism formulated by social system-theory against the idea of knowledge society, which is an interesting mixture of the elements of high-level sociology, and highbrow traditional European culture criticism.

It points out two of the numerous respects of knowledge society, being realized already in the present: *the first* one is the all-round mediatization of knowledge, which of course means informatics. From this necessarily develops a kind of meta-knowledge, which is supposed to mean a new kind of arrangement, treatment, and interpretation of knowledge circulating in this totally and revolutionarily quickened mediatization. This meta-knowledge, the second floor of knowledge, is necessarily of a secondary nature. By its mediator role, it overshadows primary and well-grounded specialized knowledge. This is the viewpoint of classical culture criticism: the new media, the new system of social relations critically erodes the social circulations of real knowledge, and thus it erodes its validity as well.

The second defining feature of knowledge society, of which actual existence is acknowledged by this criticism, is the increasing pressure of making knowledge apt for the market. No one would deny that such a market pressure actually exists. Yet this criticism is unsound from two aspects: *one* of them is, that this market pressure is not different from the similarly shattering market pressures that had taken place before knowledge society. *The other* flaw of this criticism is the fact that there is no single element of the new positive features to be found on its horizon. We mean the elements which right reduce critically the difficulties of the acquisition of real knowledge beside the actual market pressure.

Email: andkiss@hu.inter.net

Old Patterns, New Bewitchments

Zsuzsanna Kondor, Budapest, Hungary

Recent inventions in communications technology have given rise to several changes in the framework of everyday activities. These changes herald an imminent transformation in the institutional framework, too. In the present paper, I'd like to focus on the conceptual background of some obstacles which slow this transformation down. Learning in the context of mobile communication (m-learning), a recent and growing research field, provides a good example of the decisive influence of old patterns while at the same time it emphasizes the possibilities opened up by new communications technology. This perspective offers a good opportunity to connect philosophical considerations, especially Wittgenstein's, to practical issues, and it also facilitates seeing Wittgenstein's efforts as a criticism of these hindering patterns. Some of Wittgenstein's more opaque objections can today be better understood in the light of recent cognitive science.

1. New conditions, old institutions

Education forms an important segment of social life and at the same time mirrors the dominant views on knowledge and the general order of things. John Dewey called attention to exactly those traditional dualisms which create the background of education and emphasized the importance of an awareness of these mostly non-reflected presuppositions. Even though Dewey outlined his view at the start of the 20th century, the situation has not really changed.

There is a deep interrelatedness between Dewey's criticism and changes in communications technology. As Kristóf Nyíri puts the matter: "it was the rise of *literacy* that made formal schooling inevitable" (Nyíri 2002, 122); at the time when Dewey's criticism was formulated, the outlines of the shift to the age of *secondary orality* were emerging. According to Walter J. Ong, the institutional and also cognitive framework changed as a consequence of the invention of alphabetical writing. Alphabetical writing is a very effective means of storage; however, there is no supporting environment or unity of references that facilitate understanding. As a new kind of storage system with built-in barriers, alphabetical writing, as compared to orality, created new habits in the thought process. General subjects, abstract concepts detached from the human life-world, and linearly-structured arguments emerged.[1] The cohesive power of live intercourse and its multimodal contexts remain an important factor in everyday life, but the conceptual and institutional frameworks have gradually been altered by the requirements of silent texts. In the age of secondary orality, there are other mediators of experience and ideas beside texts. The emergence of different recording technologies and systems for communicating over distance gradually allowed, once more, more direct access to others' experiences. Accordingly, the pressure of verbal formulation decreased, and mediated communication gradually became closer to live intercourse.

Recently, we can see that the traditional differentiations of work and spare-time, the public and private sphere, learning and post-learning, workplace and home, theory and practice, etc. seem to have disappeared from our everyday routine. Teleworking, lifelong learning, and the continuous rescheduling of tasks are now part of everyday activities. These changes indicate an overall transformation in the social, institutional, and even cognitive framework. However, if we cast a glance at researchers in the field of education, we find that they mostly move within the traditional framework both in a conceptual and an institutional sense. That is, they mostly try to tame new technology to fit into the institutional setting, divesting it of its original use. Of course, there are efforts to incorporate everyday practice, such as introducing more fieldwork and teamwork, and utilizing multimodal means to help the learner, but the gap between school and everyday life (in contrast to the above-mentioned tendencies) seems to have been maintained.

Subsequently, I will focus on the roots of this state of affairs. I rely on Dewey's considerations and relate them to Wittgenstein's famous phrase: "Philosophy is a battle against the bewitchment of our intelligence by means of language". (Wittgenstein 1963, 109)

2. Old patterns and looking for new ways

I suggest examining the above phrase as one which errs to some extent, and at the same time is deeply correct. At first sight the objection arises that it is not language, but our view of language, that is responsible for the bewitchment. However, considering recent studies in the realm of cognitive psychology, it becomes clear that some characteristics of language, especially the circumstances of literacy, indeed make it capable of leading us astray as regards our views on the nature of language.

These characteristics of language become especially visible if we compare the cognitive processing of verbal and pictorial representations. According to Allan Paivio's dual coding approach, imagery and verbal expression are parallel processes, but some important differences between them are discernable. As Paivio puts it,

> "verbal descriptions of concrete situations and events from memory and verbal expressions of the manipulation of spatial concepts are likely to be mediated efficiently by non-verbal imagery, whereas abstract discourse and verbal expressions of abstract reasoning are more likely to be mediated entirely by the verbal system. A second (less obvious) implication is that the verbal behavior mediated by imagery is likely to be more flexible and creative than that mediated by the verbal symbolic system. This follows from the theoretical assumption that the spatially and operationally parallel image system is not characterized by logical sequential constraints to the same degree as the verbal symbolic system". (Paivio, 434/5)

In Jacob and Jeannerod's representational theory of visual mind, neither of the two kinds of visual representations (visual percepts and visuomotor representations) have conceptual content, yet both of them can serve as the basis for or be subject to conceptual processing. The visual system provides many kinds of information all at once. These data are important either for acting on an object or for defining objects' relations to each other, and it is possible to recall them. During the conceptual transformation,

---

[1] See Ong 1982, especially pp. 31-57ff. and 103-112ff

we lose some details, resulting in an increase in the un-ambiguousness of verbal expression and in accordance with our priorities.

 "Now once the visual percept has been turned into a thought by a process involving a selective elimination of information, further conceptual processing can yield a still more complex thought involving, not a two-place relation between pairs of objects, but a three-place relation between a pair of objects and an egocentric perspective." (Jacob and Jeannerod 2004, 31)

Visuomotor representations are egocentric, but in a strictly functional sense: the spatial reference is the actor's body. In the case of verbal or conceptual transformation, an egocentric perspective means a reflexive relation in accordance with some general goals. According to Michael Tomasello:

"As perspectively based cognitive representations, then, linguistic symbols are based not on the recording of direct sensory or motor experiences, as are the cognitive representations of other animal species and human infants, but rather on the ways individuals choose to construe things out of a number of other ways they might have construed them, as embodied in the other available linguistic symbols that they might have chosen, but did not." (Tomasello, 9)

This entails a certain distance from the surrounding world. To express something verbally means, at the same time, to reorder its elements in accordance with certain priorities. This unique feature of linguistic symbols exists because the socially embedded user has the intention of influencing his/her communicational partners according to his/her priorities.[2] This distanced attitude does not characterise other kinds of mental representations.

        Summing up these characteristics, we can claim that verbal expression (compared to other kinds of representation) strengthens the impression that thinking is a process bound to the individual related to any kind of bodily activity only as far as certain goals which are anchored in practice serve as the basis of it. Literacy and its institutions (like silent reading, libraries, school discipline, etc.) intensify this impression and lead to the conviction that intellectual engagements are solely activities separated from practice. Dewey recognized that the customary role of education is based on traditional dualisms (such as matter vs. method, intellect vs. emotion, activity vs. passivity, particular vs. universal, empirical vs. higher rational knowing, etc.), with the focus only on one of these pairs at a time. "All of these separations culminate in one between knowing and doing, theory and practice, between mind as the end and spirit of action and the body as its organ and means." (Dewey, 346) This comprehension of human activity is one of the most influential ideas of the literate mind. Criticism of this dualistic attitude became very active in 20th century philosophy. Dewey himself offers a different view relying on the findings of physiology and psychology; he suggests replacing the old dualism of body and soul with that of brain and the rest of the body, and to further regard it as a whole where "brain is the machinery for a constant reorganizing of activity". (Dewey, 346)

"There are the sounds of the words, and all sorts of bodily sensations connected with gesture and intonation. Where we are liable to go wrong is in supposing that sensations connected with words are somehow 'in the mind'." (Wittgenstein 1979, 114)

Wittgenstein claims that this kind of error is, to some extent, related to language. However, some of his remarks suggest that the language that we use is optimal because we gain the most appropriate descriptions through it. His remarks on understanding, ideas, the use of symbols and rules lead to the statement: "What we are apt to confuse is the idea as a state of mind occurring at a particular time and the use we make of that idea." (Wittgenstein 1979, 87)[3] It is as if Wittgenstein believed that we are inclined to emphasize the thing-like/substantive and static character of a given phenomena, whereas the active component of the state of affairs is concealed. He claims that "[o]ne of the chief troubles is that we take a substantive to correspond to a thing. Ordinary grammar does not forbid our using a substantive as though it stood for a physical body." (Wittgenstein 1979, 31/2) And accordingly, it is easy to mix up the rules we use, i.e. we are inclined to forget that not all substantives are things. However, as he suggests, we "desire to point to something". This touches upon the metaphoric nature of language, or more precisely, that of our thought. As Lakoff formulates, "the locus of metaphor is not in language at all, but in the way we conceptualize one mental domain in terms of another. … [M]etaphor (that is, cross-domain mapping) is absolutely central to ordinary natural language semantics". (Lakoff, 203) The cognitive approach to metaphors clearly points out that even abstract concepts (such as time, states, change, causation, etc.) have their roots in everyday activity.

        Wittgenstein's tentative suggestions regarding prejudices in relation to the nature of language have been corroborated, since there is empirical and theoretical evidence by which we can argue for them, at least from a cognitive point of view. Paivio notes that Berlyne "accepts the usefulness of words as situational (that is labeling) responses, rather surprisingly argues that verbal processes are deficient in their capacity to represent transformations". (Paivio 31) This is a disputable question for Paivio because he finds it difficult to prove that the motor component is more intrinsic to images. I believe that the representational theory of visual mind yields a clarifying distinction: the distinction between visual percept which "serves as input to higher human cognitive processes, including memory, categorization, conceptual thought and reasoning" and visuomotor representation which "is at the service of human action". (Jacob and Jeannerod 2004, 45) Both can be at the service of action, but acting upon the world without visuomotor representation is at the very least impaired and cumbersome, whereas conceptual processing of visually-gained information doesn't necessarily need a visuomotor supplement. That is, visuality/imagery is closer to action than conceptual processing. At a primary level, the relationship between them is without mediation. This, of course, does not mean that verbally processed and stored information has no role in acting, it just draws attention to the notion that there is a difference in grade.

3. Conclusion

As we can see, some of the difficulties Wittgenstein touched upon have continued to surface in a considerable body of recent research (in cognitive and developmental psychology, as well as in the contemporary theory of metaphors). Although these difficulties were encountered somewhat prior to Wittgenstein (Bergson, James, and Dewey come to mind), the earlier findings didn't have the impact on philosophical thinking that they deserved. The exceptional contributions of Bergson and Dewey originate

---

[2] For the importance of social embeddedness, see Robin Dunbar's theory of "social intelligence" and Merlin Donald's reconstruction of cognitive evolution.

[3] See also: "The phrase 'in the mind' has caused more confusion than almost any other in philosophy." (Wittgenstein 1979, 114)

from their specific interests: Bergson studied the scientific results of his time, while education, a practical issue, was one of Dewey's chief concerns. This deeper embeddedness in practical and scientific problems could help distance us from the dominant paradigm of verbal expression. As Wittgenstein indicates, the dominance of verbal expression can indeed distort experience to some extent. Recently, means have become available to mediate experience and thought not only verbally, but multi-modally; that which is mediated is close to, or even identical with, experience. We are no longer as much at the mercy of verbal expression as we were. Accordingly, past theoretical considerations can be examined in a new light. The feeling of mental discomfort can be interpreted as the awareness of certain dissonances which originate from the chasm between experience on the one hand, and theories that describe reality on the other. Even though "Wittgenstein's later work can be usefully interpreted as a philosophy of post-literacy", (Nyíri 2005, 352)[4] Wittgenstein lacked the proper tools, within the framework of the traditionally elaborated conceptual network of literacy, to grasp the relevant new experiences.

Literature

Dewey, J. 1985 *Democracy and Education. The Middle Works of John Dewey 1899-1924.* Vol. 9, Carbondale and Edwardsville : Southern Illinois Univ. Press

Donald, M. 1993 *Origins of the Modern Mind. Three Stages in the Evolution of Culture and Cognition*, Cambridge: Harvard Univ. Press

Dunbar, R. I. M. 2003 "Are There Cognitive Constraints on an E-World?" in: K. Nyíri (ed.) *Mobile Communication. Essays on Cognition and Community*, Vienna: Passagen Verlag

Jacob, Pierre and Jeannerod, Marc (2003) 2004 *Ways of seeing. The scope and Limits of Visual Cognition*, Oxford : Oxford Univ. Press

Lakoff, John 1993 "The contemporary theory of metaphor" in: Andrew Ortony (ed.) *Metaphor and Thought*, Cambridge Univ. Press

Nyíri, Kristóf 1997 "Wittgenstein as a Philosopher of Secondary Orality" in: *Grazer Philosophische Studien* 52 (1996/97), 45-57

Nyíri, Kristóf 2002 "Towards a Philosophy of M-Learning", in: M. Milrad – U. Hoppe – Kinshuk, (eds.) *Wireless and Mobile Technologies in Education*, Los Alamitos: CA: IEEE Computer, 121-124.

Nyíri, Kristóf 2005 "Wittgenstein's Philosophy of Pictures", in: Alois Pichler – Simo Säätelä (eds.) *Wittgenstein: The Philosopher and his Works*, Working Papers from the Wittgenstein Archives at the University of Bergen, no. 17, pp. 281-312.

Ong, Walter J. 1982 *Orality and Literacy: The Technologizing of the Word*, London: Methuen

Paivio, Allan 1979 *Imagery and Verbal Processes*, Hillsdayle: Lawrence Erlbaum Associate, Publishers

Tomasello, Michael 1999 *The Cultural Origins of Human Cognition* Cambridge MA: Harvard Univ. Press

Wittgenstein, Ludwig 1963 *Philosophical Investigations* Oxford: Basil Blackwell

Wittgenstein, Ludwig 1979 *Wittgenstein's Lectures. Cambidge, 1932-1935* Oxford: Basil Blackwell

Email: kondor@webmail.phil-inst.hu

---

[4] For more details see Nyíri 1997.

Forms of Life as Forms of Culture

Kristijan Krkač / Josip Lukin, Zagreb, Croatia

1. Forms of Life

In the "Foreword" of the 1977 edition of CV, G. H. von Wright says that notes from "Culture and Value" "…can be properly understood and appreciated only against the background of Wittgenstein's philosophy" (CV: x). Here, we attempt to understand only one note from CV and just one part of the background, namely Wittgenstein's notion of culture from CV: 8-9 and forms of life mainly from PI (as forms of culture). Nevertheless, we will begin with some passages from Wittgenstein's later works and also with a short summary of ways of interpreting them, since there is only a small number of instances where the notion of form of life appears in his works. These are following paragraphs:

> Form(s) of life: PI: 19, PI: 23, PI: 241, PI II: 174, RPP I: 49 (see RFM: 95), RPP I: 630, CE: 397, OC: 358

> Weave of life: PI II: 174, PI II: 229, Z: 568 (see PI II: 174, 229)

> Other expressions: NM, 2001:75, Z: 569, Z: 567, RFM: 335-6, RFM: 95 (Stream of life, pattern in the weave, the whole hurly-burly of human actions, way of living, forms of our culture.) We must note that we do not accept Anscombe's change from "form of life" to "life-form" in the 2001 50th Anniversary edition of PI since it emphasizes too much biology and eo ipso naturalism which is biological rather than anthropological which as such seems to be closer to Wittgenstein).

Primarily, there is a difference in the use of the singular and the plural, i.e. form/forms of life and what seems to be obvious is:

> (a) Use of singular when he is writing on one form of life as background for many actions and also linguistic acts (PI: 23, 241, OC: 358, NM, 2001:75, Z: 567),

> (b) Use of singular when he is writing on one form of life as a whole of practices of a certain community (PI: 19, PI II: 174, PI II: 174, Z: 569),

> (c) Use of plural when he is writing on many forms of life as many practices of a certain community (CE: 397, RFM: 95),

> (d) Use of plural when he is writing on many forms of life as different cultures, and also different backgrounds (PI II: 226, commented in Kripke 1982:96-98).

So, misunderstanding is possible regarding the difference between (a) – (b), and (c) – (d), but also regarding the distinction between (a) – (c), and (b) – (d), (on different readings see Garver 1994:244-7, especially regarding PI:19, 23). Now we can consider major interpretations of these passages. PI: 19 speaks in favor of language-games as presupposing forms of life as well as PI: 241 (noted by J. Klagge), but according to PI: 23, "speaking language" is a "part" of the "form of life" as "activity", so we can presuppose that there are some other parts as well and that there is no strict identity (or pure language-game account of forms of life, Garver 1994:246). CE: 397 proposes a different notion, i.e. "growing" (i.e. organic metaphor). PI II: 174 proposes that there is only "one" complex form of life which has certain modes, but PI II: 226 suggests that there are many forms of life, and that they are given. These and related interpretations are sometimes confused as well as Wittgenstein's own lines, for example PI II: 226 where there is no way to decide whether he gives emphasis to social or natural (biological) understanding (Cavell 1989:42). Furthermore, there is no real difference between behavioral and biological interpretations (Hunter 1986). S. Cavell in his "The Claim of Reason" emphasized the distinction between "forms" of life, and forms of "life" (life forms) and also the second interpretation (biological), but he nevertheless changed his explication in support of the first interpretation (cultural), (Cavell 1979:83, 1989:40-41). Nonetheless, Cavell's suggestion is to merge natural (biological) and social accounts into one, furthermore, that "form of life" in fact "is" such a combination (Cavell 1989:44, referring to PI II: 174). To conclude this part we can say that we here have several, somewhat competing, interpretations of form(s) of life concept:

> (a) Language-game account (von Wright, Schulte, Baker/Hacker) PI: 19, 23, RPP I: 630 Language games are interwoven with nonlinguistic activities. (Glock 1997)

> (b) Social account, the way of life account, (Bloor, Cavell 1989) PI: 19 Identity between forms of life and ways of life. (Combined with biological, Cavell 1989:44)

> (c) Cultural account, anthropological, conceptual relativism (Cavell 1989, Glock 1997) BB: 134, RFM: 95, culturally-natural account (Backer/Hacker 1995) Differentiation between forms of life and other cultural phenomena, ((b), and (c) is rather difficult to distinguish.

> (d) Behavior-package account (Quine, Kripke 2002:96-98, Hunter) PI II: 226, RPP I: 630 Identity between forms of life and patterns of behavior. (Objection in Glock 1997:125-6)

> (e) Organic, biological account (Cavell 1979, Hunter, combination of organic and cultural in Simpson 1998, for objections to Hunter see Garver 1994:241, objections 1-3) TLP 4.002, PI: 185, 206, 230 Identity between forms of life and biological conditions of human being (it must be noted that some authors identify only 4 or even 3 interpretations, so these mentioned interpretations can be reduced).

2. Forms of Life as Forms of Culture

Without further reference to other interpretations we will attempt to make understandable the cultural account, vis-à-vis the very phenomenon of culture. It seems that Wittgenstein used a whole family of resembling concepts such as actions, institutions, practices, routines, habits, forms of life, and even culture in an everyday sense (meaning arts, and also skill and technique). Of course, he also used the expression in a more strict philosophical sense, as for instance in CV.

> (1) "Culture is like a great organization which assigns to each of its members his place, at which he can work in the spirit of the whole, and his strength can with a certain justice be measured with his success as understood within the whole." (CV: 8-9). However we must differ between Wittgenstein's notions of culture and civilization

since contemporary civilization, in Wittgenstein's opinion, lacks culture – noted by N. Garver.

Here, it seems that we have "culture" as a whole, as a "background", as something given "which assigns place", and on the other hand "culture" that is "constituted" by the success of its members. But, is there any kind of relevant confirmation of such an idea of culture in Wittgenstein's writings regarding form(s) of life? Now, regarding PI: 7, 19, i.e. equation of language-games with forms of life, we must mention that language is:

(2) in BB: 134 "equated with culture" (Glock 1998:125),

(3) in RFM: 95 with the "forms of culture" and in (RFM:335-6) with a "way of living". So, if language-games are in the same relation to forms of life as well as to culture, forms of culture, and perhaps way of living, then forms of life are forms of culture.

That language activity is an important part of cultural activities seems to be an underlying idea which connects language–game account and cultural account. So, form of life has parts and is constituted by them. These parts are language-games, actions, practices, institutions, etc. Now, it seems promising to recognize many of his culture–concepts in a way that they form a bundle of resembling notions ordered to create a certain overview / perspicuous presentation i.e. from particular and more individual to universal and more social.

(4) These whatever "different forms" of life that, as Glock suggested (1997: 125),

(5) constitute "one form" of life that can be understood as culture in the sense mentioned previously (CV: 8-9, our suggestion). And this "constituted form" of life (or constructed) is explicated with the amount of related notions i.e. phenomena. Constituted "form" of life is at the same time a kind of background (culture) and a whole of many different given "forms" of life. Many different "forms of life" (actions, practices …) can be understood only against one "form of life" as a background or a whole (way of life, stream of life …), but this "form of life" is (as organization) constituted out of these "forms of life".

For example, to describe a certain action (one among many "forms of life") like ordering, or hoping, or a child's learning to brush his or her teeth, one needs a background from which the process of teaching and learning (in fact acquiring a form of life) is possible, and this background is one "form of life" as culture.
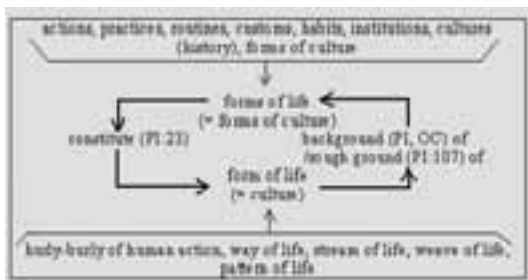
So, "form" of life is a culture, i.e. totality of communal activities in which, among other activities the language-game is embedded, or we can see it as a kind of background, which has to be accepted, the given (PI II 226).

(6) Linguistic and nonlinguistic actions are many "forms" of life and these constitute "form" of life as a culture,

(7) culture, which is at the same time a background on which these "forms" of life can be understood (i.e. learned, practiced, changed, and replaced), cannot be changed and if it can, then only without the possibility of far-reaching changes in worldview, language, and culture (form of this change may be suggested in OC: 95-99).

Regardless of the change, a certain form of life nevertheless can be steady or not (regular activity, CE: 397). So, routines for instance, as steady and regular actions are maybe also a form of life concept. Furthermore, this idea that the language-game or linguistic activity makes sense only within the background of a form of life, as the idea that forms of life are, as it were, foundations for language-games, has two interpretations, i.e. transcendental and naturalistic.

(8) According to the first, "forms of life as communal practices" are preconditions of language-games (see previously from (a) to (e), especially (a)), "My idea is that this mutual absorption of the natural and the social is a consequence of Wittgenstein's envisioning of what we may as well call the human form of life." (…) "We might perhaps be ready to say that culture as a whole is the work of our life of language, it goes with language…" (Cavell 1989:44, 48),

(9) and, according to the second, "form of life as inflexible biological human nature" rigidly determines how we act and react. (Glock 1997:125-126, Simpson 1989, second interpretation supported by PI: 415, OC: 357-360 commented and criticized in Baker, Hacker 1995:241, see also previously (e))

Some argue that there is a third interpretation in which "natural" is important, although not as in naturalistic interpretations, but rather as in the cultural anthropological interpretation, like in Garver, and in Baker and Hacker (see (c)):

(10) The basic idea of cultural naturalism seems to be the following: "From the point of view of natural history, however, there is just one common form of life for all humans." (natural history as general fact, Garver 1994:260, 267 and our proposition 7), (a) Natural is not uniformly biological. (b) Natural is not necessary. (c) Natural is anthropological. (d) If (a – c), and if Wittgenstein's conception of human nature is not biological, then natural is cultural, and his concept of form of life is not biological, but cultural. (Baker, Hacker 1995:239-241) or like in Glock: "However, Wittgenstein's naturalism is anthropological rather then biological. Ordering, questioning … (PI: 25). These activities, as well as those already quoted [RPP I: 630], are cultural activities, forms of social interaction." (Glock 1997: 126)

So, this interpretation (10) is in fact "form of life contextualism" and it seems in this context to be "culture". This context of culture applies to linguistic and nonlinguistic activities, practices, routines, customs, and institutions (PI: 199, 337, Bloor, 1996).

(11) Culture as the background of action, and even more as the surroundings of actions, gives sense (meaning, background, rough ground) to these same actions as "ours", meaning that they are part of our culture (this is what Cavell means by "everydayness as home", see also PI 206, Z 567-9); as Baker and Hacker put it: "In short, the natural history of man is the history of a convention-forming, concept-forming, language-using animal – a cultural animal. (Baker, Hacker 1995:240-241)

113

So there is no paradox (of not knowing the criterion of "cultural" without knowing an "instance of culture", and vice versa), rather, when a child learns a certain practice (certain form of life) it becomes familiar with it, or it bumps into the whole of culture (form of life). A completely different question and maybe more a interesting one is – in what way are these cultural phenomena in fact, form of life phenomena, such as these patterns, forms, and weaves of life? So, is it possible to interpret these phenomena and concepts as, surely not metaphysical, but nevertheless ontological? And what kind of ontology would it be? Would it be a kind of cultural ontology or ontology of culture?[†]

Literature

Baker M., Hacker P. M. S. 1985 *Wittgenstein, Rules, Grammar, and Necessity*, Vol. 2, Blackwell, Oxford.

Bloor D. 1996 "What did Wittgenstein Mean by "Institution"?" in: K. S. Johannessen, T. Nordenstam (eds.) *Wittgenstein and the Philosophy of Culture*, Verlag HPT, Vienna, 1996:60-75.

Cavell S. 1979 *The Claim of Reason: Wittgenstein, Skepticism, Morality, and Tragedy*, Oxford University Press, New York.

Cavell S. 1989 *This New Yet Unapproachable America, Lecture after Emerson after Wittgenstein*, Living Butch Press, Albuquerque.

Dilman I. 1996 "von Wright on Wittgenstein: Philosophy and Culture", in: K. S. Johannessen, T. Nordenstam (eds.) *Wittgenstein and the Philosophy of Culture*, Verlag HPT, Vienna, 1996:75-95.

Garver N. 1994 *This Complicated Form of Life*, Open Court, Chicago and La Salle.

Glock H. J. 1997 *A Wittgenstein Dictionary*, Blackwell, Oxford.

Hunter J. F. M. 1986 "Forms of Life in Wittgenstein's Philosophical Investigations", in: Shanker S. (ed.) *Ludwig Wittgenstein Critical Assessments*, Vol. 2, Bristol, 1986:106-124.

Kripke S. 1982 *Wittgenstein on Rules and Private Language*, Harvard University Press, Cambridge.

Malcolm N. 2001 *Ludwig Wittgenstein, A Memoir*, Clarendon Press, Oxford (NM).

Richter D. 2004 *Historical Dictionary of Wittgenstein's Philosophy*, The Scarecrow Press, Oxford.

Scheman N. 1999 "Forms of Life: Mapping the Rough Ground", in: Sluga H., Stern D. G. (eds.) *The Cambridge Companion to Wittgenstein*, Cambridge University Press, Cambridge, 1999:383-410.

Schulte J. 1992 *Wittgenstein: An Introduction*, SUNY, Albany, New York.

Simpson D. 1998 *A Form of Life, and a Type of Naturalism*, http://www.herts.ac.uk/philosophy/simpson.html.

von Wright G. H. 1982 "Wittgenstein in Relation to his Times", in: von Wright *Wittgenstein*, Blackwell, Oxford.

Wittgenstein L. 1980 *Remarks on the Philosophy of Psychology*, I, II, Blackwell, Oxford (RPP).

Wittgenstein L. 1993 "Cause and Effect: Intuitive Awareness", in: *Philosophical Occasions*, J. Klage, A. Nordmann (eds.), Hackett, Indianapolis, (CE).

Wittgenstein L. 2002 *Culture and Value*, Blackwell, Oxford (CV).

Wittgenstein L. 2004 *On Certainty*, Blackwell, Oxford (OC).

Wittgenstein L. 2004 *Remarks on Foundations of Mathematics*, Blackwell, Oxford (RFM).

Wittgenstein L. 2004 *Zettel*, Blackwell, Oxford (Z).

Wittgenstein L. 2005 *Blue and Brown Books*, Blackwell, Oxford (BB).

Wittgenstein L. 2005 *Philosophical Investigations*, Blackwell, Oxford (PI).

Email: kristijan.krkac@zsem.hr / josip.lukin@zg.t-com.hr

Medienphilosophie als ethisches Projekt?
Vilém Flussers Wittgenstein

Matthias Kroß, Potsdam, Deutschland

Ludwig Wittgenstein, schreibt Vilém Flusser 1966 in seiner Rezension der *PB*[1] für den Band 16 der *Revista brasileira de folosofia*, sei eine „figura gigantesca" und zähle zu den bedeutendsten Denkern („dos maiores pensadores") des 20. Jahrhunderts, wenn nicht der Moderne überhaupt. Das zur Besprechung stehende Buch sei unzweifelhaft von erstrangiger Größe und verdiene daher eine eingehende Würdigung (Flusser 1966, 129).

Das Werk, das Flusser hier preist, erschien 1966 in einer zweisprachigen Ausgabe. Es enthält Auszüge aus den umfangreichen Aufzeichnungen Wittgensteins zwischen 1929 und 1930. Es gewährte dem Publikum erstmals einen genaueren Einblick in die Entstehungsgeschichte seiner so genannten „Spätphilosophie", die der nach Cambridge zurückgekehrte Denker zehn Jahre nach der *LPA* zu entwickeln begonnen hatte.

In seiner drei Seiten umfassenden Rezension lässt Flussers uns freilich diesen werkimmanenten Zusammenhang nicht erahnen, denn er ignoriert alle werkimmanenten Bezüge und Verwicklungen, die bis heute die Diskussion um Kontinuität oder Bruch in Wittgensteins bestimmen. Er stellt vielmehr einen eher persönlichen Bezug zu dem Verfasser der *PB* her Spricht Flusser über das zu rezensierende Buch, so spricht er sich über sein Verhältnis zum Autor aus und kommentiert das Gelesene mehr als dass er es referiert.

Freilich war in Brasilien kaum jemand besser geeignet als Flusser, sich zu einem Werk Wittgensteins zu äußern: Er beherrschte die deutsche Sprache und vermochte daher die nuancenreiche und kunstvolle Ausdrucksweise Wittgensteins besser zu würdigen als andere, und zugleich waren ihm die Gedankengänge des Cambridger Philosophen aus eingehender Beschäftigung mit der (sprach)analytischen und logischen Philosophie vertraut. Und in seinem noch nicht ins Deutsche übersetzten Werk *LeR* (Flusser 1963) findet der Leser eine ausführliche Auseinandersetzung mit der *LPA*, wenn auch eingebettet in die kursorische Beschäftigung mit einer Myriade anderer kontinental-europäischer Philosophen – bspw. Dilthey, Cassirer, Misch, Lipps, Russell, Carnap, Mauthner, Husserl, Heidegger, Nietzsche, Frege oder Freud.

I.

In *LeR* ordnet Flusser Wittgenstein der Haupttendenz der europäisch-abendländischen Philosophie zu, die er im wesentlichen als den Dualismus von Positivismus und Existentialismus identifiziert. Der Medientheoretiker Flusser hat sich in *LeR* intensiv mit dem ontologischen Status von Bildern der Welt und den Weisen der Repräsentation von Tatsachen der Welt in Sprache auseinandergesetzt und dabei selbstverständlich auch die *Isomorphietheorie* Wittgensteins rezipiert, aber es wird schnell klar, dass ihn dabei weniger deren formallogischer Gehalt interessierte, als deren Projektions-Status im Sinne eines Bilder-„Entwurfs" des Menschen auf die Welt. Deshalb beschäftigt er sich vor allem mit jenen Sätzen der *LPA*, in denen jene von Wittgenstein selbst als „unsinnig" bezeichneten

Sätze formuliert werden, mit denen wiederum transzendierend über die Beziehungen zwischen Welt und ihrem Bild in Denken und Sprache berichtet wird.

Für seine eigene Deutung der Bild-Theorie der *LPA* hebt Flusser drei Aspekte hervor, die Wittgenstein zur Medienphilosophie beizutragen habe:

(1) Die sich in den Bildern von der Welt zeigende Logik ist zirkulär hinsichtlich ihrer Geltung; sie beruht daher auf einem Nichts.

(2) Sätze der Ethik (wie auch die der Ästhetik) sind für die Philosophie essentiell, aber sie sind unsinnig und lassen sich nicht sinnvoll in der positivistischen Sprache der Tatsachenlogik formulieren, da sie nicht auf das Verifikationsprinzip festzulegen sind. Wittgenstein: „Es ist klar, daß sich die Ethik nicht aussprechen läßt. Die Ethik ist transcendental." (T 6.421)

(3) Die selbstgesetzte Aufgabenstellung der traditionellen Philosophie, nach letzter oder erster Begründung der Geltung von Weltbildern zu suchen, ist offensichtlich *absurd*. Sie ist erstens unerreichbar und zweitens überflüssig. Die Logik der Bilder muss, aber sie *kann* auch für sich selber sorgen, ist freilich auch bodenlos und nicht zu verteidigen, wenn sie in Frage gestellt wird.

Allerdings: Wittgenstein hatte mit der *LPA* den grandiosen Versuch unternommen, die Philosophie von dem Begründungszwang für die Abbildungsbeziehungen zwischen Welt und Bildern von zu entlasten. Er hatte auf die Frage: Wie kommt die Wirklichkeit ins Bild und wie können wir sie aus ihm dann wieder entnehmen? die einfache Antwort gefunden: Weil Bilder – in welchen Zeichensystem auch immer sie komponiert sein mögen – logisch schon immer binär auf die Abbildung von Sachlagen in der Welt – mögen sie nun wirklich existieren oder nicht – ausgerichtet sind, so dass sie die Welt niemals verfehlen können. Wittgenstein glaubte daher keine metaphysische Vermittlungsinstanz mehr zu benötigen, die den sich im Abbildungsverhältnis offenbarenden Weltbezug ermöglicht und zugleich dessen Gelingen garantiert. Flusser hingegen – und hierin besteht die eigentliche Orginalität seiner Laktüre der LPA –begreift Bilder der Welt immer als wirklichkeitserzeugende Projektionen, die aus einem existentiellen Entwurf hervorgehen. Dieser Entwurf, so deutet Flusser Wittgensteins Metaphysik-Verzicht, bleibt allerdings auf sich selbst gestellt, er geschieht vor dem Hintergrund eines „Nichts" gestellt.

II

Dass sich der Leser der *LPA* nach der Lektüre in Schweigen hüllt bzw. seinem Sprechen das Geschirr der verifikationistischen Alltagssprache anlegt, immer auf der Hut, nichts Unsinniges zu äußern, mag Wittgensteins ethischer Wunsch für das rechte Verständnis seines Werks gewesen sein. Flusser hingegen nimmt den ethischen Anspruch des Verfassers der *LPA* in ganz anderem Sinne ernst. Wenn man mit Wittgenstein ästhetische und ethische Sätze aus dem Bereich des sinnvoll Sagbaren ausschließt, so Flusser, dann verkürzt man das Sprechen gerade um dessen

[1] Abkürzung- und Literaturverzeichnis s. Ende des Beitrags.

wichtigste Aufgabe, in ihrem Vollzug die Spezifik der *conditio humana* zu bezeugen. Mit dem Eintritt des Menschen in eine symbol- und zeichenhaltige Austauschbeziehung mit der Um- und Mitwelt, also mit seinem Eintritt in die Bilderwelt wird nämlich nicht allein pragmatisch eine Lebenswelt entworfen, sondern wird ein „Kunstgriff" – dieser Ausdruck Flussers ist hier ganz wörtlich zu verstehen – angewandt, um „die brutale Sinnlosigkeit eines zum Tode verurteilten Lebens vergessen zu machen", also jenes *Nichts* zu bannen, das den „bedeutungslosen Kontext [anzeigt], in dem wir vollständig einsam und *incommunicado* sind." (Flusser 1998, 10) Das Gespräch, die Kommunikation ist Welterschließung und Kulturstiftung; der Austausch erschöpft sich nicht im Gerede positivierbarer Gegenstandsaussagen, sondern erschließt uns die Welt als Welt unter Einschluss von Schönheit und Moralität. Wohl hatte Wittgenstein das Ethische und das Ästhetische selbst als seine eigentliche, gleichsam als die *hidden agenda* seines Buches bezeichnet (vgl. *B* 96f.), aber er hatte es dann, eben weil er die ontologische Dimension des Nichts auf eine bloß logische reduzierte, zutiefst verkannt. Deshalb, so Flusser, breche die *LPA* im Grunde in zwei Hälften auseinander: in einen logisch wohlabgesicherten, aber existenziell entkernten Part bloßer Tatsachenaussagen, und einen jenseits der Logizität angesiedelten, existenziell hochaufgeladenen Teil, der sich der Aussagbarkeit entzieht. Flusser sieht seine Aufgabe nun darin, beide Teile wieder zusammenzuführen. Wenn Wittgenstein ein solches Unterfangen als *absurd* bezeichnet – und er tut dies –, dann ist für Flusser diese Diagnose nicht *prohibitiv*, sondern gerade als *exhortativ* zu deuten: Es ist just diese Absurdität, die es ontologisch auszubuchstabieren gilt und damit eine ethische Chance bietet. Es heißt folglich, *mit* Wittgenstein *gegen* Wittgenstein gerade dort weiterzudenken, wo dieser dem Denken eine unüberwindliche Grenze ziehen möchte: beim Nichts und dem Absurden. Auf diese Weise lässt sich laut Flusser jenes Auseinanderbrechen des Diskurses zwischen Positivismus und Existentialismus bei Wittgenstein vermeiden, dessen Überwindung gerade Wittgensteins ethisches Postulat an den Leser gewesen sei (vgl. auch Flusser 2006, 10).

III

In *LeR* findet sich kein Hinweis auf die 1953 erschienenen *PU,* die Wittgensteins Wende zu einer pluralistisch-pragmatischen Haltung zur Sprache markieren. Er kannte sie wohl zu diesem Zeitpunkt noch nicht. Die Grundidee der *Untersuchungen,* dass das Feld der Sprache unüberschaubar und in seiner Vielschichtigkeit von einer „geschlossenen" Philosophie nicht mehr zu erfassen ist, dürfte Flussers Einsichten in die Pluralität der sprachlich generierten Weltbilder vertraut gewesen sein. Allerdings dürfte Flussers Zugang zu Wittgensteins Spätwerk von der von ihm diagnostizierten Dichotomie Positivismus/Existentialismus so stark überformt worden sein, dass er glaubte, das eigentlich Neuartige der Spätphilosophie im Vergleich zur *LPA* vernachlässigen zu dürfen.

Diese Vernachlässigung kennzeichnet jedenfalls Flussers bereits eingangs erwähnte Rezension der *PB*, auf die ich jetzt zurückkommen kann. Ich hatte bereits bemerkt, dass der Rezensent Wittgensteins sprachanalytische Detailstudien, die ja den eigentlichen Inhalt des Buches ausmachen, gänzlich beiseite lässt. Er konzentriert sich vielmehrausschließlich auf das Vorwort, das er zunächst dem brasilianischen Leser in Gänze übersetzt:

Dieses Buch ist für solche geschrieben, die seinem Geist freundlich gegenüberstehen. Dieser Geist ist ein anderer als der des großen Stromes der europäischen und amerikanischen Zivilisation, in dem wir alle stehen. Dieser äußert sich in einem Fortschritt, in einem Bauen immer größerer und komplizierterer Strukturen, jener anderen in einem Streben nach Klarheit und Durchsichtigkeit welcher Strukturen immer. Dieser will die Welt durch ihre Peripherie – in ihrer Mannigfaltigkeit – erfassen, jener in ihrem Zentrum – ihrem Wesen. Daher reiht diese ein Gebilde an das andere, steigt quasi von Stufe zu Stufe immer weiter, während jener dort bleibt, wo er ist, und immer dasselbe erfassen will. // Ich möchte sagen ‚dieses Buch sei zur Ehre Gottes geschrieben', aber das wäre heute eine Schurkerei, d.h. es würde nicht richtig verstanden werden. Es heißt, es ist in gutem Willen geschrieben, und soweit es nicht mit gutem Willen, also aus Eitelkeit etc., geschrieben, soweit möchte der Verfasser es verurteilt wissen. Er kann es nicht weiter von diesen Ingredienzen reinigen, als er selbst davon rein ist. (*PB*, Vorwort)

Flussers anschließende Interpretation verfolgt auch hier die von seiner Rezeption der *LPA* her bekannte Strategie: den ‚positiven' Teil des Buches – die analytischen Detailstudien – lässt er aus. Vielmehr ruft er Wittgenstein als Kronzeugen gegen die Hegelsche „Fortschrittsideologie" zunehmender „Versöhnung" von Welt und Bild im Namen der Positivität des Weltgeistes auf. Sodann nimmt er Wittgenstein ausdrücklich gegen Positivismus und Marxismus in Schutz. Wittgenstein sei keinesfalls ein reaktionärer Bourgeois oder ein borniertar analytischer Logiker gewesen , sondern ein Denker, der sich diesen Systemen verweigere, weil er die Haltlosigkeit, eben die Absurdität der Systemkonstruktionen erkannt habe, die sich, wie der Logiker Wittgenstein schließlich in der *LPA* gezeigt habe, auf *nichts* zu stützen, oder besser: sich nur auf *ein Nichts* stützen können.

Im abschließenden Teil des *Vorworts* hat Wittgenstein, so Flusser, dieses „Nichts" zum Ausgangspunkt für eine religiös eingefasste existentialistischen Denkgeste genommen. Das *tauto-*logische „nichts", das uns in der *LPA* begegnet, wird gleichsam unter der Hand Flussers bei Wittgenstein zu dem *onto-*logischen Nichts der Absurdität eines Camus'schen „quand-meme*":* Das Denkunmögliche und Unsagbare – eben das allem Systemdenken vorausgesetzte liegende *Nichts* – offenbart, so Flusser, Wittgenstein als einen auf existenzielle *Authentizität* gerichteten Denker.

Damit spielt Flusser also erneut das Motiv eines gespaltenen Wittgenstein aus, das er bereits in *LeR* herausgearbeitet hatte: Auf der einen Seite der positivistische Logiker, auf der anderen der existentialistische Denker, der an der Autonomie und Ineffabilität des Ethischen sprachlos wird. Und wieder glaubt Flusser Wittgenstein gerade dann auf eine paradoxe Weise treu zu bleiben, wenn er den Leser am Ende seiner Besprechung auffordert, diese Schizophrenie in Richtung auf eine neue, wahrhafte Authentizität zu überwinden. Der „neue" Wittgenstein der *PB* ist laut Flusser, im Grunde der alte: Hatte der frühe Wittgenstein am Ende seiner *LPA* nicht selbst vom Leser – und damit von sich selbst – verlangt, die Sätze des Buches zu überwinden und fortzuwerfen, um die Welt richtig zu sehen, indem er sich Schweigen verordnet hatte und damit, anstatt sich in kommunikativer Rede existenziell neu zu entwerfen, in das Nichts des schwere- und bodenlosen Schwebens eingetaucht war?

IV

Wittgenstein hat Flusser gewiss gute Gründe für eine solche existenzialistische Interpretation und auch Kritik gelie-

fert. In dem von Flusser besprochenen Vorwort-Entwurf und in seinen Eintragungen in seine Notizbücher hat er die existentiellen Antriebe für sein Philosophieren offen eingestanden hatte. Zwar waren solche Bemerkungen gewiss nicht für die Veröffentlichung bestimmt, sie sind aber sicherlich ebenso ernst zu nehmen wie die sprachanalytische Ackerei auf den Wortfeldern. Flusser war sofort bereit, die überragende Rolle der Sprache als Medium der Weltvergewisserung als gegeben anzunehmen – auch wenn er, wie ich hier leider nicht eingehend ausführen kann, ein nur schwer konsistent zu denkendes universalhistorisches Stufenmodell der Medien entwickelt, in dem die die das Zeitalter der Sprachdominanz lediglich eine von insgesamt fünf Stufen ausmacht. Doch blieb Flussers Interpretation des Wittgensteinschen Werks immer von einer existenzialistisch-ethische Primäroption konfiguriert, der gegenüber die Arbeit der Sprachanalyse bloß technisches Beiwerk bleiben sollte (vgl. dazu auch Kroß 2007a).

Dafür möchte ich ein letztes Beispiel geben. In dem undatierten Typoskript *Was der Fall ist* (TS 2503) beschreibt Flusser sein „Unbehagen", das ihm der erste Satz der *Abhandlung*, die Welt sei alles, was der Fall ist verursache. Denn wenn man diesen ersten Satz der *LPA* lese, führe kein Weg zu den folgenden Sätzen des Buches, sondern „die Gedanken kreisen um ihn herum [...]. Der Leser beginnt auf eigene Faust zu philosophieren [...]. Das ist der Fall einer philosophischen Liebe auf den ersten Blick." Sodann beginnt Flusser mit dem Wort „Fall" zu spielen,[2] das ihn zunächst zu den Wortfeldern „leichter" und „schwerer Fall" führt, die uns bei unserer Begegnung mit der Welt begegnen können. Das menschliche Leben wird dabei zu einem Schreiten von Fall zu Fall, geleitet von ‚Zu-Fällen' oder ‚Ak-zidentien', aus denen das Dasein zunächst zu bestehen scheint:

> Die Welt der eingetroffenen Fälle: zufällig also. Aber die Welt der eingetroffenen Fälle: gelegentlich also. Die Welt als Zufall und die Welt als Gelegenheit, das ist die Welt der Fälle. Diese beiden Aspekte des Lebens zu vereinigen, ist das Thema des Lebens. [...] Wir müssen sie entscheiden. Fälle entscheiden heißt: veranlassen, daß sie von nun an nicht mehr eintreffen. [...] Wir wandern von Fall zu Fall, damit wir sie nach und nach entscheiden und Welt verarmen. Das ist unsere Freiheit: Fälle entscheiden. Entropie. Den zufälligen Fall als Gelegenheit für eine Entscheidung nehmen: Ziel und Sinn des Lebens. (TS 2503, 2)

Mit dieser existentiellen Exposition des *homo viator* als Wanderer in die Entropie führt Flusser den Leser zu der Überlegung, dass das von Fall-zu-Fall-Schreiten eigentlich ein ‚Ver-Fallen', eine ‚De-kadenz' ist, die wiederum Ausdruck „meines Falls" als desjenigen, der nur mich angeht, ist. So gelangen wir mit der Meditation des ersten Satzes der *LPA* zu jenem Existentialismus, den Flusser selbst beim frühen Wittgenstein mit seinen monoton-eindringlichen Satzgebinden verorten möchte, um ihn zum Kronzeugen für die Philosophie der Bodenlosigkeit aufrufen zu können:

> Wie weiß ich, daß ich ein Fall bin? Ich bezweifel, daß ich es durch die cartesische Methode wissen kann. Ich weiß, daß ich ein Fall bin, weil ich in mir meinen Verfall spüre. Ich weiß, daß ich ein Fall bin, weil ich falle. Ich weiß, daß ich falle, weil ich vom Tod weiß. Ich bin ein

Fall, weil ich weiß, daß ich zum Tod falle. Dieses Wissen von meinem Tod erlaubt mir, das Gravitationsfeld, „Welt" genannt zu erahnen, in dem sich mein Fall abspielt [...]. (Ebd. 2f.)

Dieses Fallen zum Tod, das nicht von ungefähr an Heideggers Philosophie der Verfallenheit des Daseins an die uneigentliche Welt und das Man erinnert, wird für Flusser nun zum Ausgangspunkt jenes Entscheidens, in dem sich das Individuum gegen den „Todespol" wendet und sich auf seine Welt hin gegen den Tod entwirft. Selbstverständlich vermag sich das Ich aufgrund seines Gegen-Entwurfs nicht aus dem Fall zu lösen – der „Todespol" bleibt vorhanden, und seine Gravitation wird am Ende obsiegen. Insofern ist die Absehung vom Tod keine, wie Flusser schreibt, wirkliche Entscheidung, sondern ein Vorgang, der sich bereits ereignet haben muss, bevor er von einem Bewusstsein realisiert und *als* Entscheidung erkannt wird. Insofern kann er auch schreiben, dass diese Entscheidung „ohne Alternative" sei, denn das Leben ist nicht das „Gegenteil" des Todes, sondern die Verneinung des Todes:

> Mein Wissen [von meinem Tod, MK] dringt in den Fall, der ich bin, ein wie ein leerer Sack. Infolge dieser Leere bin ich nicht gänzlich ein Fall.[...] Der Sack ist der Ort, wo ich mich entscheiden kann. Die Welt ist alles, was der Fall ist. Der Sack in mir ist kein Fall. Er nimmt an der Einheit, „Welt" genannt, nicht teil. Der Ort der Entscheidung ist nicht in der Welt. Ich entscheide mich und ich entscheide meine Fälle an einem Ort, der nicht in der Welt ist. Ist das Theologie?[3]

> Meine Entscheidung ist gegen den Tod. Deswegen verwandelt er Fälle in Aufstieg und wendet die Schwerkraft der Welt um. Infolge meiner Entscheidung laß ich den Strom der Welt zurückfließen. Ich mache Kultur. (Ebd. 3)

Der Rückfluss des „Stroms" in die Welt der Kultur ist für Flusser ein neg-entropischer Vorgang, der, ganz analog dem Satz Wittgensteins, gedacht, dass der Tod kein Bestandteil des Lebens sei und dass die Motive für das Handeln, insbesondere die Ethik, außerhalb der Welt liegen müssen, uns zu Kulturleistungen befähigt, die nicht aus der Logik des „Falls" abzuleiten sind, sondern außerhalb des Tatsachengefüges stehen. Die *Entscheidung gegen* den Fall und *für* das Leben als Schaffen und Kulturleistung ist eine genuin ethische, weil *nichts in der Welt sie uns aufzuzwingen vermag*.

Derart in das alteuropäische Haus der Ethik heimgeholt, mutiert unter Flussers quasi-liturgischen Sprachkaskaden der Logiker und Sprachspieler Wittgenstein zu einem tiefsinnigen theologischen Zeugen des Un-Falls und des Zu-Falls des menschlichen In-der-Welt-seins. Wohl wird dieses Ur-drama des Un-Falls auf der Bühne der Sprache inszeniert, doch wissen die Akteure um den Abgrund des Nichts und des Todes, vor den sie gestellt sind.

Der Preis, den Flusser für eine solche Lektüre des Sprachphilosophen zu entrichten hat, ist freilich hoch. Wittgensteins anti-ontologische Sprachanalytik verliert ihre spielerische Geschmeidigkeit und gerinnt zu einem jener existentialistischen Seins-Entwürfe, die uns nicht nur als Produzenten von Bildern identifiziert, sondern uns darüber hinaus die Verantwortung für die Bild-Produktion aufbürdet. Indem wir uns sprachlich selbst verfehlen können, droht uns der Ver-Fall und damit der Rück-Fall in die

---

[2] Flusser weiß, dass seine Deutung nicht im Sinne Wittgensteins ist: „Die von der Etymologie vorgeschlagene Deutung [des Wortes ‚Fall', MK] ist diese: Der Fall ist, was gefallen ist. Das Wort ‚Fall' hat die Bedeutung von ‚fallen'. Diese Antwort taucht unsere Spekulation in [ein theologisches] Klima [...]. Ich bezweifel, daß es Wittgensteins Ausgangspunkt ist. Das ist unbedeutend. Ist es nicht wahr, daß wir uns entschlossen haben, auf eigene Faust zu philosophieren?" (Ebd. 1)

[3] Flusser spricht in diesem Zusammenhang wiederholt von „protestantischer" Theologie (ebd. 1, 4), vermutlich nicht wissend, dass Wittgenstein getaufter Katholik war. Die Assoziation mit dem Sündenfall (und, vielleicht mit der Erbsünden- und Prädestinationslehre des Augustinus, zu dem Wittgenstein offensichtlich ein starke Affinität besaß, vgl. Kroß 2007b) hätte Flusser gewiss zu analogen Meditationen führen können.

Sprach-Barbarei. Flusser hat in seinen Büchern immer wieder vor diesem Ernstfall gewarnt und sich selbst als Mahner und Wächter aufgeboten. Den Frieden in Gedanken und die Ruhe des Herzens, die Wittgenstein sich von der Arbeit an der Philosophie als Modus der Arbeit an sich selbst erhoffte, ist, folgt man Flusser, eine trügerische Hoffnung – ohne Aussicht auf Erfolg.

Ein Blick auf die Entwicklung der Philosophie seit Wittgenstein und Flusser zeigt, dass diese Diagnose empirisch wohl haltbar ist. Fraglich bleibt allerdings, ob wir wünschen, dass es dabei bleibt.

Literaturangabe

Flusser Vílem 1966 " Ludwig Wittgenstein: Philosophische Bemerkungen", *Revista brasileira de folosofia* 16, 129–132.

Flusser, Vilém 1998 *Kommunikologie*, Frankfurt/M.: Fischer

Flusser, Vílem ²2004 *Língua e Realidade* [1963], revisão técnica Gustavo Bernardo Krause, São Paulo: Annablume, (*LeR*)

Flusser, Vílem 2006 *Vom Zweifel* [port. 1963/64], übers. von Edith Flusser, Göttingen: edition flusser.

Flusser, Vílem o.J. „Was der Fall ist" (= TS 2503), Flusser Archiv, Universität der Künste, Berlin.

Kroß, Matthias 2007a "Sprünge im Bild. Flusser, Heidegger und Wittgenstein". Vortrag, gehalten im Rahmen der Tagung *Die Medien- und Bildtheorie Vílem Flussers*, Weimar: Bauhaus Universität.

Kroß, Matthias 2007b "The Quest for Authenticity: St. Augustine's and St. Ludwig's Confessions." Vortrag, gehalten im Rahmen der Tagung *The Future of Character*, Potsdam: Einstein Forum.

Wittgenstein, Ludwig *Briefe. Briefwechsel mit B. Russell, G.E. Moore, J.M. Keynes, F.P. Ramsey, W. Eccles, P. Engelmann und L. von Ficker.* (*B*)

Wittgenstein, Ludwig *Philosophische Bemerkungen.* (*PB*)

Wittgenstein, Ludwig *Philosophische Untersuchungen.* (*PU*)

Wittgenstein, Ludwig *Logisch-Philosophische Abhandlung / Tractatus Logico-Philosophicus.* (LPA/T)

Email: matthias.kross@einsteinforum.de

Wittgenstein registrieren

Wilhelm Krüger, Bergen, Norwegen

Das Werk des österreichischen Philosophen Ludwig Wittgenstein ist umfangreich genug, die Gedanken, die hier in MSS und TSS geäußert werden, sind bedeutend, kompliziert und verwickelt genug, um für Experten wie Laien ein Werkzeug zu fordern, das die Recherche in diesen Texten vereinfacht. Das *Wittgenstein Archiv der Universität Bergen* (*WAB)*, das im Rahmen eines länderübergreifenden Projektes mit dem Namen *Discovery* auf der Suche nach einem solchen Werkzeug ist,[1] muss diesbezüglich nicht bei null anfangen. Mit der im Jahr 2000 veröffentlichten Wittgenstein-CD-Rom "*The Bergen Electronic Edition*" (*BEE*)[2] liegen Wittgensteins Texte bereits in elektronischer Form vor. Die Möglichkeiten sich durch dieses elektronische Medium anhand seiner Texte auf die Suche nach Leben und Werk des Philosophen zu machen, sind außerordentlich.[3] Mit dieser Arbeit soll zur Diskussion gestellt werden, ob es vor diesem Hintergrund sinnvoll ist eine Art inhaltsbezogenes Sachregister zur weiteren Erschließung und Vernetzung der Wittgensteinschen Texte zu erstellen. Ich werde dazu nach (1.) einigen einführenden Bemerkungen über Register, (2.) die Suchmöglichkeiten erläutern, die innerhalb der *BEE* bestehen, und (3.) auf die am WAB geplante Erweiterung dieser Werkzeuge zu sprechen kommen.

1. Register

Register sind vor allem aus Büchern bekannt. Und die Bücher über Wittgenstein stellen diesbezüglich keine Ausnahme da. Es sind dies dort die unbedeutend erscheinenden Listen mit kurzen Ausdrücken (z.B.) über Sachen (Sachregister) oder Namen (Namensregister), die am Ende der Bücher zu finden sind, und den Leser – in übersichtlicher Form und ohne Umwege – zu der Buchstelle seines Interesses führen, ohne dass er das ganze Buch gelesen haben muss. Suchwörter (Terme) zu präsentieren, die den Inhalt (die Essens) eines bestimmten Textstückes in leicht überschaubarer Form zum Ausdruck bringen, wird als das Ziel solcher Register angesehen, die Antizipation seiner Benutzer durch Auswahl und Gewichtung der angebotenen Terme als eines ihrer Qualitätsmerkmale. [4] Wenngleich diese Ausdrücke unter Hinzufügung einer Ortsangabe mitteilen, *was*, wo zu finden ist, also durchaus eine Angabe zum Inhalt machen, sollen sie, idealtypisch gesehen, keine Antworten auf (z. B.) philosophische Fragen geben, sondern – problemerhaltend - auf die Dokumente verweisen, denen eine Antwort auf ein philosophisches Problem zu entnehmen ist. Der Term wiederholt den Inhalt des Textes auf die ihm eigene Weise. Der ihn vergibt, muss nicht nur eine schlagkräftige und möglichst eindeutige Formulierung finden, sondern zunächst den Text, den es durch diese Formulierung zu übersetzen gilt, einer inhaltlichen Analyse unterziehen. Auf der anderen Seite macht der Gebrauch eines Registers dadurch eine Untersuchung für den Benutzer zu einem (mind.) zweistufigen Verfahren. Wer z.B. wissen will, was Wittgenstein über Frege sagt, erfährt anhand des Registers lediglich, wo Wittgenstein etwas über Frege sagt. M.a.W., das Register ist Mittel und nicht Zweck. - Unabhängig davon, ob

man so eine Orientierungshilfe 1:1 übernehmen will, oder ob man in ihren Begriffen – wie ich das hier tun will - ein Leitprinzip auch zur übersichtlichen Darstellung elektronischer Texte sieht,[5] ist zu bestimmen, welcher Text mit welchen Termen auf welche Weise und durch welche Art von Register präsentiert werden soll, für wen die Registrierung gedacht ist (Vorwissen und Interesse der Benutzer), wer sie durchführen kann; und schliesslich welche Ressourcen dafür zur Verfügung stehen. Ich will einigen dieser Variablen im folgenden sowohl in der *BEE* als auch in einer 'inhaltlich erweiterten Form' nachgehen.

2. *The Bergen Electronic Edition*.

Mit der *BEE* liegt der Wittgensteinsche Nachlass den Benutzern in zwei (statischen) Versionen vor: einer Diplo- und einer Normversion. In beiden Versionen kann gesucht werden. Nach etwas einem Register Ähnlichem, fahndet man aber in dieser Ausgabe vergeblich. Eine übersichtliche Darstellung der Dokumente durch eine begrenzte Anzahl aussagekräftiger Terme zu geben, ist der Ehrgeiz dieser Ausgabe nicht. Anstelle eines Registers wird dem Benutzer hier ein avancierter Suchapparat angeboten, inklusive einer Liste *aller* im Text vorkommender Ausdrücke, der dazu einlädt, die ganze Vielfalt der Wittgensteinschen Schriften abzurufen. Die Volltextspeicherung gibt dem Benutzer freie Hand. Wer hier sucht, benutzt dazu immer einen selbstgewählten und von Wittgenstein gebrauchten Ausdruck (oder Teile davon) und kann direkt in die Schriften hinein vermittelt werden. Ein Hauptproblem so einer mechanischen Suche stellt sich als Relevanzproblem dar. Es besteht die Gefahr, dass infolge eines Suchbegriffes, auf zu viele (irrelevante) Stellen (Bemerkungen) verwiesen wird. Wer z.B. nach Wittgensteins Begriff vom Satzverstehen mit "Verstehen" sucht, kann dadurch auch auf Tagebucheintragungen mit „verstehen" verwiesen werden, die für seine Untersuchung irrelevant sind. Er kann aufgrund von Homonymien zu anderen Begriffen geführt werden, die mit seinem Thema nichts zu tun haben. Desweiteren kann es dem, der so sucht, passieren, dass dadurch nicht auf alle relevanten Stellen seines Forschungsvorhabens verwiesen wird. Bemerkungen, die Wörter enthalten mit synonymen, oder doch nahezu synonymen Bedeutungen, tauchen nicht auf. Er wird „Verstehen" finden, „Missverstehen", "augenblickliches Verstehen" und "plötzliches Verstehen" noch nicht.

Die Methode, die Relevanz eines Textes nach der inversen Häufigkeit des Suchwortes pro Bemerkung festzustellen,[6] ist aufgrund der Synonymie- und Homonymieproblematik und der Tatsache, das von der *BEE* nur die Bemerkungen selbst, nicht aber das Auftreten des Suchzeichens innerhalb einer Bemerkung gezählt werden, hier nur bedingt anwendbar. Diesen Nachteilen ist durch ein wenig Mehraufwand beim Suchen, einiges von ihrer Schärfe zu nehmen. Ein Benutzer kann und sollte sich der angebotenen sog. „Wildcards" (*) bedienen, die ihm nicht nur "Verstehen", sondern mit „Verstehen*" alle Bemerkungen mit Wortformen liefert, die mit „verstehen" beginnen.

---

[1] Vgl. dazu Deirdre Smith, *Re-discovering Wittgenstein,* in diesem Bd.
[2] Vgl. Wittgenstein 2000.
[3] Vgl. Krüger 1999: 46-48.
[4] Vgl. Kaufmann 2001: 69.

[5] Gerne im Sinne von PU 570.
[6] Die Idee dabei ist, dass ein Textstück für ein Untersuchungsthema dann besonders relevant ist, wenn der Term, durch den es präsentiert wird, in dieser Bemerkung viel häufiger vorkommt als in anderen Bemerkungen. (Vgl. Kaufmann 2001: 152.)

Der Benutzer sollte intelligente Suchmethoden verwenden, durch die er das Thema der aufzusuchenden Bemerkung (erfahrungsmäßig) eingrenzt. Wer z.B. „Regel" mit „Befehl" und „Blume" im Suchfeld kombiniert, wird sehr wahrscheinlich zu einer übersichtlicheren Darstellung von Beispielen zum Sprachgebrauch kommen als mit „Regel" alleine; usw. Der Benutzer kann sich schließlich seine Suchergebnisse im Kontext („words around hits") darstellen und sich eigene Konkordanzen basteln, durch die er selbst die Spreu vom Weizen trennt.

3.1 Das Registrieren

Hinter der Idee, den Wittgensteinschen Nachlass durch ein Register mit möglichst eindeutigen und übersichtlich angeordneten Termen erschließbar zu machen, steckt der Wunsch nach Arbeitserleichterung für die, die diese Vorarbeiten aus fachlichen Gründen nicht selbst leisten können, wie auch für jene, die glauben Wichtigeres zu tun zu haben. Die Registrierung erhebt damit den Anspruch, weder ausschließlich für Laien noch für Spezialisten erstellt zu sein; sie richtet sich aber vornehmlich an philosophisch Interessierte. Überschaubare Einheiten sollen dazu Teil für Teil analysiert werden, ihnen sollen manuell voraussehbare Terme zugeteilt werden; und für diese soll schließlich ein übersichtliches, benutzerfreundliches Layout, die Form eines sog. „Registers" gefunden werden. Dafür einzelne durch Leerzeilen getrennte Bemerkungen („sections") als Sucheinheiten (Fundstellen) zu benutzen, bietet sich an, da es oft solche „Textblöcke" sind, die bei Wittgenstein einen Gedankengang ausmachen, und die von ihm selbst innerhalb seines Nachlasses verschoben werden.[7] Da sich zumeist mehrere Bemerkungen auf einer Seite befinden, wird dem Benutzer das Auffinden von Themen erleichtert, es wird dadurch aber auch eine Indexierungstiefe des Nachlasses vorgegeben, die das Projekt überfordern könnte. Der Indexterm, so die Theorie, soll „die Essenz von Dokumenten" (Kaufmann 2001: 1) wiedergeben, denen er zugeordnet ist; mehrere „Essenzen" sind denkbar. Durch die arbeitsintensive manuelle Vergabe dieser Terme haben wir gegenüber einer maschinellen Vorgehensweise den Vorteil, dass wir Relevanz- und Bedeutungsprobleme auf der Grundlage unseres Textverstehens lösen können. Wir können das besagte Textstück als philosophischen Beitrag des L. Wittgenstein innerhalb seines Gesamtwerkes würdigen, und es benutzerrelevant und registerkohärent registrieren. Die natürliche formale Grenze des Ausdrucks, der dieses Wesen offen legen soll, ist neben seiner Eindeutigkeit seine Überschaubarkeit. Es wird also z. B. aus Wittgensteins eigenem Wortschatz extrahiert, „Sprachspiel" bleibt „Sprachspiel". Es wird standardisiert „des Schmerzes" kann zu „Schmerz" werden, und es wird paraphrasiert werden. (Phrasen mit mehr als 10 Token kommen schon in Buchregistern vor.) Definitionen sollen möglich sein. Und auch dass unser Schlagwort die Form einer These annimmt, soll hier nicht per se ausgeschlossen sein. Abgesehen von individuellen Kennzeichnungen, wie Personennamen sie darstellen und Ausdrücken, die durch ihre Schönheit und Prägnanz für den Benutzer einen hohen Wiedererkennungswert haben,[8] ist die Bestimmung des Terms die Herausforderung des Registrierens. Die Frage, was Wittgenstein mit „meinen" meint, unter „verstehen" versteht, mit „Zeichen" bezeichnet und mit welcher Grammatik er „Grammatik" verwendet, usw., brauchen wir dazu nicht zu beantworten. Wir geben nur den Hinweis, welche Bemerkung sich vor allen anderen dadurch auszeichnet, dass er in ihr (und allen, die in gleicher Weise

etikettiert sind), mehr als in den übrigen Bemerkungen philosophisch relevant über (z.B.) Registrieren spricht. Woran ist das zu erkennen? Die Antwort klingt für eine manuelle, d.h. eine sich auf inhaltliche (intellektuelle) Analysen stützende Registrierung ernüchternd. Meistens lässt es sich nicht umgehen, dass in der Bemerkung, deren Inhalt es darzustellen gilt, der Ausdruck oder eine seiner morphologischen Varianten, durch den er dargestellt werden soll, selbst vorkommt. Da Wittgensteins Schriften nicht gerade für einen Mangel an Subtilität bekannt sind, verbietet sich hier eine allzu forsche Verallgemeinerung. Auf der Suche nach Indextermen auf Implikationen, Präsuppositionen oder gar das Argumentationspotential einer Bemerkung zu verweisen, führt in die falsche Richtung, auf die schiefe Bahn. Es sollte z. B. eine Bemerkung mit „können" nicht automatisch mit „verstehen" etikettiert werden, und eine Bemerkung mit „verstehen" nicht mit „können". Und beide zusammen nicht nur deshalb mit „wissen" oder „beherrschen", weil Wittgenstein selbst behauptete, dass sie (auf grammatische Weise) zusammengehören.[9] Hier liegt auch eine Herausforderung für die Fälle, in denen es ratsam erscheint, neue Ausdrücke zu entwerfen.

Eine der Quellen von PU 504 in Wittgensteins *Big Typescript* aus dem Jahre 1933 kann uns als Beispiel dafür dienen, mit welchen Schwierigkeiten man hier konfrontiert wird. W. schreibt dort:

> Wenn man aber sagt "wie soll ich wissen, was er meint, ich sehe ja nur seine Zeichen", so sage ich: "wie soll er wissen, was e r meint, er hat ja auch nur seine Zeichen". (*Big Typescript* 4.1)

Wittgenstein kontert durch diese Bemerkung offenbar die Vorstellung eines Opponenten, dass derjenige, der etwas meint, zum Inhalt seiner Meinung einen privilegierten Zugang hat, der Dritten durch Zeichen nicht erschlossen werden kann. Die Schlüsselwörter, die das inhaltliche Gewicht dieser Bemerkung tragen, sind zweifellos „wissen", meint" und „Zeichen". "Zeichen, meinen und wissen", "wissen und meinen" oder „meinen und wissen", „wissen, was gemeint ist" oder "das Meinen und Wissen von Zeichen" könnte ein erster Etikettierungsversuch lauten. Wer seine Suchanfrage also unter Verwendung dieser Ausdrücke formuliert, würde (auch) auf diese Bemerkung stoßen. In den Registern zu den veröffentlichten PU, in denen ausnahmslos durch mehrere Schlagwörter auf PU 504 verwiesen wird, wird als dem "Zeichen" untergeordneter Ausdruck auch "meinen und verstehen" ins Spiel gebracht.[10] Das Register der kritisch-genetischen Edition von Schulte hebt sich dadurch hervor, dass er mit Bezug auf PU 504 unter „Wissen" den Term „Nur er / ich weiß, ..." konstruiert.[11] Hallet etikettiert in der Blackwell Ausgabe der PU mit der oppositionellen Phrase "'a gulf between an order and its execution'", die er nicht nur hier, sondern auch in PU 431, 433, 503, 505 und 506 findet und unter „order" subsumiert.[12] Mit „meinen (intendieren)" und „Befehl, befehlen(d)" markieren, wahrscheinlich motiviert durch den Kontext der Bemerkung, ebenfalls Luckhardt und Aue in ihrem zweisprachigen Register zum *Big Typescript*.[13] Den eindeutigsten Zugang zu PU 504 eröffnet Hallet. Unter dem Oberbegriff "mean" führt dieser den Ausdruck "'How am I to know what he means?'". Mit dem selben Teilsatz registriert Schwarck in einer deutschen Fassung. Er wählt aber dazu aber nicht „meinen", sondern „wissen" als Oberbegriff.[14] Mit „Meinen als innerer Vorgang" oder „Grenzen

---

[7] Im Vorwort zu seinen PU I spricht Wittgenstein selbst von *„Bemerkungen"*.
[8] Vgl. „bububu", PU S. 18.

[9] Zum "verstehen", "können" und "wissen" vgl. PU 155.
[10] Vgl. z. B. Wittgenstein 1990: W. Breiderts Register zu den PU.
[11] Vgl. Wittgenstein 2001: Register 2. Spätfassung und "Teil II".
[12] Vgl. Wittgenstein 1997: Hallets Index zu den PU.
[13] Vgl. Wittgenstein 2005: Register zum *Big Typescript*.
[14] Vgl. Wittgenstein 1997: Schwarcks Register zu den PU.

der Sprache" etikettiert aus guten Gründen niemand, obwohl dies in der Bemerkung zwischen den Zeilen vorkommt. Nimmt man diese Betrachtungen als Anregungen und ihre Vielfalt als Ermutigung, kann hier möglicherweise allgemein mit „die Problematik von Meinen und Verstehen beim Gebrauch von Zeichen" oder etwas spezieller mit "die Problematik von 'Wissen, was gemeint ist' in der Perspektive der 1. und 3. Pers. Sing." etikettiert werden, angeordnet unter "Meinen", "Wissen" und "Zeichen" in einer entsprechenden Registerpräsentation.

3.2 Das Register

Das Register ist der Ort, an dem die Terme alphabetisch, systematisch oder vielleicht assoziativ - und dann für manchen mit heuristischem Gewinn - zusammengeführt werden, und in dem durch Angaben des Ortes auf verschiedene Bemerkungen verwiesen wird. Eine elektronische Ausgabe ist in der Lage, bei entsprechendem Input sowohl durch sehr differenzierte als auch durch vereinfachte Register einem Benutzerinteresse Rechnung zu tragen. Dass hier für Wittgensteins Begriffe Über- und Unterordnungsverhältnisse geschaffen werden, erscheint insoweit unproblematisch, als hier nicht ontologische Verhältnisse, sondern das Wiederfinden im Vordergrund steht. Eine gewisse Willkür bei der Erstellung von Termen (Nominalphrasen), die sich im Index in der Ordnung der Ausdrücke wiederholt, erscheint unvermeidbar. Ob eine Bemerkung mit „die Sprache der Gebärden" oder „Gebärdensprache" zu etikettieren ist, macht wohl inhaltlich keinen Unterschied, kann aber die Registeranordnung bestimmen. Wir haben bereits gesehen, wie in der Praxis mit solchen Problemen umgegangen wird. Insoweit nicht klar ist, ob (z.B.) „Regel" unter „Sprache" oder „Sprache" unter „Regel" anzuordnen ist, werden die Ausdrücke im Register einfach mehrfach genannt; sie sind dann an beiden Stellen auch als Oberbegriffe zu finden. Mit Bezug auf Etikettierungen auf einen einheitlichen, verbindlichen Standard zu kommen, dürfte ohnehin illusorisch sein; und ob diese Anstrengung lohnenswert wäre, ist auch nicht sicher. Um innerhalb unserer Arbeitsgruppe eine möglichst große Termkonsistens („Gleiches soll gleich behandelt werden") zu gewährleisten, bewegen wir uns hier zwischen der Analyse der Bemerkung, den bereits gemeinsam teilfertiggestellten Registereintragungen als Vorgabe und einer durch die bestehenden Wittgensteinregister und Sekundärliteratur zum Ausdruck gebrachten Erwartungshaltung. Durch diese Vorgaben, so die Idee, wächst der normative Druck auf alle neu zu vergebenden Terme. Als formale äußere Eckpunkte dieser Arbeit gelten uns dabei über den in der Bemerkung ausgedrückten philosophischen Gedankengang hinaus auch Angaben zur Textgenese, philosophiegeschichtliche Hinweise, philologische Informationen und Hinweise auf von W. durchgeführte Textbearbeitungen (samt Metakommentare) als markierungswert.

Schlussbemerkung

Für die Schwierigkeiten, die bei der Anfertigung eines aussagekräftigen Wittgensteinregisters auftreten können, gibt es keine Patentrezepte. Der Übergang von der Bestimmung des Ortes zur Kommentierung des Textes ist, insbesondere wenn es sich um philosophische Texte handelt, fließend. Das Register ist von dem geprägt, der es anlegt. Sagt man zu wenig, befindet man sich in der Nähe von Konkordanzen (Stichwortlisten), deren Gebrauch über den Nutzen der *BEE* kaum hinausgeht. Sagt man zu viel, besteht die Gefahr, den Text zu stark zu filtern und zu kommentieren, anstatt den Benutzer auf relevante Textstellen aufmerksam zu machen. Die Variationsbreite, die man in den Registern zu den Schriften Wittensteins findet, deutet an, dass diese Probleme nicht die Ausnahme sind, sondern für die hier angestrebte Art der Darstellung der Wittgensteinschen Texte der Normalfall.[†]

Literaturangabe

Kaufmann, Esther 2001 *Das Indexieren von natürlichsprachlichen Dokumenten und die inverse Seitenhäufigkeit*. Lizentiatsarbeit der Philosphischen Fakultät der Univ. Zürich, Inst. für Computerlinguistik, <www.ifi.unizh.ch/cl/study/lizarbeiten/lizkaufmann.pdf>

Krüger, Wilhelm 1999 *Wittgensteins Nachlass – The Bergen Elektronic Edition*, in: "Information Philosophie" 3, August 1999, 46-48.

Wittgenstein, Ludwig 1990 *Philosophische Untersuchungen (PU)*. In "Wittgenstein. Tractatus logico-philosophicus", Werkausgabe Bd. 1, mit einem Register zu den PU von W. Breidert; stw 501, Frankfurt / Main: Suhrkamp.

Wittgenstein, Ludwig 1997 *Philosophische Untersuchungen*, (eds.) G.E.M. Anscobe & R. Rhees, mit einem Register von G. Hallett u. C. Schwarck; Oxford: Blackwell.

Wittgenstein, Ludwig 2000 *Wittgenstein's Nachlass – The Bergen Electronic Edition*. Oxford: OUP.

Wittgenstein, Ludwig 2001 *Philosophische Untersuchungen*, kritisch-genetische Edition (eds.) J. Schulte, Frankfurt / Main: Suhrkamp.

Wittgenstein, Ludwig 2005 *The Big Typescript*, (eds.) G. Luckhardt & M.A.E. Aue, Oxford: Blackwell.

Email: Heinz.Kruger@hit.uib.no

Wittgensteinian Reflections on the Unavoidability of Gettier's Counterexamples

Lev Lamberov, Yekaterinburg, Russia

Before 1963 knowledge had been often defined as justified true belief: *S* knows that *p* if and only if (a) *S* believes that *p*; (b) *p* is true; (c) *S* is justified in believing that *p*. But Gettier (1963) has doubted such a definition by constructing counterexamples (Cf. Russell (1912), chap.13). The general reaction to Gettier's examples has been to concede that a fourth condition had to be added to the analysis of "*S* knows that *p*". The search for this fourth condition has become known as the Gettier's problem. Many philosophers thought that it was very easy to find a solution of Gettier's problem. They had tried to find simple conditions that handled the initial counterexamples, but new counterexamples emerged almost immediately. In my paper I shall argue that when we focus on our notions of truth and justification we see that Gettier's counterexamples are unavoidable. I think that some works of Wittgenstein (for example, Wittgenstein (1969)) contain some thoughts which are in close relationships with Gettier's counterexamples. Wittgenstein's later philosophy, I think, shows us that Gettier's counterexamples are unavoidable.

Gettier tells us two stories (he calls them "cases"). I'll begin with the second one because I think that it is simpler than the first one.

1. Case II

Let me restate Gettier's argumentation. Smith falsely believes (but with good reason) that Jones owns a Ford. Smith doesn't know where exactly his friend, Brown, is, but Smith arbitrarily picks Boston, Barcelona and Brest-Litovsk. He infers three disjunctions from the assumed fact that Jones owns a Ford:

(g) Either Jones owns a Ford, or Brown is in Boston,

(h) Either Jones owns a Ford, or Brown is in Barcelona,

(i) Either Jones owns a Ford, or Brown is in Brest-Litovsk.

It happens only by chance that Brown is in Barcelona. So (h) is true. Moreover, Smith is justified in believing that (h) because he is justified in believing that Jones owns a Ford. But Smith's evidence doesn't pertain to the true disjunct of (h). So, we cannot say that Smith knows that (h) according to the definition of knowledge.

For the sake of convenience, I'll use the following labelling:

(f) Jones owns a Ford,

(Z) Brown is in Barcelona.

The proposition that (h) is true because of its logical form and corresponding to the fact that Brown is in Barcelona. Smith believes that (h) is true because of its logical form and its coherence with his beliefs. He infers (h) from his belief that (f) (which he thinks is corresponding to the fact that Jones owns a Ford). For instance, the proposition that (h) coheres with Smith's belief that (f). Smith *doesn't know* that (h) is true, since he believes that (f), but (f) is false. Smith infers (h) from (f). Such an inference is very simple.

Now let me turn to the examination of Gettier's argumentation. Here we take a God's-eye view. There is the question to be asked: What theory of truth must we use? If we use a correspondence theory of truth, then (h) is true because of (Z). If we use a coherence theory of truth, then (h) is true because of either (f) or (Z), or both, where (h), (f), and (Z) are Smith's beliefs. According to the correspondence theory of truth, (f) is false, but Smith thinks that it is true. He thinks that (f) is corresponding to the fact. But it is not. The proposition that (Z) is true because of the correspondence theory of truth and it is probably true for Smith (Smith has no idea where Brown is; Smith thinks that Brown *may be* in Barcelona). Smith thinks that (f) is true and infers that (h) is true. He has coherence evidence for (f) and (h). But when Gettier states that Smith *doesn't know* that (h) is true because (f) is false and (Z) is true, Gettier uses the correspondence theory of truth. If it were the case that Smith gets access to the objective fact that Jones owns no Ford, he wouldn't believe that (f) is true. Smith may reason as following:

(1) Jones is driving a Ford now;

(2) Jones has at all times in the past within my memory a car, and always a Ford;

(3) Hence Jones owns a Ford.

When Smith sees that Jones owns a Ford and notices that Jones has at all times in the past a Ford, Smith "adds" a belief that Jones own a Ford (that is, (f)) to his system of beliefs. Then he infers (h) from his belief that (f). Smith has no access to the objective fact that Jones owns no Ford. If it were the case he would not believe that (f). Consequently, he didn't know (falsely) that (h) was true because of (f). Of course, Smith is only a human being and he cannot know what transcends his beliefs. But this is a mental experiment.

2. Case I

Let me restate Gettier's argumentation. Smith believes that Jones will get a certain job. Smith knows that Jones has ten coins in his pocket. Smith infers from these beliefs that the man who will get the job has ten coins in his pocket. But, unknown to Smith, he himself will get the job, and he has ten coins in his pocket. Smith has very good evidence for his belief that Jones is the man who will get the job, and Jones has ten coins in his pocket. But Smith falsely believes that the term "the man who will get the job" refers to Jones. Again, in this case we turn unlucky Smith down in knowledge.

For the sake of convenience, I'll use the following labels:

(d) Jones is the man who will get the job, and Jones has ten coins in his pocket,

(e) The man who will get the job has ten coins in his pocket,

(X) Jones is the man who will get the job,

(Z) Smith has ten coins in his pocket.

Now let me turn to the examination of Gettier's argumentation. Poor fellow Smith sees that (d) entails (e). Smith's boss assured Smith that Jones would in the end be selected. And Jones has boasted his ten coins in Smith's field of vision. Smith thinks that (e) tells about Jones, because Smith thinks that (X) is true. Smith infers (e) from (d) and (X), using the simple principle of the substitutivity for co-referring terms. The proposition that (e) is true if and only if the proposition that (d) and the proposition that (X) are true. But neither (d), nor (X) aren't true according to the correspondence theory of truth. These are true only according to the coherence theory of truth (they cohere with Smiths system of beliefs). Let me focus on Smith's probable reasoning:

(1) The president of company assured me that Jones would in the end be selected;

(2) Hence Jones is the man who will get the job;

(3) Jones has boasted his ten coins;

(4) Hence, the man who will get the job has ten coins in his pocket.

Smith, after talking with his boss, "adds" a belief that (X) to his system of beliefs. When Gettier states that (e) is true and (d) is false he uses the correspondence theory of truth. The proposition that (e) is true because of (Z), but Smith doesn't know that (Z), and he thinks that (e) is true because of (d) and (X).

3. Conclusion

According to the correspondence theory of truth Smith didn't know what Gettier had ascribed to him in both stories. Smith's belief that (h) is true cannot be called knowledge by initial definition. This is so because the case does not conform to the condition of definition (knowledge is a justified true belief). Justification and truth for Smith "spring" from the same source – the system of Smith's beliefs. Smith justifies his beliefs by his beliefs. And he thinks that they are all true. He thinks that they are true because they cohere with each other. He thinks that they are true because they warrant each other. Smith justifies one part of his beliefs by the other one. Suppose that Smith can get access beyond his beliefs and use the correspondence theory of truth. Gettier's counterexamples fail at the same time because we cannot call what Gettier uses in his counterexamples knowledge. Justification cannot guarantee the truth. It aims only to give the conditions for putting a believer in the best position for getting the truth (Cf. Zagzebski (1994)). In both cases there is the objective fact which is inaccessible to Smith (that is, the fact that Jones owns no Ford and the fact that Smith is the man who will get the job). Because Smith has no capacity to observe the objective facts he constructs the false beliefs (that is, that Jones owns a Ford and that Jones is the man who will get the job) and thinks that these are true. This situation is the same as with Carla from Reed (2000). The explanation why Smith holds this false beliefs refers to his acceptance of his memory, his boss's promises, etc. Given this last fact, we can see that the explanation of why Smith holds the belief in question is independent of what makes them objectively true. Smith has no ability to discriminate reliable from unreliable belief sources. That makes him too incapable of discriminating what is true from what is false (Cf. Reed (2000)).

In Wittgenstein's later philosophy (for example, in Wittgenstein (1969)) we find some interesting thoughts about certainty, language-games and rule-following. He thinks that the certainty (but not the truth) of our knowledge of the external world is our believing in the propositions which behave according to certain language-games. Namely these propositions, according to Wittgenstein, form our conception of reality. He writes:

> The propositions describing this world-picture might be part of a kind of mythology. And their role is like that of rules of a game; and the game can be learned purely practically, without learning any explicit rules (§95).

He concludes that dispute whether they correspond to the reality becomes nonsense. Such notions as true and false are dissolved in the context of the vast number of language-games. So, we cannot leave behind the frames of our language. To take a proposition as inflexible is to take it as a rule of grammar. We get "bumps" by running our heads up against the limits of language.

Also, when Wittgenstein is philosophizing about foundations of mathematics (in Wittgenstein (1978)), he writes that a proof is a model which shows us a result of constructive procedure. An acceptance of a conclusion is an illustration of our believing in it, so we are following a rule. An acceptance of a proof justification (its sequence) is our believing in rule-following.

It seems that justification is something like rule-following in mathematics. When Smith thinks of false beliefs as true beliefs (here he goes wrong) and infers other true beliefs (that is, makes them justified) there is a cruel necessity for him to take derived beliefs as true. And in this he goes wrong. Because, according to Wittgenstein, a proposition which had been proved by a proof serves as a rule and hence as a paradigm. Smith produces new false propositions from the false ones and uses them as rules. Wittgenstein (in Wittgenstein (1969)) writes:

> The sentence "I can't be making a mistake" is certainly used in practice. But we may question whether it is then to be taken in a perfectly rigorous sense, or is rather a kind of exaggeration which perhaps is used only with a view to persuasion (§669).

And then he remarks:

> I tell them I have just flown there from… They ask me if I might be mistaken. – They have obviously a false impression of how the thing happens. (If I were packed up in a box it would be possible for me to be mistaken about the way I had travelled.) If I simply tell them that I can't be mistaken, that won't perhaps convince them; but it will if I describe the actual procedure to them. Then they will certainly not bring the possibility of a *mistake* into the question. But after all that – even if they trust me – they might believe that I had been dreaming or that *magic* had made me imagine it (§671).

It might be imagined that some propositions, he argues in §96, of the form of empirical propositions, were hardened and functioned as channels for such empirical propositions which were not hardened but fluid; and that this relation altered with time, in that fluid propositions hardened, and hard ones became fluid.

Justification leads us to a correspondence truth only by indirection. There is something accidental here. We use rules of our mythology and justify some beliefs with other beliefs which assume a role of rules of a game. It's nonsense that we can know (according to initial definition) that we *know* something. We *cannot know* that something is a knowledge. A standard definition of knowledge identifies it with "I know" in the sense of "I can't be wrong". But this strikes presumably with the limits of language.

Literature

Gettier, Edmund L. 1963 "Is Justified True Belief Knowledge?", *Analysis*, 23, 121-3.

Reed, Baron 2000 "Accidental Truth and Accidental Justification", *The Philosophical Quarterly*, 50, 57-67.

Russell, Bertrand 1912 *Problems of Philosophy*, Oxford: Oxford University Press.

Wittgenstein, Ludwig 1969 *On Certainty*, Oxford: Basil Blackwell.

Wittgenstein, Ludwig 1978 *Remarks on the Foundations of Mathematics*, Oxford: Basil Blackwell.

Zagzebski, Linda 1994 "The Inescapability of Gettier Problems", *The Philosophical Quarterly*, 44, 65-73.

Email: dogsleg@r66.ru

Wittgenstein's programme of a New Logic

Timm Lampert, Pittsburgh, Pennsylvania, United States

1. Introduction

In his earliest writings, *Notes on Logic* (NL), *Moore Notes* (MN) and *Tractatus logico-philosophicus* (TLP), Wittgenstein calls his conception of logic self-confident "New Logic". He opposes his New Logic to the "Old Logic", which he identifies with the logic of Frege and Russell. From 1912 to 1914 he confronted Russell with his work on New Logic. Soon Russell accepted Wittgenstein as his "master" (Monk (1990), chapter 3). Russell and Whitehead wanted Wittgenstein to work over *Principia Mathematica* (PM) (cf. Pinsent (1990), p. 60). Finally, Russell expected that the elaboration of Wittgenstein's New Logic would displace PM as paradigm of modern logic. This expectation was not fulfilled. The explanation for this is at hand: Wittgenstein's conception of logic could only be realized in propositional logic but not in predicate logic. In fact, no suggestions according proofs of predicate logic can be found in TLP. This seems to confirm the common judgement that Wittgenstein's main contribution to logic consists in the development of truth-tables, while his conception of logic is not able to supply any substantial contribution beyond propositional logic (cf. Black (1964), p. 323, Anscombe (1996), p. 137, cf. also the footnote of the editors in *Cambridge Letters* (CL), p. 52).

Yet, it is not taken into account that Wittgenstein did not think of truth-tables as the proof method of his New Logic but of the so called "ab-notation", a logical notation he worked on intensively in 1913/14. It is this notation he identifies with the "new notation" in opposition to the "old notation" of Frege and Russell (NL, p. 93[1]). The method of truth-tables – "WF-schemata" in Wittgenstein's terminology – was already worked out by Wittgenstein in 1912 (cf. Shosky (1997), p. 20). Contrary to the method of truth-tables, Wittgenstein's intention by developing the ab-notation was to realize his conception of logic in the realm of predicate logic (cf. CL, letter 28, p. 4, against Biggs (1996), p. 27). The question in how far Wittgenstein's New Logic can be realized depends first and foremost on the question in how far his ab-notation is applicable to predicate logic.

Unfortunately, the notebooks from 1913/14 dealing with the ab-notation have not been received (cf. CL, letter 32, p. 58 and Biggs (1996), p. 11). Thus, one has to rely on the scanty remarks in NL, MN, CL from 1913/14. Furthermore, the understanding of the ab-notation even in the realm of propositional logic was hampered by the fact that all received diagrams of the ab-notation were reproduced mistakenly or not even printed in the first editions of NL, MN, CL. In addition to the misjudgement that the method of truth-tables displaced the ab-notation this accounts for the fact that Wittgenstein's ab-notation remained nearly disregarded up to now in the literature. Yet, Wittgenstein did not doubt the validity of the ab-notation for the whole realm of predicate logic. Merely the handling of identity within the ab-notation was an open question for him (cf. CL, letter 30, p. 53). Likewise, he does not confine his understanding of logical proofs to propositional logic in TLP and still speaks of the "Old Logic" in opposition to his "New Logic" (TLP 4.126, 6.125). It was not Wittgenstein's intention to work out in detail his conception of a New Logic in TLP, but he had no doubt on the feasibility of this project. As the editors of CL point out rightly this contra-

dicts Church's theorem of the undecidability of predicate logic (cf. CL, p.52). However, one is unable to judge upon Wittgenstein's programme if one concludes from this that Wittgenstein's programme is doomed to failure. First of all, throughout his life Wittgenstein was critical about metamathematical proofs and their methods – these proofs are not independent of the conception of Old Logic. Furthermore, merits and anomalies of the Wittgensteinian paradigm can only be discussed in a logically and philosophically fruitful manner by elaborating it. This, in turn, presupposes an understanding of its main ideas. In what follows the objective of Wittgenstein's New Logic will be lined out in contrast to the Old Logic. The detailed elaboration of his programme of a New Logic is given in my book "Wittgenstein's New Logic", which works out Wittgenstein's abnotation for first order logic.

2. Old vs. New Logic

In MN, p. 109[5] Wittgenstein describes the "procedure of the old Logic" as follows:

> This is the actual procedure of [the] old Logic: it gives so-called primitive propositions; so-called rules of deduction; and then says that what you get by applying the rules to the propositions is a logical proposition that you have proved.

This is just the common understanding of logical proofs in the sense of derivations within an axiomatic system. Frege's and Russell's systems satisfy this proof conception as well as modern sequence calculi do: A formula is proven by deducing it from the axioms applying derivation rules. Wittgenstein does not deny that logical true formula, tautologies, can be identified by this procedure. Yet, he emphasizes that their logical truth cannot be proven this way. He goes on to say:

> The truth is, it tells you something about the kind of proposition you have got, viz that it can be derived from the first symbols by these rules of combination […].

What is proven by the axiomatic proof procedure is simply the deducibility of the formulae from the axioms. This is not denied within the framework of classical logic either. It is an accepted truism that only by assuming the logical truth of the axioms and the correctness of the derivation rules the logical truth of theorems can be concluded from their deducibility. Not the content of Wittgenstein's remark that proofs within an axiomatic system are in need of a metalogical justification is illuminating but the fact that he opposes his conception of a New Logic to this common understanding of logical proofs. Through his life Wittgenstein opposed to the understanding of logical and mathematical proofs resting on axioms, because one has to rely on some metalogical, intuitive evidence if one does not only want to maintain the deducibility of theorems but their logical or mathematical truth. In PG, p. 297 (cf. TLP 6.1271) he says:

> Logic and mathematics are not *based on* axioms, […]. The idea that they are involves the error of treating the intuitiveness, the self-evidence, of the fundamental propositions as a criterion for correctness in logic.

Axiomatic proofs do not deliver a purely syntactical criterion for logical properties of arbitrary formulae of a formal system. The axioms are taken for granted without a formal proof. They hold an exceptional position within the system, but this position is not justified syntactically – the axioms are formulae within the system and do not differ essentially from other formulae. This can be seen by the fact that there are several correct and complete axiom systems for the same formal system and by the fact that not all axioms have some syntactical feature in common that identifies them as axioms. The common understanding of logical proofs in the sense of derivations from axioms depends on proofs of the logical truth of the axioms and of the correctness and completeness of a calculus relative to some prior given semantics. Such proofs cannot be carried out within formal logic. Thus, the question arises to the metalogical justification of an axiomatic calculus. Such a foundation necessarily exceeds the limitations of admissible evidence in logic. One objective of Wittgenstein's New Logic is to replace axiomatic proof procedures by a proof procedure that is not in need of such a metalogical foundation. In TLP 6.1265f. he says:

> It is always possible to construe logic in such a way that every proposition is its own proof.

> All the propositions of logic are of equal status: it is not the case that some of them are essentially primitive propositions and others essentially derived propositions.

> Every tautology itself shows that it is a tautology.

That logical propositions are "their own proof" or tautologies "show themselves" to be tautologies does not mean that there is no need for proofs in the sense of manipulations of formulae in order to identify tautologies as tautologies. It only means that this can be done by relying solely on the formulae themselves as starting points of the proof instead of relying on axioms. In this respect Wittgenstein was looking for something similar to tableaux procedures such as Beth's or Smullyan's procedure (cf. Beth (1962), Smullyan (1965)). Yet, contrary to these procedures New Logic does not only aim for a procedure in order to identify tautologies but for a procedure applicable to "every proposition", i.e. any predicate formula, in order to identify its truth conditions. In Wittgenstein's conception proofs in the sense of derivations of theorems from axioms are replaced by proofs in the sense of converting formulae to symbols of an ideal notation that allow to identify unambiguously tautologies and, generally, the truth conditions of any formula by the syntactical features of the ideal symbols. Again and again Wittgenstein stresses that one has to identify tautologies "from the symbol alone" (TLP 6.113) or that one can "[recognize] in a suitable notation [...] the formal properties of propositions by mere inspection of the propositions themselves" (TLP 6.122). Axioms, i.e. formulae with an exceptional position within a logical system, are not needed in this conception, because presuming a sufficient notation, which identifies the truth conditions of all formulae likewise, every formula "is its own proof" (TLP 6.1265, cf. 6.127f.): The proof does not consist in a derivation of formulae from formulae of the same system but in a conversion of the formula in the symbols of an ideal notation according to a general procedure wholly depending on the syntax of the initial formula. Put concisely, the proof conceptions can be opposed as follows.

Proof conception of Old Logic:

Axioms $\Rightarrow$ formula

The formula in question marks the end of the proof. It has to be a theorem in order to be provable. Proofs of the truth conditions of formulae not being theorems are not available in this conception.

Proof conception of New Logic:

Any Formula $\Rightarrow$ ideal symbol

The ideal symbol identifies the truth conditions of the initial formula. Wittgenstein exemplifies his proof conception in TLP 6.1203 for propositional formulae by introducing a notation using brackets that is similar to the ab-notation. One might also think of the truth-table method as a well known procedure that realizes this proof conception basically. In case of truth-tables the ideal symbol consists of the assignment of truth values, T and F respectively, below the main sentential connective to the truth values of the propositional variables in the left part of the truth-table. The objective of the ab-notation is to realize such a proof conception for predicate logic.

By the endeavour of Wittgenstein's New Logic it shall be demonstrated by purely logical means that an understanding of logic in the sense of an axiomatic theory, which is not based on purely syntactical grounds, is superfluous. It is not maintained that axiomatic proof systems are mistaken. However, in logic their form is misleading in so far it suggests that logic rests on some truth beyond symbols and their rule-governed manipulation and in so far it evokes problems as the foundation of axioms or the correctness and completeness of the axiomatic system, which, according to Wittgenstein's point of view, should be solved by changing the logical point of view rather than going beyond it. Thus, with the conception of New Logic a certain philosophical point of view concerning the understanding and foundation of logic is at stake. The ambitious objective is to justify stringently a Wittgensteinian understanding of logic by construing a logic system of an alternative form without delivering different logical results, i.e. without identifying truth conditions of formulae that they do not have according to classical logic.

Wittgenstein's proof conception brings forth that syntax and semantic do not fall apart as in classical logic. By the proof procedure the truth conditions of the formulae become obvious. In this respect it provides a semantic in the sense of a theory defining truth conditions of formulae. Thus, it is not in need to be justified by some prior, independent given semantics. This, of course, does not mean that it cannot be compared to classical semantics. Furthermore, it should be demonstrable that both concepts of semantics are compatible, because otherwise not both would concern the same logic. Yet, the truth conditions need not to be identified by some procedure or some considerations external to the syntactical manipulations of the proof procedure itself. Every step in the procedure is a step in clarifying the truth conditions and nothing more can and is to be done than defining the steps explicitly. In consequence, not the question of correspondence of syntax and semantic is in the focus of Wittgenstein's conception but the question how an ideal notation looks like that identifies truth conditions of the formulae unambiguously and how a procedure can be defined in order to convert formulae in the symbols of such an ideal notation.

Wittgenstein's conception differs significantly from the traditional point of view by regarding the syntax of predicate logic as deficient because of the fact that the truth conditions of predicate formulae cannot be identified by relying on its syntactical features. Repeatedly he identifies as the reason of his rejection of the syntax of predicate logic – the "old notation" – that syntactically different formulae might be equivalent. E.g. in NL, p. 102[3] he says (cf. NL, p. 93[1], TLP 5.43):

If p = *not--not--p* etc.; this shows that the traditional method of symbolism is wrong, since it allows a plurality of symbols with the same sense; and thence it follows that, in analyzing such propositions, we must not be guided by Russell's method of symbolizing.

Commonly, the language of predicate logic is regarded as an ideal language in contrast to natural language, because it is set up recursively and it is unambiguous in so far every formula expresses a certain truth function of atomic propositions. However, according to Wittgenstein's point of view this is not sufficient, because identical truth functions can still be expressed differently. In this sense, the syntax of predicate logic shares a deficiency with natural language. The problem is not primarily that signs of different types are equivalent, but that no general syntactical criterion exists to identify equivalent symbols as equivalent (cf. NL, p. 94[3], p. 99[2], p. 101[7]). This gets manifest by considering equivalent formulae differing in several respects, such as the following formulae:

(1) $\exists x_1 \forall x_2 ((Q \land \forall x((\exists y \exists z Ixyz \land \neg Q) \lor (\forall x_3 \exists x_4 Hx_3 x_4 \land \neg Q))) \lor ((\neg Fx_2 \land Gx_1) \lor Hx_2 x_1))$

(2) $\neg \forall y \exists x \neg ((\neg Fx \land Gy \land P) \lor (\neg Fx \land Gy \land \neg P) \lor Hxy)$

(3) $\exists y \forall x Hxy \lor \exists y (\forall x (\neg Fx \lor Hxy) \land Gy)$

According to classical logic it is possible to prove their equivalence by deducing one from the other. However, it is not possible to identify a syntactical feature that (1) to (3) have in common in virtue of that they are equivalent. The fact that the truth conditions cannot be identified by means of the syntax of predicate formulae also becomes evident if one considers non-equivalent formulae: The differences of their truth conditions cannot be identified by syntactic criteria. Moreover, mostly it cannot even been proven syntactically that the formulae are not equivalent.

In the framework of Wittgenstein's New Logic not laying down axiomatic calculi with certain metalogical properties is the first task of logic but solving the equivalence problem.

Equivalence problem: The equivalence problem is the problem to define a mechanical procedure such that the same symbol is assigned to every predicate formula of a class of equivalent formulae and different symbols are assigned to non-equivalent predicate formula in a finite number of steps.

To solve this problem, syntactical differences of equivalent formulae must me minimized systematically.

The symbols assigned to the formulae – in case of the ab-notation the "ab-symbols" – shall identify the truth conditions of predicate formulae. This means that the ab-symbols can be paraphrased by a mechanical procedure such that they denote common features of the models and counter-models of the initial formula. This, in turn, implies the possibility of construing the totality of models and counter-models from the ab-symbol of a formula without reckoning single interpretations. The understanding of logical proofs in the framework of New Logic can be characterized as follows:

Logical Proof: A proof according to the conception of New Logic consists in the application of a mechanical procedure assigning an ab-symbol to a predicate formula identifying its conditions of truth and falsehood unambiguously.

In how far this proof-conception will be realized is, in turn, to be measured against the extent of the solution of the equivalence problem and against the possibility of construing the totality of models and counter-models of a formula given merely its ab-symbol. The complete realization of this proof-conception is the core problem of logic according to the Wittgensteinian view.

In fact, no satisfying answer to the question of the truth conditions of predicate formulae can be put forward in the framework of classical logical. Paraphrases of the formulae identify their truth conditions just as little as the formulae themselves. Derivations are only capable of identifying internal relations between formulae. And in the framework of classical semantics no general descriptions of the models and counter-models of a *predicate* formula can be delivered but only single models and counter-models (cf. Lampert (2006)). Even for subclasses of predicate logic that exceed propositional logic and monadic predicate logic no answer is given to the question of the truth conditions of a predicate formula in terms of a mechanical produced, finite expression explicating the truth conditions of the formula in a satisfying manner. This is not only deficient from the point of view of New Logic but from the perspective of everyone handling with predicate formulae and seeking to understand them. This deficiency should be resolved for as many subclasses of predicate logic as possible. Thus, the project to realize Wittgenstein's programme of a New Logic is motivated by philosophical as well as by logical grounds. And its feasibility should be measured by the question to what extent the elaboration of Wittgenstein's ab-notation for first order logic is able to solve the equivalence problem.

Literature

Anscombe, E. 1996: *An Introduction into Wittgenstein's Tractatus.* Bristol: Thoemmes.

Biggs, M. 1996: *Editing Wittgenstein's 'Notes on Logic'*, Vol. 2. Bergen: Wittgensteinarkivet.

Beth, E. 1962: *Formal Methods.* Dortrecht: Reidel.

Black, M. 1964: *A Companion to Wittgenstein's Tractatus.* Cambridge: Cambridge University Press.

Lampert, T. 2006: "Explaining formulae of first order logic", Ruch Filozoficzny LXIII.2, p. 459-480.

Monk, R. 1990: *Ludwig Wittgenstein.* London: Jonothan Cape.

Pinsent, D. 1990: *A Portrait of Wittgenstein as a Young Man.* Oxford: Blackwell.

Shosky, J. 1997: "Russell's Use of Truth Tables", *Russell: the Journal of the Betrand Russell Archives* 17, p. 11-26.

Smullyan, R. 1995: *First-order logic.* New York: Dover.

Email: lampert@andrew.cmu.edu

The Erosion of Certainty

Silvia Lanzetta, Sydney, Australia

In his "Defence of Common Sense", Moore had bumped into the deadlock of the correct analysis of truisms. He had spotted the key-role of the sense-datum and its non-coincidence with the external object which one claims to exist; other than that, he could only conclude that sense-data have a go-between role for our experience of the world, yet no account of their ultimate nature is available. In "Proof of an External World", he had urged that the external world existed, and had existed independently from our present, and past, perception – the premise of the first proof being the gesture of showing his hands; the premise of the second proof, his trustful, introspective appeal to memory.

In Wittgenstein's opinion, the reason why it makes no sense to doubt of what introspection and sense data tell me is not the truisms' content being evident, rather their belonging to a form of life. The truth-conditions of a proposition do not depend on its mirroring a reality, but on a wider set of propositions within which the proposition fits. Although this does not seem to differ much from what Wittgenstein has been theorizing up to 1950, this is not the case:

> When one says that such and such a proposition can't be proved . . . that does not mean that it can't be derived from other propositions; any proposition can be derived from other propositions. But they may be no more certain than it is itself. (Wittgenstein ²1974, §1)[1]

This foreshadows a picture of knowledge where the verbal dimension is central. A proposition such as 'here is one hand' could be derived from the proposition: 'here is my body', but cannot be known: they both belong to the *back*-ground of knowledge. Knowledge in the proper sense relates to tallying with facts – the objective establishment of truth which links to the possibility of doubt; with hypothetical statements "which, if they turn out to be false, are replaced by others" (OC 402). Ungrounded sureness is instead defined by description, to which "[a]t some point one has to pass from explanation" (OC 189); it is made of norms that logically exclude a mistake, and are born out of practice. The lack of sureness has to do with the possibilities of madness, but not with error. Yet, the border between madness and oddness is not so sharp:

> I might . . . interrogate someone who said that the earth did not exist before his birth . . . . And then it might be that he was contradicting my fundamental attitudes, and . . . *I should put up* with it[2]. (OC 238)

Certainty in the sense of knowledge can be grounded on sense-data and memory, but not certainty in the sense of sureness, because the *assumptions* which sureness is embedded in are unshakable convictions.

This links to the distinction between 'empirical propositions' and 'norms of descriptions' – propositions whose form is empirical, but whose content is logical. Whereas empirical propositions are hypothetical, the norms of description fit into a world-picture, which "is the matter-of-course foundation for" (OC 167) scientific research. "[T]he same proposition may get treated at one time as something to test by experience, at another as a rule of testing" (OC 98). A key question arises: are the procedures to state when a proposition has to be considered empirical or methodological strictly rigorous and merely depending on the different contexts within the same and stable system of beliefs? An example of how a proposition can thus switch is outlined by von Wright:

> Consider . . . the proposition that I have two hands. . . . I have undergone an operation . . . . I wake up and am not . . . clear what has happened . . . . Was . . . one of my hands amputated? I look and see them both. Then my knowledge that I *still* have two hands can be said to rest on 'the evidence of my senses'. But I did not learn that I have two hands by looking at them and counting. (von Wright 1982: 170-171)

In normal circumstances, I should "test my *eyes*" (OC 125), not whether I have two hands. The exceptions within normal circumstances confirm a rule (of trusting one's own senses) which no one has yet ever explicitly been taught. Is *the limit* according to *On Certainty* a Tractarian limit between what can and cannot be said? If so, Moore's objections to skepticism would be a misfired attempt to say what can only be shown; hence Moore's failure to provide a comprehensive analysis of truisms. Yet, Wittgenstein is not satisfied with the opposition between what can and cannot be expressed: "that isn't the end of the matter" (OC 37), he says. The issue has not been concluded once and for all in the Tractarian dichotomy:

> The propositions describing [my picture of the world] might be part of a . . . *mythology*[3] [which] may change back into a state of flux [and] the river-bed of thoughts may shift. (OC 94-95, 97)

Empirical propositions are the water of the river. The limit-propositions form the river-bed. Their grammatical function has been fixed, yet it is not unchangeable. Furthermore, no matter how hard or friable the river-bed is, it can shift: the possibility of change does not simply concern the different use one can make of a proposition according to the different contexts within a fixed frame of reference. The border between the contingent and the unsayable in the *Tractatus* was cogent; in *On Certainty* the unsayable becomes contingent. *Within* a system, there is no possibility of imagining *how* an *unheard-of* shift of the system itself would occur. Wittgenstein says that logic is not an empirical science, but "the same proposition may get treated at one time as something to test by experience, at another as a rule of testing" (OC 98): the border is fuzzy because of the impossibility of a clear-cut definition of the point where a mistake ceases to be improbable and becomes inconceivable. Wittgenstein's disproof of the myth of the rule as an entity other than its praxis has to be distinguished from the prospect of conflicting belief-systems (or even, of the *unheard-of*). Only the first element is present in all of Wittgenstein's later works; both can be found in *On Certainty*. Wittgenstein embraces, within the set of limit-propositions, also propositions that should be fully granted an empirical status. He says: "if Moore says he knows the earth existed [long time before my birth], most of us will grant him [that]" (OC 91); yet, he adds, "why should not a king be brought up in the belief that the world began with him?" (OC 92).

---

[1] Hereafter referred to as OC (abbreviation of "*On Certainty*"), followed by paragraph number.
[2] My emphasis.

[3] my emphasis.

Neither Moore nor the king has telling grounds. There follows, a shift of belief would depend on a shift in the way one looks at the world. Both Moore and Wittgenstein make the mistake of embracing within the set of truisms, among others, statements about the age of the earth. Yet, while this confusion does not affect Moore's epistemology, it leads Wittgenstein to conclude that the main criteria of both endorsing a world-view and all knowledge within it are simplicity, symmetry, and practical convenience; one could build houses even believing that the earth is flat, because this belief has no practical effects relative to their construction. A hypothesis can get assumed as a truism. This is not entirely questionable: there are indeed facts which apparently cannot be explained by science, until the latter is more advanced. An example can be found in Wittgenstein: no one had ever been on the moon in his lifetime; the opposite was for Wittgenstein himself unconceivable. Some propositions which have always been assumed as truisms can indeed become falsifiable. In Wittgenstein's view, nonetheless, if the adults of a tribe claim they have been on the moon in their dreams, and that dreams are the means to get there, we can conclude that it is true that no one has ever been on the moon only *if* we are thinking within our system. Truth is system-related; and this, one may question, for systems get reversed (all main axioms of mathematics standing nonetheless fast) with no need for truth to be culture-related, because science is not confined to simplicity, practicability and symmetry.

Wittgenstein, among the "unshakably fast" (OC 144) elements of a system both includes beliefs of tangible and intangible nature. A distinction thus appears not to be required between a child's belief in God and a child's belief that the earth existed long before he was born. The axis around which the body of my knowledge rotates is fixed not because it is made of "intrinsically obvious" (OC 165) elements, rather what we learn is a "host of interdependent propositions" (OC 274) hard to doubt because they are not isolated, yet related through experience: this is why the probability of subversion is low – the immobility has not much to do with the different (either empirical or grammatical) use one can make of a proposition within a fixed frame of reference. Knowledge relies on "generally accepted axioms" (OC 551) in which one *believes*. Wittgenstein claims that the fundamental contradictions of mathematics do not affect its application (e.g. even if the figure of a square's diagonal cannot be put into a fraction, it can still be applied as an indicator of the diagonal's length). Yet, the key point is that "something must be taught us as a foundation" (OC 449) in order for us to perform actions – no matter if, eventually, "there seems to be no clear boundary between [the cases] where doubt is unreasonable [and others] where it seems logically impossible" (OC 454); therefore, "even when the calculation is . . . fixed for me, this is only a decision for a practical purpose" (OC 49). Similarly, logic has to be seen by looking at the practice of language, and what belongs to logic has the "character of a rule" (OC 494). Yet a rule is defined as emerging from man's animal instinct of survival, not from ratiocination. Whether Wittgenstein considers or not logic and mathematics to be subject to alteration, the axioms of empirical science do not seem to be impervious to paradoxical changes; and because many of those axioms actually belong to mathematics, Wittgenstein seems to be indirectly claiming that no single bit of certainty is invulnerable to revision: "[i]f something *really unheard-of* happened?" (OC 513) that twisted the system, *all* its axioms would be dragged away with it. Wittgenstein is not arguing per absurdum that this cannot occur. He holds, for instance, that some irregularity in the events of nature might occur, so that the law of induction would prove no more valid, yet

one may as well be able to make inferences, although not according to that law. Yet, we do not have the need, or the frame of mind to *think* of the unheard-of. Unthinkable possibilities, therefore, do not contrast the senselessness of doubt *within* our system. This nevertheless does not protect us from the following: "I can't be making a mistake, – but some day, rightly or wrongly, I may think I realize that I was not competent to judge" (OC 645).

Wittgenstein arguments imply that it is hard for conflicting belief-systems to intercommunicate. In one of his parable[4], he takes an airplane to some place whose inhabitants have never heard about the possibility of flying. He explains to them how he flew there, but they respond he may be in error. Wittgenstein thus considers the possibility of convincing them by describing the whole event. What could occur now, he reckons, is that they would admit him not to be mistaken, yet to have dreamt the whole episode or been induced by a magic to that belief. He does not grant these people the possibility of at least believing that he was transported by a magic machine: the only thing that they can be imagined to be able to admit is that it was a dream. The possibility of convincing even once one has found a common language is excluded.

The complexity of one key passage deserves attention:

"I know" has a primitive meaning . . . related to "I see" . . . . "I know" is supposed to express a relation, not between me and the sense of a proposition . . . but between me and a fact. So that the *fact* is taken into my consciousness. (Here is the reason why one wants to say that nothing that goes on in the outer world is really known, but only what happens in the domain of . . . sense-data.) This would give us a picture of knowing as the perception of an outer event through visual rays which project it as it is into the eye and the consciousness. Only then the question arises whether one can be *certain* of this projection. And this picture [shows] how our *imagination* presents knowledge, but not what lies at the bottom . . . . (OC 90)

A misled picture makes one fall into the sceptical trap: if knowledge is a consequence of a projection of a fact operated by my senses, I am led to ask how I can be sure of this projection. A satisfactory answer does not come; it seems, consequently, that one can be sure only of sense-data, but not of what lies at the bottom of our knowing. Wittgenstein is implying that knowledge is ultimately a relation between me and the sense of a proposition: "a proposition … only gets sense from the rest of our procedure of asserting" (OC 153). Only this way doubt will not arise about what lies at the bottom. Knowledge *is* related to sense-data, but any deep belief in this relation to the point of making it the essence of knowledge entails that we are tempted to go beyond them in order to prove the existence of the external world. Sense-data are the indubitable limit, yet so indubitable that the domain of sense-data dissolves into that of language.

One may observe that the procedure of asserting is for Wittgenstein modelled on the practice of every-day action; yet a belief's resistance to change is subordinated to a hermeneutics which makes the distinction between the authority of the human form of life and the one of textbooks feeble. Wittgenstein says that we learn countless things from the authority of adults. Experience is for Wittgenstein not able to disconfirm anything belonging to the ungrounded frame whose propositions characterize "my

---

[4] Cf. OC 671.

interpretation of experience" (OC 145) and cannot therefore be put to test, and should not even be put into *text*. However, the very fact that the frame ultimately "swallows" (OC 143) all empirical consequent beliefs and actions makes even the text prevail on empirics. Everything can potentially fit into an ungrounded frame, as long as it is "removed from traffic" (OC 210). Historiography itself is conceptualized as a language game of meaning ascription to events: although Wittgenstein concurs that it is subordinated to the belief in the existence of the earth at least when the events described occurred, he does not grant any definite border between propositions which cannot be "subject to testing" (OC 162) and the reports of historiography. The propositions contained in textbooks are virtually as incorrigible as Moore's truisms. This does not simply mean that testing must come to an end, at some point, in order not to block research; more profoundly, even Moore's truisms can be reduced to pure text, and every certainty is ultimately verbal; it is, altogether, *story*.

Literature

Moore, George E. 1925 "A defense of common sense", in: Moore, George E. 1959 *Philosophical Papers*, London: Gorge Allen & Unwin Ltd..

Moore, George E. 1939 "Proof of an external world", in: Moore, George E. 1959 *Philosophical Papers*, London: Gorge Allen & Unwin Ltd..

Von Wright, George H. 1982 "Wittgenstein on Certainty, in: von Wright, George H. 1982 *Wittgenstein*, Oxford: Blackwell, 162-182.

Wittgenstein, Ludwig ²1974 *Über Gewissheit,* G. E. M. Anscombe and G. H. von Wright eds., Eng. Tr. by Denis Paul and G. E. M. Anscombe, *On Certainty*, Oxford: Blackwell.

Email: silvialanzetta@libero.it

Wittgenstein and Logical Analysis

Montgomery Link, Boston, Massachusetts, United States

The *Stanford Encyclopedia of Philosophy* says that Wittgenstein is a logical atomist in the *Tractatus.* My position is that logical atomism is inessential within Wittgenstein's philosophy. For him a pellucid logical analysis does not require that elementary arithmetic actually be part of logic. The logical atomist interpretation takes general propositions about elementary arithmetic to depend on logic in the sense of a truth-functional analysis. I argue that in the *Tractatus* the truth-functional analysis and the concept of natural number depend on the operation.

The position that Ludwig Wittgenstein is a logical atomist when he writes the *Tractatus Logico-Philosophicus* has become mainstream in the new millennium, even though it was originally a speculative revision of the traditional interpretation that Wittgenstein is a logicist in the *Tractatus.* The author of the *Stanford Encyclopedia* article, Ian Proops, acknowledges his claim is controversial.

One reason this position remains philosophically controversial even after wide acceptance is that Wittgenstein himself never claimed to be a logical atomist. Logical atomism normally has been thought to be a branch of philosophy developed by Bertrand Russell in the years after the publication of the first volume of the *Principia Mathematica.* Today I shall argue that, from the perspective of the philosophy of mathematics, Wittgenstein could have been a logical atomist only in a derivative sense. I shall sketch what I take to be the central view of logical analysis in the *Tractatus*, and end with the proposition I find evident in that sketch, that logic is an ideal in the *Tractatus*.

*

There are five core tenets of logical atomism, but only one main idea for my purposes. This main idea is to express a generality as a logical product.[1] For example, to express 'All my friends love the ocean' it suffices to express a conjunction of elementary propositions each of which manifests one of my friends liking the ocean. That is, I can write:

Dennis loves the ocean AND Donna loves the ocean AND Genia loves the ocean AND Greg loves the ocean AND Nir loves the ocean AND SO ON.

The conjunction 'AND' is what we would call a "logical constant"; however, in the *Tractatus,* strictly speaking, there are no logical constants (5.4).[2]

Let's look at this point more closely. Wittgenstein reduces the general form of any proposition to the truth-functional calculus specified and determined by the notion of the iteration of an operation. My immediate purpose is to explain that determination. In the *Tractatus,* every non-elementary proposition results from successive applications of the N operator to some elementary propositions, as follows:

$[a, N, N'a]$.

This is the general form of the proposition, a mnemonic device for which is *Anna*: the A is an elementary proposition (or a collection of elementary propositions), the n is a truth-functional operation, and the na is the result of applying n to a. Anna is a variable going proxy for any truth-functional proposition. It gives the variable form of the logical product about my friends loving the ocean, where A is a series of elementary propositions, one for each friend, and n is conjunction.

Anna, a recursive variable providing the general form of the truth-function, appears in the *Tractatus* as

$$\left[\bar{p}, \bar{\xi}, N\left(\bar{\xi}\right) \right] \text{ (6)}.$$

I apologize for putting Anna so formally, but I want you to see what I take Wittgenstein to mean when he writes that an "operation shows itself in a variable" (5.24) by giving the difference and showing how to proceed. Say, e.g., the variable is a, x gives the difference, and $O'x$ shows how to proceed. Then the propositional variable

$$\left[a, x, O'x \right] \text{ (5.2522)}$$

is the formal component of the general form of the *Omega operation* $\Omega'\left(\bar{\eta}\right)$ (6.01). Set $\bar{\eta}$, the variable basis of the Omega operation, to be some series of propositions $\bar{p}$, then

$$\left[\bar{p}, \bar{\xi}, N\left(\bar{\xi}\right) \right] = \left[\bar{\xi}, N\left(\bar{\xi}\right) \right]'\left(\bar{p}\right).$$

This, Wittgenstein writes, "is the most general form of transition from one proposition to another" (6.01). In sum, the interpretation of Wittgenstein as a logical atomist does not violate the interpretative requirement imposed by Brian McGuinness that there be no logical constants only if Anna is provided for by the Omega operation.

The general case is supposed to involve a complete description. A complete description of everything I have written in my pocket notebook includes each of the entries plus the proposition that there are no other entries in my pocket notebook. I've been trying to convince you that the generality of Anna derives from the Omega operation; having exposed the operation as the generator for any logical connection between propositions, I shall take up the question of the logical analysis of generality in mathematics. Previous commentators have all focused on Anna, but my focus is on what is essential to the general form, which, I shall now argue, is the iteration of an operation, the 'AND SO ON' in the logical product about the ocean. In the case of my friends loving the ocean, the entire domain is covered, and generality achieved, in the sense that each name has a fixed interpretation in the calculus.

* *

This requirement is met in the case of the natural numbers

0, 1, 2, …

through the Omega operation, which supplies an explicit and fixed symbolic interpretation to fulfil the concept of

---

[1] *V.* Wittgenstein (1974, p. 268), and for details Link (2005, 4.4).
[2] All parenthetical citations in the main text are to proposition Nos. in the *Tract.*

ordinality. In later writings, for example in the *Philosophical Grammar,* on page 268, Wittgenstein will testify that, when he used the ellipsis in the *Tractatus,* he meant that he had not enumerated all the cases here but that they could be enumerated. To say that a series is *denumerable* is to say that all the members can be put on a single list. Not every series is denumerable, but the *Omega series* is:

$$x, \Omega'x, \Omega'\Omega'x, \ldots (6.02).$$

We can now state the general form of the Omega series:

$$\left[x, \xi, \Omega'\xi \right] = \left[\xi, \Omega'\xi \right]'(x).$$

Anna is an instance of this general form. Actually, truth-functional logic is not the only instance of the Omega operation in the *Tractatus.* Another use is in the analysis of the natural numbers.

How does an operation effectively produce the series of natural numbers? The notion of iteration gives the Omega series. Wittgenstein does not assume the natural numbers, nor that the Omega series is fundamentally mathematical, for that would be anathema to his position. The natural numbers in the *Tractatus* are properties, not of logic, but of the operation. They are marks of mathematical concepts. Let me show you how.

Wittgenstein provides a recursive definition of the natural numbers using these symbolic rules:

$$x = \Omega^{0}{}'x,$$
$$\Omega'\Omega^{\nu}{}'x = \Omega^{\nu+1}{}'x.$$

The identity sign here indicates a purely stipulative assignation. With these stipulations the Omega series can be rewritten as:

$$\Omega^{0}{}'x, \ \Omega^{0+1}{}'x, \ \Omega^{0+1+1}{}'x, \ \ldots$$

Wittgenstein then simplifies the exponents using the following list of stipulations:

0+1=1,

0+1+1=2,

and so on.

This would give

$$\Omega^{0}{}'x, \ \Omega^{1}{}'x, \ \Omega^{2}{}'x, \ \ldots$$

So the natural numbers turn out to be exponents. Let's check to make sure that works. For 0, we have stipulated that the first member of this series is the first member of the Omega series rewritten. Next, we verify the case for any successor ordinal:

$$\Omega^{n+1}{}'x = \Omega'\Omega^{n}{}'x$$
$$= \Omega'\Omega^{\overbrace{0+1+\ldots+1}^{n}}{}'x$$
$$= \Omega'\underbrace{\Omega'\ldots\Omega'}_{n}x.$$

That completes my reconstruction of section 6.02. Wittgenstein forthrightly declares that a natural "number is the exponent of an operation" (6.021). That is how Wittgenstein uses the Omega series to get the natural numbers. The general form of the natural numbers is:

$$\left[0, \xi, \xi+1 \right] = \left[\xi, \xi+1 \right]'(0) \ (6.03).$$

I conclude this stage of the argument with three minor points concerning this analysis. First, truth tables, even the logical propositions themselves, are strictly superfluous (6.1203-6.1221). Second, truth does not apply to the equations of mathematics in the *Tractatus,* for these are pseudo-propositions (6.2). To maintain the consistency of this position requires that there be no dependence on a completed actually infinite series.[3] Third, Wittgenstein does not appeal to mathematical intuition (6.2331).

* * *

The Omega series as Wittgenstein presents it leads to at least these two positive outcomes of his philosophy, which I summarize as slogans: First, that the *a priori* is all analytic; second, that a philosophical analysis of elementary arithmetic does not require a purely conceptual basis in logic. The Omega operation is the characteristic of Wittgenstein's philosophy that marks it as different from the philosophies of Frege and Russell. Logical atomism, if it is to have any significance at all, surely requires a logical analysis of elementary arithmetic. Among the many versions of logicism, the narrowest one, the core logicist position, is the position that elementary arithmetic is part of logic. If we accept this as a minimal case for logicism, then there is not so much to distinguish logicism from logical atomism in terms of Wittgenstein's approach. That suggests a difference in name only. As Juliet says,

a Rose
By any other name would smell as sweet.

Now granting that logical atomism encompasses this much of logicism, I shall complete my argument.

Suppose, for an argument by *reductio ad absurdum,* that Wittgenstein were a minimal logicist in the *Tractatus.* Then the notions of series, of succession, of first element, of next element, of the general laws of addition and multiplication, and of the natural numbers, would all be part of logic. Of course, in the *Tractatus,* addition, multiplication, and the tautology are provided for by the operation. Identity is not. Equations, then, are not part of logic. Wittgenstein cannot have meant that the tautology would explicate the concept of identity, and indeed that is exactly what he says in his letter to Ramsey.[4] Identity is not a logical relation for Wittgenstein. But imagine it were. Such an account would still call for a conceptual analysis of number; Wittgenstein, however, never provides a conceptual basis in logic. Instead, he defines the natural numbers as exponents of an operation.

This is surprisingly close to anthropologism. Wittgenstein's main line can now be summarized. In the *Tractatus* Wittgenstein provides a case to refute logicism, a case in which at least some of elementary arithmetic is perfectly clear, absolutely in order, yet not logicistic.

Let me step back for a moment to consider a separate interpretative question much discussed during the past decade. Wittgenstein features the to and fro of philosophy (6.53), but the only way he can make his case against the logicism of Frege and Russell is by generating a positive and constructive account of (at least some of) elementary arithmetic with no logical concepts in play. I think he accomplishes this under an ideal assumption.

---

[3] *V.* Link (2005) for the argument that Wittgenstein's philosophy is independent of that requirement. For details on logicism and the historical development of the logicist interpretation of the *Tract., v.* Link (2005, chs. 2-3), Frege (1953), and Russell (1903).
[4] TS 206. For details *v.* Link (2005, 3.3) and Ramsey (1925).

The mathematization of logic does not extend the realm of logic on Wittgenstein's view. This I believe sets a major interpretative hurdle for those who plump for Wittgenstein's logical atomism. The philosophical analysis that Wittgenstein actually carries out is logical but there is no basis in logic provided. The logic is to provide only the pure structure, like crystal.

The Omega series, a bare outline of pure form, realizes an ideal for logic, which explains why "logic is transcendental" in the *Tractatus* (6.13). This ideal for Wittgenstein at that time was *sub specie humanitatis,* within the realm of what is human.[†]

Literature

Frege, Gottlob 1953 *The Foundations of Arithmetic: A Logico-Mathematical Enquiry into the Concept of Numbers,* translated by J.L. Austin, second revised edition. Oxford: Blackwell.

Link, M. 2005 "Wittgenstein and Infinity", Ph.D. thesis, Boston Univ.

McGuinness, Brian 2002 "The *Grundgedanke* of the *Tractatus*", chapter 10 of *Approaches to Wittgenstein. Collected Papers.* London and New York: Routledge.

Proops, Ian 2004 "Wittgenstein's Logical Atomism", *Stanford Encyclopedia of Philosophy.* <http://plato.stanford.edu/entries/wittgenstein-atomism/>.

Ramsey, Frank P. 1925 "Foundations of Mathematics'', *Proceedings of the London Mathematical Society* (2), 25, part 5.

Russell, Bertrand 1903 *Principles of Mathematics.* London: Cambridge Univ. Press.

Whitehead, Alfred North, and Bertrand Russell 1910 *Principia Mathematica,* volume 1. Cambridge: Cambridge Univ. Press. 2nd ed, 1925.

Wittgenstein, Ludwig 1922 *Tractatus Logico-Philosophicus,* translated by C.K. Ogden with the assistance of F.P. Ramsey. London: Routledge and Kegan Paul. Corr. ed, 1933.

Wittgenstein, Ludwig 1974 *Philosophical Grammar,* edited by R. Rhees, translated by A. Kenny. Berkeley and Los Angeles: Univ. of California Press.

E-mail: mlink@suffolk.edu

A Digital Turn In Philosophy and Wittgenstein about "Is"

Vladimir Olegovich Lobovikov, Yekaterinburg, Russia

Wittgenstein's remarks about the set of logically different meanings of the word-homonym "is" are very important for adequately understanding a process starting with the philosophy of the digital turn and resulting in a digital turn in philosophy. By the digital turn in philosophy I mean the turn to digital philosophizing. What does the term "digital philosophizing" mean? Below I attempt to clarify the meaning of this term and to show its necessary connection with Wittgenstein's considerations about "is". Initially the turn to digital philosophizing appeared in logic. It resulted in the computer culture of our days. Now this culture is going to widen the sphere of digital philosophizing: not reduce it to logic only. It is relevant to talk about a digital formal ethics, a digital metaphysics, etc. Wittgenstein was one of those analytical philosophers who worked in this prospective direction.

> 3.323. In the language of everyday life it very often happens that the same word signifies in two different ways ... Thus the word "is" appears as the copula, as the sign of equality, as the expression of existence; "to exist" as an intransitive verb like "to go"; "identical" as an adjective ...

> 3.324. Thus there easily arise the most fundamental confusions (of which the whole philosophy is full).

> 3.325. In order to avoid these errors, we must employ a symbolism which excludes them ...

> L. Wittgenstein. *Tractatus logico-philosophicus*

Wittgenstein tried to expand the digital culture of logic to the humanities. Naturally, the reaction was negative. The resistance by traditional philosophers was strong. However, the times are changing: today many philosophers understand that the digital turn is indispensable for the progress of human civilization. In different spheres of human life, digital technologies demonstrated their ability successfully to compete with traditional ones. I guess that, in particular, the digital turn will be fruitful for the development of philosophy since it is a system some parts of which are computable. I talk about only some parts of philosophy because digital and traditional technologies (*analogue* ones) of philosophizing are not absolute opposites, but complements of each other.

If logic is not taken into account (if excluded), then it is true that up to the present time the traditional mechanisms (*analogue* ones) of using and developing philosophy still dominate. The basic characteristics of philosophical systems and of understanding them have an *analogue* character and are regulated by *analogue* methods. Therefore, the quality and precision of philosophizing is determined by the quality and precision of *analogue* philosophical systems represented at the level of natural language. It is evident that the quality and precision of traditional philosophizing is low. Moreover, the functioning and development of traditional philosophy requires long periods of creative work by highly qualified masters, who appear very seldom. The period in history of philosophy since its beginnings to the present time, may be called the epoch of great masters. *Digital* technologies mean the end of this very long epoch. They imply *discreteness* of philosophical discourse. By virtue of this discreteness, the quality and precision of philosophizing become significantly higher than the best achievements of the analogue philosophy discourse. Moreover, the results of digital philosophizing are almost independent from the emergence of rare talents and geniuses, possessing the highest qualifications and realizing themselves by virtue of a very long and complicated process of individual creative work.

The digital technologies of philosophizing represented at the level of artificial languages transform the continuing history of philosophy into a united technological complex, which is available for any user. This means a digital revolution in philosophy. But where is it? Is it taking place today? No. Up to the present day, it does not exist in the actual processes of teaching, studying and investigating philosophy (if logic is not taken into the account). Moreover, the overwhelming majority of philosophers believe that a digital revolution in philosophy is impossible in principle. They require a concrete example of digital philosophizing when they are actually convinced that nobody can show this example. Therefore, the best way to demonstrate the possibility and value of developing and using digital metaphysics is to construct a simple concrete example of it. Below an attempt to constructing such a basic variant of digital metaphysics is submitted.

The mentioned basic system of digital metaphysics is a discrete mathematical simulation of a common basis shared by the metaphysical systems of Parmenides of Elea, Aristotle, Descartes, Spinoza, Leibniz and others. The common basis of these systems abstracted from their contents is simulated below by virtue of a finite, but open (potentially infinite), list of equations of a two-valued algebra of formal axiology. The submitted mathematical representation of metaphysics-as-a-system is based upon the fundamental hypothesis that, in its essence, *metaphysics is formal axiology (theory of value forms).* In particular, metaphysics is a masked theory of moral-legal forms of good and evil (bad). Obviously this is a non-trivial hypothesis. Below, by virtue of the hypothetical-deductive method, I will investigate the set of logical consequences following from the above-formulated non-trivial assumption. One of the most important consequences is the corollary that under some definite conditions it is *necessary* that metaphysical sentences (affirmations about value forms) are considered as evidently either false or senseless (possessing no meaning). It is a fact of the history of philosophy that such treatment of metaphysical sentences is very popular. By virtue of the hypothesis under investigation, normal-people's negative attitude toward metaphysical sentences can be explained in the following way. Usually, people treat metaphysical sentences as empirical ones, which use the logical connective "is". Normal people presuppose that in all possible contexts the word "is" has one and the same meaning, namely, in every sentence of natural language "is" means the logical connective. In this case, properly perceiving metaphysical statements as ones of mentally ill (psychically not normal, crazy) persons is *necessary*.

However, according to Wittgenstein, the word "is" is a homonym. I perfectly agree with the above-cited Wittgenstein remarks about "is". Moreover, I would like to add that in natural language, along with the formal-logical meaning the word, "is" has also a formal-axiological one. In natural language the word "is" may stand for *a formal-*

axiological equivalence relation and, from my point of view, *in the natural language of metaphysics it does stand for the formal-axiological equivalence*. The precise definition of this relation by means of the algebra of formal axiology is submitted below. The mentioned axiological equivalence is a relation between moral-legal evaluation functions (in the strict mathematical meaning of the word "function"). The evaluation functions are considered as axiological meanings of words and word combinations of natural language (especially in metaphysics). From the viewpoint of the hypothesis under investigation, the notions of metaphysics are the evaluation functions (in the mathematical meaning of the word). In the rigoristic (two-valued: "black-and-white") axiology, the domain of values of variables of these functions is the set {g (good), b (bad)} consisting of the two elements. The evaluation functions under investigation take their values from the same set.

For constructing a digital simulation of metaphysics, let us introduce some concepts and symbols of the artificial language of algebra of two-valued axiology. Let the letters *a, c* mean *axiological forms* of metaphysical things (free activities or subjects or states of affairs) possessing one of the two *axiological values*: either *g* (good), or *b* (bad).

Glossary for part 1 of the table below: Symbol *Ba* stands for unary axiological operation «*being* (existence) of *a*». Symbol *Ua* means evaluation function «*unity* of *a*». *Na* means «*non-being* of *a*». *Va* stands for «*set* of *a*». *La* — «*simplicity* of *a*». *Wa* — «*complexity* of *a*». *Sa* stands for «*non-change* (*immutability, non-movement*) of *a*». *Ma* — «*change* (*movement*) of *a*». *Ca* — «*completeness* of *a*». *Pa* — «*emptiness* of *a*». *Ya* — «*consistency* (non-contradictoriness) of *a*». *Za* — «*inconsistency* (contradictoriness) of *a*». *Ha* — «*whole* (ness of) *a*».

Glossary for the part 2 of the below table: *Xa* — «*part of a*». *Aa* — «*general, universal* (ity of) *a*». *Ta* — «*particular* (ity of) *a*». *Ga* — «*uniqueness, singularity* of *a*». *Ka* — «*knowledge* (episteme) of a̲». *Da* — «*opinion* (doxa) about a̲». *Ra* — «*rational* (ity of) *a*». *Fa* — «*feeling a*». *Ja* — «*illusion* (mistake) of a̲». *Ia* — «*ideal* (ness of), *perfect* (ness of) *a*». *Qa* — «*real* (reality of) *a*». *Oa* — «*optimal* (ness of) *a*». *N·a* — «*opposite of a*». The evaluation-functional sense of the above-mentioned axiological operations is defined by the following table, which consists of two parts.

(Part 1)

a	Ba	Ua	Na	Va	La	Wa	Sa
g	g	g	b	b	g	b	g
b	b	b	g	g	b	g	b

a	Ma	Ca	Pa	Ya	Za	Ha	
g	b	g	b	g	b	g	
b	g	b	g	b	g	b	

(Part 2)

a	Xa	Aa	Ta	Ga	Ka	Da	Ra
g	b	g	b	g	g	b	g
b	g	b	g	b	b	g	b

a	Fa	Ja	Ia	Qa	Oa	N*a	
g	b	b	g	g	g	b	
b	g	g	b	b	b	g	

Let the symbol «*a=+=c*» stand for the relation: «the axiological form *a*, is *formally-axiologically equivalent* to the axiological form *c*». In the algebra under review, *metaphysical objects are called formally-axiologically equivalent if and only if their axiological forms are formally-axiologically equivalent*. By definition, *an axiological form a is called formally-axiologically equivalent to an axiological form c if and only if these axiological forms (a and c) acquire identical axiological values (g or b) under any possible combination of axiological values of the variables occurring in these forms.*

It is important to emphasize that in natural language the words "is", "means", "consequently", etc. are homonyms: they may stand not only for the corresponding notions of formal logic, but also for the above-defined formal axiology notion «*a=+=c*». This statement is supported by Wittgenstein's observation that "is" may mean not only *the logic connective* (which is not symmetrical; the conversion is not logical), but also *an identity* relation, which is symmetrical (Wittgenstein, P. 55). Thus the words "is", "means", etc. can produce confusions at the intersection of formal logic and formal axiology. Mixing the two essentially different meanings of the words can cause confusions.

By means of the above-defined algebra, it is easy to demonstrate the following *formal-axiological equivalences*. (In the below list of equations, the word "is" stands for the above-defined relation "=+=".)

1) Ba=+=Ua: being is unity.

2) Ba=+=NVa: being is non-being of set.

3) Ba=+=La: being is simplicity.

4) Ba=+=NWa: being is non-being of complexity.

5) Ba=+=Sa: being is non-change.

6) Ba=+=NMa: being is non-being of movement.

7) Ba=+=Ca: being is completeness.

8) Ba=+=NPa: being is non-being of emptiness.

9) Ba=+=Ya: being is consistency.

10) Ba=+=NZa: being is non-being of contradiction.

11) Ba=+=Ha: being is wholeness.

12) Ba=+=NXa: being is non-being of parts.

13) Ba=+=Aa: being is universality.

14) Ba=+=NTa: being is non-being of particularity.

15) Ba=+=Ga: being is uniqueness (singularity).

The conjunction of the above formal-axiological equations is a mathematical simulation of the main metaphysical ontological tenets of Parmenides of Elea. Some epistemo-

logical tenets of his metaphysics are represented by the following *formal-axiological equivalences*:

16) Ka=+=RKa: knowledge (episteme) is rational knowledge (reason).

17) Fa=+=Ja: feeling is illusion (mistake).

18) Ka=+=NJa: knowledge (episteme) means non-being of mistakes.

19) Fa=+=NRKa: feeling means non-being of rational knowledge.

20) RKa=+=N˙Fa: reason is opposite to feeling.

21) Ka=+=KBa: knowledge (episteme) is knowledge of existence.

22) Fa=+=Da: feeling is an opinion (doxa).

23) Da=+=NKa: opinion is non-existence of knowledge.

24) Ka=+=N˙Da: knowledge (episteme) is opposite to opinion (doxa).

25) Ma=+=Ja=+=Fa: movement is illusion (feeling).

26) Va=+=Ja=+=Fa: set is illusion (feeling).

27) Wa=+=Ja=+=Fa: complexity is illusion (feeling).

28) Pa=+=Ja=+=Fa: emptiness is illusion.

29) Na=+=Ja=+=Fa: non-being is illusion.

30) Fa=+=Na: feeling is non-being.

31) Ka=+=NZa: knowledge is non-being of contradiction.

32) Ka=+=CKa: knowledge is complete knowledge.

Wittgenstein's philosophical ideas are in direct opposition to the above-listed system of metaphysical tenets (of Pythagoras, Parmenides, Plato, etc.) simulated by means of the above-defined algebra. However, in spite of the manifest opposition of Wittgenstein's linguistic empiricism to rationalistic metaphysics, his critical remarks appear important for explicating, explaining and understanding the tenets of rationalistic metaphysics. Why? Let us answer this question by virtue of investigating the mathematical simulation of metaphysics. For this aim, let us list below some formal-axiological equivalences representing the rationalistic metaphysics of facts, values, and norms.

39) Ia=+=Qa: ideal is real.

40) Qa=+=Ia: real is ideal.

41) Oa=+=Qa: optimal is real.

42) Qa=+=Oa: real is optimal.

Pondering over these equivalences, one naturally gets an impression that from the common sense viewpoint they are paradoxical (even crazy!). For ordinary people possessing mental health, the above equations seem to be either evidently false propositions or combinations of words making no sense. Therefore it is not a surprise that during the history of philosophy these equivalences were sharply criticized. For instance, Voltaire used to criticize Leibniz's optimistic equations # 41-42. However these equations are not specific properties of only Leibniz's philosophy, but universal and necessary properties of any rationalistic (anti-empirical) metaphysics. Thus there are too many "crazy" persons among prominent philosophers: all those

who are not empiricist-minded thinkers ought to be evaluated as "crazy" ones. Perhaps this is a too strong statement. Hence, it is sound to investigate a hypothesis that Voltaire's attempt to make a fool of Leibniz is based upon a naturally concealed linguistic blunder to be discovered and eliminated. Here Wittgenstein's idea of the indispensability of language therapy is perfectly relevant. I believe that the particular case of the linguistic fallacy underlying Voltaire's controversy with Leibniz is an exemplification of a more universal and fundamental linguistic fallacy of chaotically mixing and absolutely identifying *metaphysical* (=formal-axiological) and *scientific* (=formal-logical-and-empirical) aspects of research in the humanities. Discovering and eliminating this linguistic blunder by using the artificial language of formal axiology is the main goal of the present paper. I consider that this goal can be reached by virtue of combining "Hume's Guillotine" with Wittgenstein's philosophy of ordinary language. Such combinined results are found in the following explication of the principle of autonomy of facts and values.

Let *Ea* stand for an act of informing (true or false affirming) that *a* takes place in reality. The above-said (about "=+=" and the formal-logical connectives) may be formulated as the following rule A—D. (A) From the truth of *a*=+=*c* it does not follow logically that the logical equivalence of *Ea* and *Ec* is true. (B) From the truth of the logical equivalence of *Ea* and *Ec* it does not follow logically that *a*=+=*c* is true. (C) From the truth of *a*=+=*c* it does not follow logically that either (*Ea* logically entails *Ec*), or (*Ec* logically entails *Ea*) is true. (D) From the fact that either (*Ea* logically entails *Ec*), or (*Ec* logically entails *Ea*) is true, it does not follow logically that *a*=+=*c* is true. This rule is an effective remedy for the impression that metaphysical sentences are symptoms of illness. To produce this remedy, Wittgenstein's observations about "is" are indispensable.

The above submitted discrete mathematical simulation of traditional metaphysics clarifies the meaning of the term "digital philosophizing". This term stands for making *discrete* philosophical statements – metaphysical *equations* (formal-axiological *equivalences*) – by means of *precise calculating compositions of discrete evaluation functions* at the level of appropriate artificial language instead of the traditional generation of texts by means of natural language. The term "analogue (traditional) philosophizing" stands for making *approximate* philosophical statements about *analogies among continual evaluation systems* at the level of natural language. For instance, in digital philosophy, equations 41, 42 representing G.W. Leibniz's optimism are results of comparing the table definition of the function Q (real) with the table definition of the function O (optimal).This comparison gives the famous statement of G.W. Leibniz. To recognize the difference between this (digital) type of philosophizing with a traditional one, it is relevant to look through the long text of Leibniz's "Theodicy" where he has established and elaborated his optimism by means of traditional philosophizing.

Thus, in brief, "*analogue* (traditional) philosophy" deals with *vague analogies* among *continual evaluation* functions. On the contrary, "digital phylosophy" deals with *exact identities (equivalences)* among *discrete evaluation* functions. (The word "digital" is used because 0 and 1 are implied: the value "bad" may be replaced by 0 and the value "good" – by 1. Hence in the digital metaphysics it is relevant to use digital technology which is analogous to the one used in logic. I mean the technology of computing truth-tables for establishing logic equivalences.)

Literature

Wittgenstein, L. 1949 *Tractatus logico-philosophicus*, London: Routledge and K. Paul.

vlobovikov@mail.ru

Wikiwebs für Kommunikationsprozesse

Michael Luger / Andrea Adelsburg / Daniel Kuby / Daniel Schmid, Wien, Österreich

Wikiwebs

Wikiwebs sind einfach einzusetzen. Wikiwebsoftware gibt es in mehreren Versionen als Freie Software bzw. Open Source. Deren Installation ist meist nicht aufwendig. Eventuell kann man auch ein bestehendes Wiki mitbenutzen. Einer Anwenderin (m/w) sollte man in 10 Minuten erklären können, wie sie Inhalte in ein Wiki schreiben kann. Die meisten kennen Wikis ohnedies schon von der Wikipedia her.

So einfach ist es aber möglicherweise doch nicht. Inhalte kommen – technisch gesehen – einfach in ein Wikiweb hinein. Aber wie strukturiert man sie? Wie organisiert man den Prozess ihrer Entwicklung? Wikis machen keine Strukturvorgaben. Darin unterscheiden sie sich von anderen Möglichkeiten Inhalte ins Web zu bringen, wie z.B. Kontentmanagementsystemen oder Forensoftware. Wie weit kann man sich was Struktur, Entwicklungsprozesse, und allgemein den konzeptuellen Hintergrund von Wikis betrifft, an verbreiteten Wiki-Verwendungen, vor allem der Wikipedia, orientieren? In dieser Hinsicht ist Vorsicht geboten. Es sei denn, man möchte an einer Enzyklopädie oder ähnlichem arbeiten.

Die Ausdrücke "Wikiweb" bzw. "Wiki" bezeichnen eine Art von Software, die in verschiedenen technischen Implementierungen realisiert ist, welche sich untereinander in einigen Details unterscheiden. Allen gemeinsam ist, dass mit einem Wikiweb Inhalte im Internet zugänglich gemacht, und diese direkt im Wikiweb erstellt und geändert werden können. D.h. Autorinnen (m/w) benötigen neben dem Web-Browser keine weitere Software und die Inhalte sind vollständig im Web abgespeichert.

Änderungen von Inhalten in einem Wiki können über eine Anzeige der zuletzt geänderten Seiten und über eine Anzeige der Differenzen zwischen verschiedenen Versionen einer Seite verfolgt werden. Damit wird kontinuierliches Publizieren von Inhalten ermöglicht. Dadurch, dass Inhalte direkt im Web erstellt und geändert werden können, und dadurch, dass Änderungen anderer verfolgt werden können und transparent bleiben, unterstützen Wikiwebs das gemeinsame Schreiben von mehreren Autorinnen (m/w) am selben Text.

Kommunikationsorientierung

Auf diesen Features bauen einige etablierte Verwendungsweisen von Wikiwebs auf. Dabei entstehen Texte, bei denen die Beteiligung mehrerer Autoren (m/w) nicht mehr erkennbar ist. Ein Musterbeispiel dafür ist die Wikipedia, die freie Internet-Enzyklopädie.

Nicht in allen Wiki-Verwendungssituationen macht diese Vorgangsweise Sinn. Sie geht von einem gemeinsamen Konsens als Zielvorgabe aus und basiert auf einem Prozess-Konzept, bei dem Einzeländerungen, die im Widerspruch zur Ausgangsversion des Textes stehen, ein Bestandteil in einem Ausgleichsprozess und ein Schritt zu einem gemeinsamen Konsens sind. In Situationen, in denen Konsens nicht angestrebt, nicht zu erwarten oder zumindest fraglich ist, kann es unhöflich oder unproduktiv sein, einen anderen Standpunkt einfach zu überschreiben. Wenn dieselbe Stelle immer wieder auf dieselbe Weise hin

und her geändert wird, wird sich auch in Summe kein Konsens einstellen.

Auf dem Weg zu einem Konsens liegen gebräuchlicherweise auch weitere Anforderungen, wie das Austauschen von Argumenten. U.a. dafür steht in der Wikipedia zu jedem Artikel eine Diskussionsseite zur Verfügung. Die räumliche Trennung zwischen Inhalten und dazugehörigen Argumenten, oder Reaktionen darauf, erschwert allerdings die Zuordnung beträchtlich. Dies kann zusammen mit der Fokussierung auf den Inhalt, den Ergebnis-Text, bei anderen Wiki-Einsatzsituationen nicht möglich oder nicht sinnvoll sein. Dort kann es mehr Sinn machen, Inhaltstext und die damit zusammenhängende Kommunikation nicht zu trennen, sondern parallel Raum für Inhalte, ihre Diskussion, ihre Argumentationsgeschichte und sich gegenüber positionierende divergierende Standpunkte zu haben.

Damit verbunden ist von Fall zu Fall zu entscheiden, ob Beiträge einer Person oder einer Position zuordenbar bleiben oder im Chor aufgehen. Das hängt nicht mit einem bürgerlichen Autoren-Konzept zusammen, sondern damit, dass zu einem Diskurs identifizierbare Diskurspartner (m/w) gehören. Manche Äußerungen lassen sich ohne Zuordnung zu einer Person oder zu einer Position einfach nicht verstehen. Positionen können in diesem Zusammenhang Positionen von beteiligten Personen oder Personengruppen sein, verschiedene Positionen die von denselben beteiligten Personen eingenommen werden oder wechselnde Positionen in einer explorativen Phase oder einem Entwicklungsprozess.

Das Ergebnis eines Arbeitsprozesses kann dann sein, dass – eventuell partielle – gemeinsame Standpunkte entstanden sind, Vorraussetzungen transparent gemacht worden sind, Argumente ihren Gegenargumenten gegenübergestellt wurden, so dass sie möglichst nicht aneinander vorbeigehen. Eventuell können in einer kommunikationsorientierten Umgebung Missverständnisse leichter ausgeräumt und verschiedene Verwendungen von Begriffen in einer gemeinsamen Verwendungspraxis angeglichen werden.

Strukturierungsfeatures

Um kommunikationsorientierte Wiki-Verwendungssituationen besser unterstützen zu können, haben wir technische Wiki-Erweiterungen entwickelt, mit denen sich Textabschnitte logisch kennzeichnen lassen. Damit können etwa Textabschnitte, die Personen oder Positionen zugeordnet sind, von Bereichen, für die alle gemeinsam verantwortlich sind, unterschieden werden.

Textabschnitte können auf eine einheitliche Weise abhängig von ihrer logischen Zuordnung zu Autoren (m/w) oder Textarten optisch verschieden dargestellt werden, ohne dass sich der Benutzer (m/w) direkt mit Design-Fragen oder technischen Angaben (z.B. Html-Code) beschäftigen muss. Damit bleibt die mit der Wiki-Konzeption verbundene Fokussierung auf den Inhalt, statt auf die Darstellung, erhalten. Optische Attribute sind z.T. autorenabhängig konfigurierbar, damit z.B. Beiträge einer Autorin (m/w) durchgehend mit einer bestimmten Farbe gekennzeichnet sind.

Damit lässt sich auch die Möglichkeit, Abschnitte ein- und ausklappen zu können – ein Feature, das man etwa von mancher Forensoftware kennt – in Wikis einsetzten. Zusätze (wie z.B. Kommentare) können so in einen umgebenden Text integriert werden, ohne dessen Textfluss zu stören. Der Leserin (m/w) bleibt überlassen, ob Zusätze eingeklappt und so der umgebende Text ohne Unterbrechung lesbar ist, oder ob diese ausgeklappt und somit ebenfalls zu lesen sind.

Diese technischen Möglichkeiten können, über die Strukturierung von Diskursen hinaus, allgemein zur optischen Strukturierung von Wikiseiten verwendet werden.

Die folgenden Bildschirmausdrucke zeigen zur Illustration Situationen aus der Entwicklung dieses Artikels. Dabei war ein Prototyp der im Text beschriebenen technischen Strukturierungsfeatures im Einsatz. Zuerst ein Ausschnitt des Artikeltextes der von Kommentaren umgeben ist:

Wenn man den Text nicht kennt, bietet das ein eher chaotisches Bild. Nachdem alle Kommentare eingeklappt wurden, wird der eigentliche Artikel gut sichtbar:

Hier die Ansicht des selben Ausschnittes beim Bearbeiten des Textes:

In dieser vorläufigen Variante des Wikimarkups gibt "comment" die Textart an, rechts davon steht der Benutzername. Der Markup wird noch überarbeitet, u.a. um Kommentare in Kommentaren zu unterstützen. Auch die Anzeige der Textabschnitte wird noch überarbeitet. Es soll auch möglich sein, Einfügungen vollständig auszublenden.

Forensoftware?

Warum dann nicht gleich Forensoftware verwenden oder Foren in Wikis als Zusatz integrieren, statt nur bestimmte auch in Foren verwendete technische Strukturierungsmöglichkeiten in ein Wiki integrieren?

Abgesehen von der oben angesprochenen, damit verbundenen und in manchen Verwendungssituationen problematischen Trennung von Kontent und Diskussion, ist in Foren eine Restrukturierung von angefallenem Material nicht vorgesehen. Nach der Konzeption von Foren wird Ordnung in das Gewirr von eingehenden Stimmen gebracht, indem Beiträge eindeutig einzelnen Teilnehmern (m/w) und Zeitpunkten zugeordnet werden und nachträglich im Wesentlichen nicht mehr verändert werden können. Im Unterschied zur Möglichkeit, in einem Wiki bestimmte technische Strukturierungsfeatures zu nutzen, handelt es sich bei Forensystemen um die Vorgabe einer Struktur. Das Eine kann von Fall zu Fall flexibel verwendet werden. Ihre Korrektheit und Sinnhaftigkeit wird von der Wiki-Community gewährleistet, sofern sie funktioniert. Das Andere wird von der Software sichergestellt, unabhängig davon, ob es in bestimmten Situationen Sinn macht oder nicht. So kann etwa in einem Wiki eine Änderung im Beitrag einer anderen Teilnehmerin (m/w) ein übersichtlicheres Resultat bringen als ein zusätzlicher, sich am Ende einer Reihe von folgenden Beiträgen einreihender Beitrag.

Eine Diskussion in einem Forensystem wird schnell unübersichtlich, die Liste von neuen Beiträgen und Antworten darauf immer länger, eventuell entwickeln sich unterschiedliche Threads in verschiedene Richtungen. Wenn am Anfang der Diskussion eine Frage stand, mag sich eine Antwort gefunden haben. Nur in welchem Beitrag, in welchem Thread ist diese zu finden? Auch Lösungen, wie Ratings für Beiträge, sind da nur eingeschränkt hilfreich. Eigentlich funktioniert nur eins: Jemand schreibt eine Zusammenfassung. Diese dürfte dann nicht im Forum veröffentlicht werden, sondern außerhalb, z.B. als Artikel in einem CMS. Soll die Diskussion fortgesetzt werden, müsste eigentlich das erste Forum vor dem Erstellen der Zusammenfassung geschlossen werden, und danach ein neues - basierend auf dem Zusammenfassungsartikel - gestartet werden.

In einem Wiki könnte man sich so einen Ablauf kontinuierlich vorstellen. Diskussionsbereiche, die obsolet ge-

worden sind, können nach hinten in Archivseiten verschoben werden und die bereinigte Diskussion wieder übersichtlicher werden lassen. Diskussionen, die unübersichtlich geworden sind, können auf mehrere Seiten aufgeteilt werden. Laufende Diskussionen können in einem Rahmentext mit einer Einführung und einer Zusammenfassung des aktuellen Standes versehen werden. Diskussionsbeiträge können in den Rahmentext übernommen werden. Diskussionssequenzen können kommentiert und bereinigt werden und einen neuen Rahmentext bilden.

Wenn allerdings in einer Diskussion in einem Wiki die erforderliche laufende Restrukturierung entfällt und notwendige Konventionen nicht eingehalten werden, kann das Ausmaß an Unübersichtlichkeit und Chaos das in Forensystemen erreichbare noch um einiges übertreffen. In vielen Verwendungssituationen wird das nicht gehen. Diskussionen in Wikis machen Forensysteme nicht obsolet. Es geht darum, in spezifischen Verwendungssituationen unnötige Strukturvorgaben nicht in Kauf nehmen zu müssen.

Literaturangabe

zum Projekt:

http://edit.philo.at - das Wiki dieses Projektes

http://timaios.philo.at/wiki - aus dem Projektumfeld

http://moinmoin.wikiwikiweb.de - die Wikisoftware, die für dieses Projekt verwendet wurde

zu Wikis:

http://de.wikipedia.org/wiki/Wiki

http://en.wikipedia.org/wiki/Wiki

http://c2.com/cgi/wiki?WhyWikiWorks

http://c2.com/cgi/wiki?WhyDoesntWikiDoHtml

zur Wikipedia:

http://de.wikipedia.org/wiki/Wikipedia:über_Wikipedia

http://de.wikipedia.org/wiki/Wikipedia:Autorenportal

Email: michael.luger@univie.ac.at /
andrea.adelsburg@univie.ac.at /
kdaniel@libero.it /
daniel@io.philo.at

Farewell to the Resolute Reading of the *Tractatus*?

Tuomas William Manninen, Iowa City, Iowa, United States

In recent years, new interpretations on the works of Frege and Russell have emerged, challenging the received view on their respective goals. Because Wittgenstein acknowledges the influence from Frege *and* Russell in the *Tractatus*, it stands to reason that the changes in the former are reflected in the latter. Regrettably, the focus of such *Tractatus*-interpretations has been partisan. In what follows, I will delineate and defend a bipartisan interpretation of the *Tractatus*. As an upshot, I challenge the motivation behind the resolute reading of the *Tractatus*.

First, the key for deciding the extent of Frege's and Russell's respective influence on the *Tractatus* can be found in Wittgenstein's pre-*Tractatus* writings. Warren Goldfarb, having investigated these, argues that

> [a]lthough one sees a significant amount of concern with Frege, there is little evidence of a full appreciation of Frege's views, and no evidence of Wittgenstein working through those views from within. Rather, the basic framework and the basic stance are thoroughly inherited from Russell; and the working through them, from within […] is visible (Goldfarb 2002, 197).

Even if this evidence suggests that Russell was the chief influence on the *Tractatus*, we cannot categorically dismiss Frege. The picture before us suggests that *Tractatus* was a Russellian project, complemented by Fregean elements conspicuously absent from Russell's works (such as the notion of elucidation).

Given this, what exactly was Russell's project that Wittgenstein inherited? Russell answers this in the following:

> The adoption of scientific method in philosophy […] compels us to abandon the hope of solving many of the more ambitious and humanly interesting problems of traditional philosophy. Some of these it relegates […] to special sciences, others it shows to be such as our capacities are essentially incapable of solving. But there remains a large number of the recognized problems of philosophy in regard to which the method advocated gives all those advantages of division into distinct questions, of tentative, partial, and progressive advance (Russell 1914/1974, 118-119).

So how are we to understand Russell's 'scientific method of philosophy'? According to Gregory Landini, this is, essentially, an eliminativistic programme. Commonly, Russell's *Lectures on Logical Atomism* is regarded as the paradigm for his early philosophy. But using the lectures as a paradigm for early Russell is not only anachronistic but also misleading. Instead, Landini turns to Russell's earlier, oft-neglected works. Using Russell's substitutional theory of 1905/06 as the source, a strikingly different paradigm, accentuating the eliminativism of Russell's philosophy emerges. An example of this method is found in Russell's 1905 paper "On 'Insolubilia' and their Solution by Symbolic Logic", which discusses different approaches to resolve the problems with class theories, and advocates abandoning classes from ontology as a solution to the paradox of classes. Although Russell recognizes the inherent difficulty in carrying out the task, he contends that his substitutional theory can accomplish this. This shows that Russell's approach is not reductivistic but eliminativistic: classes are not *reduced* into other entities, but they are *eliminated* from ontology. By employing the substitutional theory, Russell reconstructs class structures (those deemed worth preserving) using propositions, avoiding ontological commitment to classes as entities. Landini summarizes Russell's method as follows:

> Russell's logical atomism was precisely a conception of philosophy as eliminativistic analysis, reconceptualization, and reconstruction. The ontology of an old theory is abandoned (or obviated). Only structures of the old theory are recovered (when possible). […] The method advocates a form of structural realism, for it *retains* only the structure given by the laws of the old ontological framework (just as Maxwell's equations for electromagnetic waves in an aether are retained in Einstein's no-aether theory of relativity) (Landini 2003, 115).

Although this overview is brief, it suffices for grasping the essence of Russell's eliminativistic method. As for Russell's influence on Wittgenstein, it is obvious that the eliminativism should be acknowledged. But what is its role in the *Tractatus*? A close reading of the *Tractatus* shows that it is written in the spirit of Russell's philosophy:

> Wittgenstein was Russell's protégé, […] enthralled by the many successes of Russell's eliminativistic programme, which made logical analysis, followed by logical synthesis (construction), the essential task of philosophy. In reading the *Tractatus*, it is essential to keep in mind that Wittgenstein *accepted* Russell's eliminativism as part of his own programme (Landini 2003, 118).

Now, what about the Fregean elements of the *Tractatus*? To understand these, I will turn to James Conant's interpretation of the notion of 'elucidation' that occurs both in Frege's and Wittgenstein's works. To properly understand 'elucidation', we need to recourse to Frege's *Begriffschrift*, a formula language for the expression of pure thought, and distinct from ordinary language; the relation of these two is illustrated by comparing the latter to a microscope and the former to the eye. Yet even if the *Begriffschrift* helps in uncovering the illusions due to ordinary language, it cannot do without the help from ordinary language. The primitive notions of a theory are not susceptible to formal definitions within that theory; they must be introduced by elucidations in ordinary language. These in turn cannot be translated into the *Begriffschrift*. For the elucidations to succeed, they must be understood as transitional; they must be understood as nonsensical when judged by the standards of the *Begriffschrift*. Conant applies this point to Wittgenstein's *Tractatus* and, at first, Wittgenstein's elucidations seem to be akin to Frege's: they are elucidatory nonsense, purporting to *show* something that cannot be *said* (Conant 2000, 177). Conant argues that this is a pervasive illusion. The *Tractatus* invites the reader to approach it as she would approach any other philosophical text. But this leads the reader to the recognition that the procedure she has followed dissolves under its own weight. The philosophical problems the reader (mis)took herself to be engaging now dissolve, since they were due to the illusion that they can be framed in language. For Conant, the difference between Frege and Wittgenstein is that

[t]he aim of Fregean elucidation is to help us to understand the principles of construction which underlie his *Begriffschrift*. The mark of our having grasped his elucidations is that we have mastered his symbolism and are able properly to use it to express thoughts. Frege's elucidatory "propositions" cannot be expressed in *Begriffschrift*, but the logical distinctions which they attempt to convey [...] show themselves through the difference in the signs of the *Begriffschrift*. […] The only "insight" that a Tractarian elucidation imparts, in the end, is one about the reader himself: that he is prone to such illusions of thought. The assumption underlying Tractarian elucidation is that the only way to free oneself from such illusions is to fully enter into them and explore them from the inside (Conant 2000, 195; 197).

Despite its allure, Conant's interpretation is problematic, not the least because he summarily overlooks Russell's contributions to the *Tractatus*.

Now we face questions about the success of Wittgenstein's Russellian programme. Landini interprets this as follows:

Tractatus was a handbook of constructive criticisms and preliminary ideas toward the perfection and completion of Russell's eliminativistic program for a new philosophy of logical form (Landini 2003, 121).

The point is that Wittgenstein's goal in the *Tractatus* was merely to delineate how the Russellian eliminativism could be perfected. The system he outlines does not amount to a full-fledged theory, and it is questionable whether Wittgenstein ever hoped to complete this task. However, Wittgenstein himself never completed this task. After returning to academic philosophy in 1929, Wittgenstein began to change his mind on what his earlier work could amount to. In the preface to the *Philosophical Investigations* he writes: "Since beginning to occupy myself with philosophy again […] I have been forced to recognize grave mistakes in what I wrote in that first book" (Wittgenstein 1958/1999, x). Although Wittgenstein admits to flaws in his earlier work, he does not completely abandon it. Neither does he maintain that *only* his later work is of any worth; some aspects of Wittgenstein's philosophy remain constant, and the early works contain germs of the views which are not fully developed until his later works.

Now, interpreting the *Tractatus* as an attempt to perfect Russell's eliminativist programme gives a decisive argument against the resolute reading of the *Tractatus*. In fact, the need for the resolute reading dissolves. As the resolute reading is promoted both as a way of making sense of the more cryptic remarks in the *Tractatus*, and as a way of finding continuities between Wittgenstein's earlier and later works, this consequence is of utmost importance.

A crucial problem in *Tractatus*-interpretations is reconciling the 'frame' of the book (the Preface, plus sections 6.53 through 7) with its body. The problem emerges from considering section 6.54 alone:

My propositions elucidate in the following way: anyone who understands me eventually recognizes them as nonsensical, when he has used them – as steps – to climb up beyond them. (He must, so to speak, throw away the ladder after he has climbed up it.)

If the propositions in the *Tractatus* are nonsensical then what can one hope to achieve after working through them? One could interpret Wittgenstein's rejection of nonsensical propositions *resolutely*, and maintain that this was what Wittgenstein advocated, which is a central aspect of the resolute reading. This reduces most of Wittgenstein's views in the *Tractatus* into nonsense; its contents are akin to sentences like "Socrates is identical". The advantage of this view is that it lessens the contrast between Wittgenstein's early and late views: the "grave errors" of the *Tractatus* comprise virtually the entire book. After reading the *Tractatus*, the reader should come to realize its nonsensical nature and, hence, be cured from the tendency to philosophize.

The merits of the resolute reading proposed by Cora Diamond, James Conant and others is that it seems to make sense of the 'frame' of the *Tractatus*. After reading the book, one is cured of the tendency to hold that there is something ineffable that cannot be said but that must be shown. But this comes with a price: all the philosophical insights in the *Tractatus*, including Wittgenstein's views on the proper role of philosophy, become nonsensical. This is peculiar, given that Wittgenstein revisits these views in his later work. Thus, if Wittgenstein had held that the *Tractatus* contained nothing but austere nonsense and the 'frame' (as per the resolute reading), it would have been odd for him to maintain the views he later expressed. The resolute reading seems to sever the very continuity between early and late Wittgenstein it purports to establish. Furthermore, if Wittgenstein inherited his philosophical outlook from Russell, then Russell would have to get a share of this fallout. But one can conclude this only by neglecting Russell's positive contributions to the *Tractatus*; one can support the resolute reading only from a Fregean partisanship. By adopting a bipartisan approach to the *Tractatus*, we see doubts looming over the very motivation for the resolute reading.

So what are we left with at the end of the *Tractatus* if we regard it as a handbook for perfecting Russellian eliminativism? In particular, how are we to understand the mystical remarks in the *Tractatus* (or even its 'frame')? Landini's interpretation here is negative: If the eliminativist programme outlined in the *Tractatus* is completed, what one is left with is just mystical pronouncements. Russell's scientific philosophy of the logical form becomes extremely austere, if all the logico-semantical notions are built into the structure of language. Moreover, this approach seemingly undermines the possibility of advancing arguments in its support. But what does the notion of 'building the logico-semantical notions into the structure of language' entail? An analogy should illustrate the answer. A construction site for a building invariably uses scaffolding, which are indispensable for the construction. Once the building is finished, these are no longer needed. Although this follows from completing the eliminativist programme, it is paramount to notice that Wittgenstein *did not* accomplish this. This would follow only if the *Tractatus* had presented a completed version of Russellian eliminativism. But the *Tractatus* contains no such version. The paradigm shift Wittgenstein outlines in the *Tractatus* still needs to be understood in the conceptual framework of the old theory, lest it be nonsensical. This seems to be the reason behind the wording of *Tractatus* 6.54: whoever understands *him* must see that the *propositions* in the *Tractatus* are nonsensical. Whoever carries out the eliminativist programme must relinquish the ladder (the old theories) that enabled her to frame the new theory. Now the need for the resolute reading dissolves: the propositions of the *Tractatus*, some framed in Fregean/Russellian conceptual notation, others in everyday language, are nonsensical *when assessed by the standards of the perfected scientific philosophy*. As propositions of everyday language, they are "in perfect logical order" (Wittgenstein 1974, 5.5563). However, these are not the propositions to be used *in* scientific philosophy,

even if these are the *only* propositions in which it can be *framed*. If the language of scientific philosophy demands that all logico-semantical notions are built into its structure, then the theory does not allow any of its guiding principles to be formulated in that language; any such attempt would amount to nonsense. Thus, one has to use everyday language as the ladder for the perfected scientific philosophy. And this is overlooked by the proponents of the resolute reading.

In conclusion, Wittgenstein never completed the Russellian system of scientific philosophy, and it remains open whether this was ever his intention. But why is this so? Allow me to offer a speculative answer. Completing the system would have amounted to the discovery to which he alludes in *Philosophical Investigations*, one that would have enabled him to stop doing philosophy. This would have meant abandoning philosophical approach to questions which perplex each of us the most, including the *Tractatus*-passages where Wittgenstein discusses life, death, and the mystical. It could be maintained that Wittgenstein was aware of what the completed system would amount to, but that the price was too high for him. As Wittgenstein remarks, the crystalline purity of logic (and, *a fortiori*, of the Tractarian eliminativism) rendered it no longer applicable to actual uses of language (Wittgenstein 1958/1999, §107). Instead of pursuing the former, Wittgenstein decided to return to the rough ground, to the philosophical problems of everyday language. Although this violates the principles of scientific philosophy, it allowed his work to have content that would have been lost with the Tractarian eliminativism. Thus, instead of throwing away the ladder after ascending it, Wittgenstein threw it away before climbing it, for in order to get to the rough ground, no ladder is needed.

Literature

Conant, James 2000. "Elucidation and Nonsense in Frege and Early Wittgenstein", in: Crary and Read (eds.), *The New Wittgenstein*, New York: Routledge, 174-217

Diamond, Cora 1991. *The Realistic Spirit*, Cambridge, MA: MIT Press.

Frege, Gottlob 1997. *The Frege Reader*, ed. Beaney, Oxford: Blackwell.

Goldfarb, Warren 2000. "Wittgenstein's Understanding of Frege: The Pre-Tractarian Evidence", in: Reck (ed.), *From Frege to Wittgenstein*, Oxford: Oxford University Press, 185-200.

Landini, Gregory 2003. "Wittgenstein's Tractarian Apperenticeship". *Russell* 23, 101-130.

Russell, Bertrand 1905/1973. "On 'Insolubilia' and their Solution by Symbolic Logic". in: Lackey (ed.), *Essays in Analysis*, New York: George Braziller.

Russell, Bertrand 1914/1957. *Mysticism and Logic*, Garden City, NY: Doubleday & Company.

Wittgenstein, Ludwig 1958/1999. *Philosophical Investigations*. Oxford: Blackwell.

Wittgenstein, Ludwig 1974. *Tractatus Logico-Philosophicus*, trans. Pears and McGuinness, New York: Routledge.

Email: tuomas-manninen@uiowa.edu

Wittgenstein on the Meaning of Life: From Theory to Therapy

Michael Maurer, Vienna, Austria

In the philosophical Œvre of Ludwig Wittgenstein explicitly ethical remarks *appear as* scattered islands within the ocean of logical and linguistic investigations. The fact that precisely these remarks motivate Wittgenstein's *Denkbewegungen* was articulated by the author himself several times.[1] In the following article we attempt to provide hints for the ethical dimension of Wittgenstein's "*authorial strategy*" (Conant, 2000, 175) by reflecting on the importance of the question of the *meaning of life* for the development of Wittgenstein's philosophical *style of thinking*. When refering to the "close relationship between his life problems and his philosophical way of thinking" (DB, 8, *my translation*), we are not following the impulse of reductionist psychologization, but are offering an invitation to a reading of Wittgenstein's philososophy that emphasizes the 'tone of voice" (Monk, 2001, 4) of his *language*.

1. The Problem of Life

When we become a *„terra difficultatis"* (Augustinus, X, XVI, 25) for ourselves by looking into the mirror of diffuse reflection and the painful questions of metaphysics make our entire life questionable, philosophical thinking organizes an attempt to give an answer to the elementary questions of our existence.

Ludwig Wittgenstein's diary notes written when he was a volunteer soldier in the First World War give a picture of a desperate psychological state which provides the origin of the *metaphysical need* that is made to disappear at the end of the *Tractatus*. In relative analogy to Kierkegaard, Wittgenstein keeps a continuous *journal* in which biographical and philosophical notes penetrate each other. The partial encoding of the entries and the phenomenological structure of the diary allows for a remarkable insight into Wittgenstein's *style of thinking and working; from diaries and notebooks - strictly thought through -* the philosophical core, which gives the *Tractatus* its enigmatical form, becomes distilled. Philosophy and biography penetrate each other in the form of a doubled bookkeeping. *Recto* and *verso* of the manuscript mark the two invisibly interacting spheres of the personal and the philosophical.

In a state of deep disconcertment about the painful disruption of human existence, the young Wittgenstein asks himself the metaphysical question *par excellence*:

> „Kann man aber so leben daß das Leben aufhört problematisch zu sein? Daß man im Ewigen lebt und nicht in der Zeit?" (BEE, Ms 102, 117r [1.6.1915])

In asking this question Wittgenstein recapitulates a figure of traditional philosophical thought: the idea of an approach *sub specie aeternitatis.* The finite nature of human understanding is to be abolished in favour of a deeper insight into the hidden rules of the world. This is the expression of a passionate desire to be *redeemed* by the ordering of metaphysical knowledge, wherein the untiring longing for the *right* form of life *comes to an end:*

> „Das große Problem, um das sich alles dreht, was ich schreibe; ist: Ist a priori, eine Ordnung in der Welt, und wenn, ja, worin besteht sie?" (BEE, Ms 102, 117r [1.6.1915])

Inner loneliness and depression make the idea of suicide possible throughout Wittgenstein's whole life. Suicide is no more than the *destruction of life* (*In this way* Weininger removed the contradictions between his moral ideal and human reality). In a conversation with his close friend David Hume Pinsent, Wittgenstein said that the care of Bertrand Russell ended "nine years of lonely suffering, in which he constantly considered suicide". (Monk, 2004, 57, *my translation*)

There is sufficient autobiographical and biographical evidence to show, that also for the rest of his life, Wittgenstein's inner moral struggle *with* his own imperfection and continuously growing feelings of meaninglessness never came to a standstill. Throughout his entire life Ludwig Wittgenstein continues to search for the *right* form of life. Tormented with inner strain and restlessness, in permanently new drafts he will try to make vanish the *problems of philosophy* and the *problem of life,* which stand in a complex relationship to each other.

In the *Tractatus* we come across the attempt to give the *problems* a logically strict form in order to make them dissolve on the critical point of their condensation.

2. The *Vanishing* of the Problem?

At a decisive point in the *Tractatus* the question of the *meaning of life* gains paradigmatic importance for Wittgenstein's philosophical method:

> „Die Lösung des Problems des Lebens merkt man am Verschwinden dieses Problems.
>
> (Ist nicht das der Grund, warum Menschen, denen der Sinn des Lebens nach langen Zweifeln klar wurde, warum diese dann nicht sagen konnten, worin dieser Sinn bestand?)"(TLP, 6.521)[2]

As a reaction to the logic of the *problem of life* – which is the *prime example* for the paradoxical nature of philosophical problems – Wittgenstein carries out the radically therapeutic project of a final distinction between sense and nonsense (TLP, p. 9). The philosophical questions turn out to be unsolvable, i.e. meaningless in the medium in which they are posed to us – *language.*

The author of the Tractatus wants to make the problems vanish by leading the reader to the understanding that their existence is based on a meaningless way of asking, which is inherent to the limited logic of our language. The original dissolution of the basic question of ethics (TLP, 6.521) turns out to be the paradigmatic birthplace of the *elucidative method* (Conant, 2000 et 2002b) of the *Tractatus' sentences.* Following the instructions given by the author, their *elucidative* function consists of creating an awareness of their fundamental meaninglessness in the

---

[1] Two *sign posts*: CLF, 35: „(…) denn der Sinn des Buches ist ein Ethischer. (…) mein Werk bestehe aus zwei Teilen: aus dem der hier vorliegt und aus alledem, was ich *nicht* geschrieben habe und gerade der zweite Teil ist der Wichtige. (1919)" and VB, 511: „Friede in den Gedanken. Das ist das ersehnte Ziel, dessen, der philosophiert. (1944)".

[2] This central remark stems from the third diary (note) book (Ms 103, 13r [6.7.1916]) and can be found both in the *Prototractatus* (Ms 104) and in all 3 typescripts of the *Tractatus (Ts 202, Ts 203, Ts 204).* In *Wiener Typoskript des Tractatus* (Ts *204)* these sentences even mark the end of the carrying out.

reader's mind. In the reader's consciousness the *Tractarian* sentences converge – when they are *strictly thought through* – into their own meaninglessness. The narrative structure makes of the text a mirror in which the reader finds herself in the situation of the monkey that recognizes itself for the first time in his own mirror image. „Ein *Bild* hielt uns gefangen." (PU, § 115)

The convergence of the *Tractatus* shows us that every attempt to transcend the borders of our language remains unconscious of the limited nature of human thought and existence. In the end the attempt to leave the place of the absolute empty and to ascribe to it an inexpressible and unrecognizable existence, unmasks itself as no more than the final *residue* of the metaphysical spirit of abstraction. This spirit wants to hold onto at least the possibility of truth about the world and stops on the last rung of the *Tractarian* ladder without throwing it away. (TLP, 6.54)

The ethical dimension of our existence can not be positively determined in a definitive system of philosophy. The *Tractatus* shows that the logic of our language does not meaningfully permit substantial metaphysics. Every attempt to transcend the border drawn by the author inevitably leads to self betrayal and intellectual dishonesty. In this sense the *Tractatus* has limited the ethical „gleichsam von Innen her " (CLF, 35).

The *Tractatus* ends with its author remaining silent. We have made the problems therapeutically vanish. But was the therapy sustainably successful? Is *one* disillusioning view into the mirror of our own vanities enough? Is one experience of *climbing over* the ladder of our inclination to intellectual hypocrisy enough? Can our *metaphysical need* be eased by once and forever recognizing the meaninglessness of its query?

The escatological demand of the *Tractatus*, „die Probleme im Wesentlichen endgültig gelöst zu haben" (TLP, p. 10), and its orchestrated aesthetics unmask an inconsistency. The weight of the world can not be weighed by reference to logic, because the latter operates *inside* the world. The problems are not seized upon *deep* enough (i.e. in their real *Gestalt*; Ms 123, 9v!) in order to implement the therapeutic act within the reader's consciousness. The pathos of the desire to overcome metaphysics (TLP, 6.54) continues to express the pathological spirit of theory. The language of the text remains enclosed within the solipsistic cocoon of logics. It seems as if the author of the *Tractatus logico-philosophicus* when using an intellectually designed therapy method (Cahill, 2004, 54) has fallen victim to his own verdict:

„*Die Grenzen meiner Sprache* bedeuten die Grenzen meiner Welt." (TLP, 5.6)

3. From Monologue to Polylogue: From *Logical Form* to the *Form of Life*

Wittgenstein's time as an elementary teacher in the area *in which* we are now gathered together was no more than the attempt to realize the theory of his order of silence, in which the *Tractatus* had culminated. The ambition to establish the unity of theory and practise – *life and language* – expresses one aspect of the ethical dimension of his style of philosophizing. His human and pedagogical failure, which provoked severe inner doubts and serious suicidal tendencies, were the prelude to Wittgenstein's return to philosophy. It appears that he felt that he had not *definitely* solved the problems.

Similarly to the therapeutic method of the *Tractatus*, which had originated in the mirror of an innovative variant to make the *problem of life* vanish, we also find material in the *Nachlass,* which contains a paradigmatic remark for the *morphogenesis* of Wittgenstein's *philosophical style* on the same subject:

„Die Lösung des Problems, das Du im Leben siehst, ist eine Art zu leben, die das Problemhafte zum Verschwinden bringt. Daß das Leben problematisch ist, heißt, daß dein Leben nicht in die Form des Lebens paßt. Du mußt dann Dein Leben ändern, und paßt es in die Form, dann verschwindet das Problematische." (BEE, 118, 17r - 17v [27.8.1937]).

The author of the *Tractatus* has enclosed the natural plurality of our linguistic phenomena of our *In-der-Welt-sein* into the solipsistic narrowness of the *logical room* and followed the *logical form* of a strictly linear and systematic therapy method. In the transition to the *Philosophical Investigations,* he opens windows to the linguistic polyphony of divergent forms of life. This opening of windows makes what can be thought visible, depending on the *direction in language* from *which* one is coming. Wittgenstein's atonal philosophical composition no longer expresses a dogmatically narrowed desire for harmony (i.e. the overweighing of logic). It shows that there is no extraordinary grammatical position from whose archimedean point all doubts and contradictions dissolve. The therapeutic method is now adjusted to the dialogical form of real life - to the condition of language usage of everyday life – and no longer follows the monological form of an abstract ideal of language. The logocentric form of the *Tractarian* therapy was abandoned in the grammatical purgatory of a gradual transition period (Pichler, 2004, 132-142 et 175)[3] in favour of a polyphonic treatment of the illnesses of thinking, that language contains for us; a treatment which is orientated by the real forms of speech.

In the *Investigations* we follow the course of a *circum-flexive* polylog, that is adjusted to empirical language usage instead of holding onto a theory of an essence of language in its *aesthetical core*. It is not *one single* fundamental *tractatus,* but a plurality of textual microentities that creates the missing consciousness of our being entangled in the grammar of language:

„Es gibt nicht *eine* Methode der Philosophie, wohl aber gibt es Methoden, gleichsam verschiedene Therapien." (BEE, Ms 116, 186 [1.9.1937])

Wittgenstein's last attempt, his „philosophische[n] Gedanken in eine Reihe zu ordnen" (BEE, Ms 117, 112), leads him to an inevitable approximation to the *form of life* that against our will proves to be a permanent attempt and hence always remains fragmentary.

4. From the Final Solution to an Endless *Denkbewegung*: *Laboro in Me Ipso*

Within the internal therapeutics of Wittgenstein's practice of philosophizing, the idea of a final solution becomes an endless *Denkbewegung* circulating in small loops around the subject who is meditating on her linguistic references. The natural aesthetics of the *Philosophical Investigations*

---

[3] Alois Pichler argues convincingly that the transformation of Wittgenstein's *style of thinking* took place in late autumn 1936 and consisted of a *morphogenesis* from a linearly systematic to a polyphonically open representation of his thoughts. There is no sharp division but a complex relationship between inner continuity and discontinuity.

reveals the ethical sense where the indirect message of the *Tractatus* appears to have failed.

The *ethical demand*, which Wittgenstein's activity as a writer requires from each individual reader, consists of interacting with the questions posed by the *Investigations* instead of taking the text as a positive textbook. The clearing of our individual, grammatical confusions requires of us that we confront the blind spots of our thinking and transcend *our* borders:

"I don't try to make you *believe* something, you *don't* believe but to make you *do* something you won't do." (Wittgentein *after* Rhees, 1970, 43)

As pivotal points which remain out of sight, they reveal the unexpressed presuppositions which compose the background in front of which what we say, think or do becomes meaningful.

Wittgenstein's polyphonically open therapeutics transfers the centre of its philosophical explorations from the problems to the *origin* of the problems: the sharpening of consciousness - *via philosophizing* – of grammatical obsessions and illusions turns out to be a wrestling match with *our own individual language.* „Arbeit an Einem selbst. An der eigenen Auffassung. Daran, wie man die Dinge sieht. (Und was man von ihnen verlangt.)" (VB, 472)[4].

Our search for truth about the world had its original starting point in the problematic question regarding who we are; here we close the circle of natural dialectics – which in the history of Western Philosophy has so often been artificially interrupted by θεωρια – when we transform our *Selves*:

„Revolutionär wird der sein, der sich selbst revolutionieren kann." (VB, 513)

Depending on what *direction in language* one comes from, one will perceive the rabbit or the duck (PU, p. 520) from Ludwig Wittgenstein's ‚tone of voice'. But indeed there is – and that is the suggestion of this essay – sufficient reason to view Wittgenstein's philosophical activity as an expression of an *ethical demand* whose aim is to guide us from our personal standpoint towards a more profound understanding of ourselves.

Literature

Augustinus, Aurelius 1986 *Confessiones*, ed. Martinus Skutella, Stuttgart: Teubner.

Conant, James 1996 "Putting Two and Two Together: Kierkegaard, Wittgenstein and the Point of View for Their Work as Authors", pp. 248 – 331 in: D. Z. Phillips, ed., *The Grammar of Religious Belief*, New York: St. Martins Press.

Conant, James 2000 "Elucidation and Nonsense in Frege and Early Wittgenstein", pp. 174 – 217 in: Alice Crary and Rupert Read, eds., *The New Wittgenstein*, London and New York: Routledge.

Conant, James 2001 "Philosophy and Biography", pp. 16 – 50 in: James C. Klagge, ed., *Wittgenstein: Philosophy and Biography*, Cambridge: Cambridge University Press.

Conant, James 2002a "On Going the Bloody Hard Way in Philosophy", pp. 85 – 129 in: John Whittaker, ed., *The Possibilities of Sense*, New York: Palgrave.

Conant, James 2002b "The Method of the Tractatus", pp. 374 – 470 in: Erich H. Reck, ed., *From Frege to Wittgenstein: Perspectives on Early Analytic Philosophy*, Oxford: Oxford University Press.

Cahill, Kevin 2004 "Ethics and the Tractatus: A Resolute Failure", pp. 33 – 55 in *Philosophy* 79, Cambridge: Cambridge University Press.

Diamond Cora 2000 "Ethics, Imagination and the Method of Wittgenstein's *Tractatus*", pp. 149 - 173 in: Alice Crary and Rupert Read, eds., *The New Wittgenstein*, London and New York: Routledge.

Monk, Ray 2004 *Wittgenstein. Das Handwerk des Genies,* Stuttgart: Klett-Cotta.

Monk, Ray, 2001 „Philosophical Biography: The Very Idea", pp. 3-15 in: James C. Klagge, ed., *Wittgenstein: Philosophy and Biography*, Cambridge: Cambridge University Press.

Pichler, Alois 2004 *Wittgensteins „Philosophische Untersuchungen": vom Buch zum Album*, Amsterdam und New York: Rodopi.

Rhees, Rush 1970 *Discussions of Wittgenstein, London: Routledge & Kegan Paul.*

Wallgren, Thomas 2006 "From Anti-Metaphysics to Non-Pyrrhonian Polyphony – remarks on the difficulty of receiving Wittgenstein" pp. 365 – 367 in: Georg Gasser, Christian Kanzian, Edmund Runggaldier, eds., *Kulturen: Konflikt-Analyse-Dialog. Beiträge des 29. Internationalen Wittgenstein Symposiums*, 6. – 12. August, Kirchberg am Wechsel.

Wittgenstein, Ludwig 1921 „Logisch-philosophische Abhandlung", pp. 184 – 262 in: Wilhelm Ostwald, ed., *Annalen der Natur- und Kulturphilosophie 14*, Leipzig. (TLP 1921)

Wittgenstein, Ludwig 1969 *Briefe an Ludwig Ficker*, eds., Georg Henrik von Wright und Walter Methlagl, Salzburg: Otto Müller Verlag. (CLF)

Wittgenstein, Ludwig 1989 *Vermischte Bemerkungen* (Werkausgabe 8), Frankfurt am Main: Suhrkamp. (VB)

Wittgenstein, Ludwig 1991 *Geheime Tagebücher 1914 – 1916*, ed. Wilhelm Baum, Wien: Turia & Kant. (GT)

Wittgenstein, Ludwig 1995 *Tagebücher 1914-1916* (Werkausgabe 1), Frankfurt am Main: Suhrkamp. (TB)

Wittgenstein, Ludwig 1995 *Tractatus logico-philosophicus* (Werkausgabe 1), Frankfurt am Main: Suhrkamp. (TLP)

Wittgenstein, Ludwig 1995 *Philosophische Untersuchungen* (Werkausgabe 1), Frankfurt am Main: Suhrkamp. (PU)

Wittgenstein, Ludwig 1997 *Denkbewegungen. Tagebücher 1930-1932/1936-1937. Teil 1: Normalisierte Version*, ed. Ilse Somavilla, Innsbruck: Haymon-Verlag. (DB)

Wittgenstein, Ludwig 2000 *Wittgenstein's Nachlass: The Bergen Electronic Edition*, Oxford. (BEE)

Wright, Georg Henrik von 1982 *Wittgenstein*, Oxford: Blackwell.

Email: pascalwitt@hotmail.com

---

[4] BEE, Ms 109, 174: „Es ist eine Haupttätigkeit der Philosophie vor falschen Vergleichen zu warnen. Vor (den) falschen Gleichnissen zu warnen, die unserer Ausdrucksweise – ohne dass wir uns dessen ganz bewußt sind – zu Grunde liegen. Ich glaube unsere Methode ähnelt hier der Psychoanalyse die auch Unbewußtes bewußt und damit unschädlich machen will und ich glaube daß diese Ähnlichkeit keine rein äußerliche ist.".

(Re)-Constructing the Semantic Architecture of Wittgenstein's *Vermischte Bemerkungen*

Kerstin Mayr, Innsbruck, Austria

Proceeding developments in digital humanities and questions concerning the constitution and textual organisation of Wittgenstein's *Vermischte Bemerkungen* suggested the venture to apply GABEK/WinRelan®[1], a multi-methodological oriented text-analysis tool, to these remarks. This paper introduces the technical terminology as well as some important aspects of the working process necessary for an understanding of the retrieval of semantic fields and structures within the *Vermischte Bemerkungen.*

1. Introductory remarks

In the context of the cooperative project (FWF Culture and Value Revisited) between the Brenner-Archives at the University of Innsbruck (FIBA) and the Wittgenstein Archives at the University of Bergen (WAB) a computer supported qualitative analysis of the *Vermischte Bemerkungen* is being carried out. This is done with GABEK (Ganzheitliche Bewältigung von Komplexität, Holistic Processing of Complexity), a method based on the theory of linguistic gestalten (Zelger 1999), and its computer implementation WinRelan (Windows Relationen Analyse. By a content/semantic analysis of the material an integrated view of individual aspects of Wittgenstein's originally scattered and often private notes and remarks on various topics, which were assembled, edited and published by von Wright (1994) in *Culture & Value* could be obtained. It is the project's basic intention to look to investigate philosophically relevant semantic fields (patterns) within the remarks from which we could then gain semanitc knots acting as thematic ancors for further investigations in BW and BEE.

2. What a text analysis can do

Georg Henrik von Wright still saw himself faced with the problem of the arrangement of the numerous notes and scattered among the philosophical and biographical texts Wittgenstein had left. In his foreword to the first edition of *Culture & Value* (1977) von Wright wrote:

> It was a decidedly difficult task; at various times I had different ideas about how best to accomplish [the selection and arrangement of these remarks]. To begin with, for example, I imagined that the remarks could be arranged according to the topics of which they treated - such as "music", "architecture", "Shakespeare", "aphorisms of practical wisdom", "philosophy", and the like. Sometimes the remarks can be arranged into such groupings without strain, but by and large, splitting up the material in this way would probably give an impression of artificiality. (von Wright 1977, ix)

In some cases it seems difficult to decide what Wittgenstein was referring to and therefore any kind of classification or attribution to certain topics only by reading through these notes would lack any rule- or criteria-based structure. This is now where computer based text analysis comes into play. A text analysis tool can be used to identify the context and importance of text without the intervention of the researcher. Thus, we try to investigate any inherent semantical and topical structure of this seemingly loose collection applying clear and transparent criteria. We are not primarily interested in analyzing the circumstances under which the *Vermischte Bemerkungen* were written and later combined. The texts themselves will be our first and only fields of investigation – at least at this stage. Despite being a loose collection, the textual analysis of these remarks assembled in *Culture & Value* could result in something like topical signposts hinting at recurrent themes in Wittgenstein's corpus. In this way we could gain access to clusters in the corpus which may be indicative of philosophical topoi hitherto uninvestigated as such. Thus, once a first analysis will have been completed, framing and re-framing into the larger context of text genesis as well as Wittgenstein's writings and letters should follow.

With Wittgenstein's works in general and with the *Vermischte Bemerkungen* in particular the question is again one of textuality. The question what constitutes a text (by Wittgenstein), is becoming even more virulent with the *Vermischte Bemerkungen* since the text itself was not arranged by Wittgenstein but edited posthumously. The problem, now, is to locate this text's (or rather these text units') central cores holding the essentials of its meaning(s). Before any attempt at an interpretation of this text can be made, the semantic "hot spots" have to be identified. Once uncovered, what we would get are various semantic fields and meaning-structure(s). Frequency as well as the degree of cross-references between different semantic fields may indicate probable semantic and thematic "centers of gravity". Thus, what a semantic text analysis can do, is looking for a "textual architecture" and trying to hint at crucial text criteria such as cohesion, coherence, intratextuality and – to some extent – intertextuality within *Vermischte Bemerkungen*. So we could finally reveal one or more thematic "red threads" and the an arrangement of the remarks according to various topics would no longer be artificial or at random.

Any interpretation of the text arises in that the topical building blocks (semantical fields) are understood as the meaning-structure(s) of the text. Metaphorically speaking, every text consists of various houses and its inhabitants performing with inhabitants of other houses contained within a certain text. Each of them is of different importance in the structure of the text. However, content analysis applies a set of techniques to a given text to determine the following:

* the identity of the main houses and inhabitants (semantic keywords and fields),

* the relations in which they stand to each other (constituting semantic networks),

* the hierarchy of these relations and how they evolve (forming the textual framework).

Content analysis consists in revealing the foci within a certain text, i.e. its meaning. This necessarily implies two things. First, there must be a theoretical conception of the text describing both the textual organization of the things

---

[1] GABEK® / WinRelan® (GAnzheitliche BEwältigung von Komplexität) developed by © Josef Zelger (Innsbruck 1991-2000). Cf. www.gabek.com

said as well as the structural organization of the thought-processes of the author. In case of the *Vermischte Bemerkungen* both can best be done by rule-based text-coding. Since the actual version we have is a mere construct, the question is if the various text fragments may hint at a larger underlying textual (and philosophical) conception or "hypertext", which would finally legitimate the appliance of the concept of "text" to the *Vermischte Bemerkungen*. Secondly, this implies the use of a tool which rigorously tries to exclude the subjectivity of the investigator to a maximum extent.

3. Applying GABEK/ WinRelan to the *Vermischte Bemerkungen*

The advantage in using the GABEK/ WinRelan method lies within the fact that it allows a hierarchically structured presentation of a highly complex text and its network layers. The main objective of this analysis is to clarify and highlight content-related (semantic) interdependencies and intervening variables – hypotheses on inter-dependencies can be generated in a further step. Whereas other semantic text analysis tools are designed to help the researcher identifying particular components of natural language (morphemes, words, syntax, semantics etc) and calls upon a number of pre-defined rules, GABEK is a method in which themes (or classes of concepts) as well as causal interrelations among themes are encoded. The method involves a three step encoding process.

3.1 The encoding process

When using WinRelan the first step is to divide the text up into chunks, which are then transferred onto so called index cards (see Fig. 1). Each card should include a semantically closed statement[2] whereby the length of text units represented on these cards is determined by the number of keywords. Keywords are words that constitute the semantic content of a text and are – in general – easily identified.
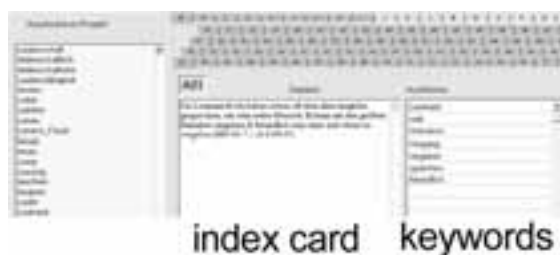

Fig. 1: Index card and corresponding keywords

What we finally get is a kind of concordance, so we can, for instance, list all words in alphabetical order (see Fig.2) which are repeated in the text two or more times, or create a chart showing the words in the text ranked in order of their frequency of occurrence (see Fig.3).

Fig. 2: Keyword list in alpahbetical order

Fig. 3: Keyword list according to frequency

Both lists derive their power for analysis from the fact that they allow us to see every place in a text where a particular word is used and therefore helps the researcher to anticipate relevant semantic fields for a subsequent detailed analysis.

As a rule one would have between three to nine keywords on each index card[3], which would mean approximately three sentences. As GABEK/WinRelan is mainly used for analyzing spoken text data, the keywording and coding of Wittgenstein's dense and highly complex remarks turns out to be quite a challenge. Where one would normally have several sentences on one index card, with Wittgenstein it is often necessary to have only one or two sentences on one card. As long as we are merely aiming at an identification of keywords in order to compile a keyword list (e.g. for a concordance or register), showing the frequency in usage of specific terms, this is fine. However, it is essential to follow the rules in regard to further data processing. Now this is where WinRelan meets its limits. Especially when it later comes to building linguistic *gestalten*, i.e. doing a strictly rule-based summary of the contents of those index cards sharing again five to nine keywords, index cards with too many sentences and equal or different keywords respectively will turn out to be useless. Why? This has to do with the algorithm used for the virtual grouping of semantically fitting index cards.

After all index cards have been coded, they have to be arranged into groups. This is done by running a cluster analysis on all keywords identified at least twice on at best five to nine index cards. The cluster analysis is a built-in feature (in WinRelan) and helps the researcher to generate virtual piles of index cards sharing again five to nine keywords. However, if there are too many index cards with too many different keywords (cf. Zelger 1996, 11), one would get too many groups i.e. too many topical threads so that an identification of more and less prominent themes would be impossible. On the other hand, if the index cards share too many keywords, we would get too few piles and it would seem as if all topics were equally prominent; either is problematic. Because when it comes to summarizing the content represented on these grouped

---

[2] Hereafter referred to as "sentence"

[3] This rule is based on the findings of George A. Miller (1956) according to which a person can remember 7 (up to 9) terms.

cards according to specific syntactic and semantic rules, we would either get a too comprehensive summary or only a superficial one. The summaries (*gestalten*) are semantic implications of the grouped cards and build the basis for further grouping and summarizing on the next higher level. What we get are so called *hyper-gestalten*. This process is repeated until we have no more groups to summarize. The final product is a *gestalten*-tree any careless or deviant coding at an earlier stage affects the quality of the later analysis.
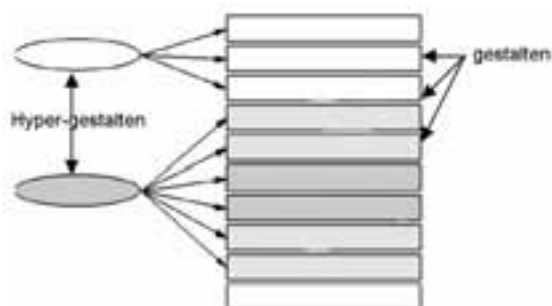

Fig.4: Gestalten-tree

Thus, the decision on how many sentences are to be coded on one index card is a crucial one.

Apart from the process of coding and clustering, the positive or negative evaluation of the keywords as well as the causal coding are important to a comprehensive text analysis, in a second step. Causal coding allows researchers to identify causal relation between keywords. Consequently, two lists are generated: the "causal list" and the "list of causal relations". Whereas, the causal lists provides information on the amount of causal effects between keywords, the list of causal relations shows more about the nature of these interdependencies.

Although there are other features relevant to a comprehensive data analysis, we will only go into one more important detail for reasons of comprehensibility. The third step important for our investigations is the generating of causal network graphics, which are based on the coding of causal relations. The researcher may, for instance, choose any keyword from the keyword list and can create a network by expanding it with keywords that shows at least two interrelations with the starting keyword. Let take the following example, starting with the keyword "Goethe":
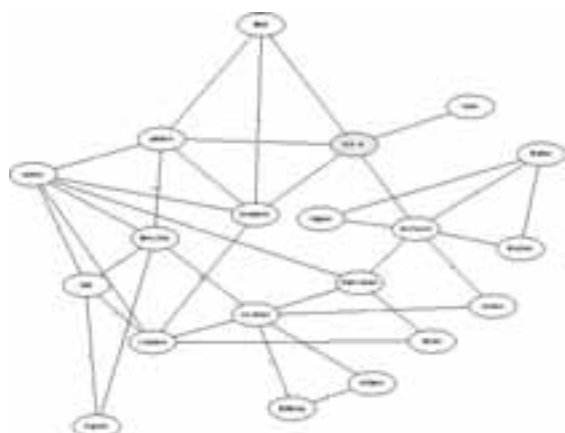
Fig. 5: Causal network graphic starting with "Goethe"
(marked green)

The analysis and identification of causal interrelations of items (keywords), conceptual fields and topics as well as semantic inter-dependencies and networks - which are achieved through the development of a rule-based network of data (remarks) - are needed to generate both deeper knowledge and understanding about the semantic structures of this (re-) constructed Wittgenstein text. This knowledge expresses itself in the unique character of its organisation and structure and could help to build the basis for further in-depth investigations and analysis concerning specific topics related to *Vermischte Bemerkungen.* In coherence with the core objectives of the analysis of the German text version (*Vermischte Bemerkungen*) an encoding of the 1st and 2nd English edition (*Culture & Value*) will be done for the purpose of comparison and exploration in terms of textual semantic similarity and deviation.

So finally, these findings will provide the basis for further investigations concerning such questions as the following:

What kind of text is this?

Is the secret code in Wittgenstein's remarks of any significant importance?

Is there a Wittgensteinian philosophy of culture according to the patterns and networks identified?

Literature

Miller, George A. 1956 "The Magical Number Seven, Plus or Minus Two: Some Limits on our Capacity for Processing Information" in *Psychological Review*, *63.* London: Harvard University Press, 81-97.

Wittgenstein, Ludwig 1998 *Culture and Value, A Selection from the Posthumous Remains,* edited by Georg Henrik von Wright in Collaboration with Heikki Nyman, revised edition of the text by Alois Pichler, translated by Peter Winch. Oxford: Blackwell.

Zelger, Josef 1996 *Linguistic Knowledge Processing by GABEK. The Selection of Relevant Information from Unordered Verbal Data.* Paper at the International Conference on Conceptual Knowledge Processing. TH Darmstadt, Faculty of Mathematics, February. Preprint Nr. 42. Universität Innsbruck: Institut für Philosophie.

Email: kerstin.mayr@uibk.ac.at

Logic of finiteness: intellectual systems in the information era: 2. Limits to diversity, exactness, and economy

Lidia A. Mazhul / Vladimir M. Petrov, Moscow, Russia

A. Diversity of the system's states: possible limits of growth

The tendency of growing diversity is undoubtedly the most important for our consideration, because all the behavioral processes can take place only on the 'basement' of the diversity of the system's states. So, is the growth of diversity unlimited? In reality we see various examples of such growth, some of them coming to certain 'final' situations, but some showing the 'endless' evolution. We shall focus on some examples of *limits of the diversity*.

Our first example relates to the sphere of the biological evolution: progress in *color vision*. As it is well known, in the process of the biological evolution, color abilities were formed, and they were realized in *three types of color detectors* which are inherent in visual apparatus of higher mammals such as monkeys and human beings. In the framework of the informational approach, the phenomenon of three-type color vision occurs quite natural (see in detail Golitsyn & Petrov 1995, pp. 81-82). Here the task should be considered: how to *distinguish* between any two spectral colors (e.g., red and green, or orange and violet), with the help of detectors possessing *bell-like spectral characteristics*, in conditions of *changing background illumination* (e.g., when changing the intensity of the sunlight)? It was shown that such color distinction is impossible, if to use only one type of color detectors or two types. Only three types of spectral detectors permit to distinguish between signals relating to different parts of the spectrum. Hence, the *final aim* of the system of color vision is achieved in the *three-detector state*, and the evolution of this system is over. [There is no need to increase the number of detector types, as soon as additional types would require extra resource supply, surplus complicated information processing resulting in its lower reliability, etc.]

The above example of finiteness pushes us to consider the problem in general: why and when the finiteness occurs possible in principle?

Evidently, any further long-range development is *not realized* in *two general cases*:

– when its 'price' is too high, 'the game is not worth the candle,' i.e., the resource expense (or the complication of the information processing) cannot be covered by the advantages obtained;

– when the aim is achieved and hence, further development of the system is senseless.

We shall not consider the first case (because of very complicated situation of possible versions). As for the second case, exactly an example of its realization was presented above: reaching perfect color distinction by means of three-detector perception.

Another example of this case can be also drawn to consideration: *distinction of phonemes* while *speech communication*.

As it is known, in many biological species, individuals can communicate with each other, for the purposes of joint activity. However, only human beings are capable of creating very mighty system of artificial signs carrying both concrete data concerning definite objects (actions) and the entire realm of abstract concepts, ideas, and so on. What was the nature of this informational 'invention' made by the evolution?

The heart of the matter consisted in *uniting* (combining) *three kinds of informational procedures* – mechanisms which had been previously elaborated, but in isolation from each other. These are (see Golitsyn & Petrov 1995, pp. 85-90):

– *associative mec*hanism connecting each signal of the speech flux (word or morpheme) with certain concrete objects, actions, or images;

– *correlational mechanism*, which checks up certain pairs of signals whether they have been met together in the previous speech experience of the given subject (recipient of the communication);

– *grammatical mechanism* indicating which namely signals, out of the flux of the words or morphemes, should be checked up by the correlational mechanism (on their joint meeting).

Each of these three mechanisms has its 'predecessors' which have been elaborated while the pre-human stage of the biological evolution. But only *combining* these mechanisms provides creating that giant *net of symbols*, links within this net being carriers of all the wealth of the information. Such is the *essence of* our *mental life* (which can be named 'genuine human' phenomenon). So this three-mechanism state can be considered as the '*final point*' of the evolution of the system of speech communication.

Apropos, in the information era the role of this 'genuine language' is growing, in comparison with old, 'archaic' versions of communication, appealing to sensual images. Hence, the net of inter-symbols links becomes very influential. And no 'improvements' in other mechanisms can compete with the power of this net. So the information era strengthens 'genuine language' mechanism, which is really the final point of the 'semantic trajectory.'

B. Exactness of behavior: approaching to absolute thresholds

As far as the second item in the equation of optimization is presented with the sign 'minus' and the value of the entropy is always positive, the item reflecting the system's errors, should be *minimal*. The best version is to make this item *zero*. It means nothing else than absolutely 'right' (true) behavior of the system, without any non-adequate interactions with the environment. In application to systems specializing in information processing, *two 'faces'* of such 'ideal,' error-free behavior are possible:

– minimization of errors when detecting the very *fact* of the signal;

– minimization of errors when working with different *values* (magnitudes) of the signal, comparing different signals, etc.

The first 'face' looks as simple *minimization of the threshold* of detecting. Of course, in many cases it would be better if the threshold equaled zero. Meanwhile, in some situations it is enough to have the threshold which is less than certain small value; for instance, when dealing with visual perception, it is senseless to have the threshold less than one *photon* (quantum). Exactly such sensitivity is inherent to human eye: after appropriate adaptation (stay in the darkness), it can detect single photons. As well when dealing with hearing, it is senseless to have the threshold less than average *fluctuation of the atmosphere density*. And again exactly such sensitivity is achieved by human ear. So both main perceptual human systems ended their evolution, because they came to due thresholds of perception.

Turning to the second 'face' of minimization of behavioral errors, we shall again focus on systems which deal with receiving signals. Here the main problem is to embrace rather *wide diapason* of possible signals. For instance, the intensity of light which should be perceived by a man, can vary in a diapason of many millions times! It seems desirable to embrace the processes relating to different parts of this diapason, by the entire, *common mechanism of processing*. [Otherwise the procedures of information processing would become too complicated, and the reliability would decrease.] What this mechanism – common for different ranges – should be?

Supposing equal probabilities of signals relating to different ranges, it seems reasonable to accept also *equal distinctive abilities* over all these ranges. It means that the *relative threshold* of perception should be constant, providing detecting the difference (ΔS) between each pair of signals (S_1 and S_2), when the difference between their values exceeds absolute threshold ΔS:

$$\Delta S / S = Const,$$

S being the average value of the diapason considered, for instance $S=(S_1+S_2)/2$. It can be shown (Zabrodin & Lebedev 1977, pp. 159-167), that this supposition results in the so-called Fechner's law – famous relationship between stimulus S and reaction R:

$$R = a \log S + b,$$

a and b being constants. Evidently, formation of this *'overwhelming' mechanism* is the final point of the evolution of such systems.

Of course, there exists another task – to *process* signals which *strongly exceed* the threshold of perception. This problem can be solved resorting to the help of the mechanism of the information processing obtained by S.S.Stevens: $R = aS^\gamma$, a and γ being constants. (About the compatibility of Fechner's and Stevens' laws see: Zabrodin & Lebedev 1977). Again we have a *universal procedure* of the information processing, common for various kinds of stimuli and describing the *final point* of the development of these procedures. In the information era, the need for such *universal procedures* is evidently increasing; hence, the final point mentioned becomes really significant stage of the evolutionary trajectory.

C. Economy of resource: nomenclature restrictions and due choices

As it is known, to economize the resource available, there exist *two principal ways*:

– to choose such kind(s) of the system's behavior which provided minimal resource expense;

– to increase this resource, in order to loosen the resource deficit.

Exactly the first way is of most interest for our consideration concerning possible evolutionary limits. Really, in situations characterized by certain *resource limitations*, appropriate *limits for the system's structure* may be expected.

Evidently, such probable approaching to the limit, should result in such a structure of the system, when the *most effective usage* of the resource is achieved. Here we have many examples relating to systems which belong to various spheres.

When dealing with *phonetic structures of languages*, we see their giant *variability*: some languages possess high share of vowels, on the contrary, some others possess many consonants, in some languages the number of phonemes is quite small (about 15 units), whereas in some others this number is great (more than 100 units), etc. Does it mean that some sound structures of languages are more 'perfect' than others? – Of course, no! Due to the informational approach, we can judge upon the '*degree of perfection*' of different phonetic structures. The results of appropriate calculations are as follows.

Indeed, some *outer limitations* are inherent to the sound structure of any language. At least two such limitations seem to be evident (see Golitsyn & Petrov 1995, pp. 95-104):

a) The necessity to provide rather *high speed of the information transmittal*. It is needed to base the perception of the communication on the processes of the '*operative memory*' which is capable of working with 'fast' signals (with time constants less than 0.1 sec), but possesses rather strictly *limited volume* – up to 7-8 units;

b) The necessity to provide rather *high reliability of the communication*. [Otherwise false decoding of the speech flux may cause behavioral errors.] Hence, certain '*redundancy*' should be inherent to the sound structure of any language.

The first limitation (*a*) results in the *restricted nomenclature both of phonemes and morphemes*. As it was shown by appropriate calculations, the most advantageous number of phonemes falls on the diapason from 14 to 130 units. Within this diapason, numerous concrete variants of sound structures occur equal on their distinctive abilities: each of these structures is capable of creating rather 'rich' nomenclature of 'basic morphemes' responding to the above limited volume of the operative memory. In all such cases the *upper limit* of basic morpheme nomenclature is $2^8 = 256$ units. (Exactly such is the basic morpheme nomenclature of all existing languages.)

Further, the second limitation (*b*) results in the most advantageous *syllabic structure* of the sound language (consisting in quite definite combinations of vowels and consonants). Nowadays exactly such structures are inherent to all the languages. So, the sound structures of all the languages came to the end of their evolution, their *final points* being determined by the human 'detecting appara-

tus.' Besides, their degrees of phonetic 'perfection' are equal!

Finally, let us turn to the processes of 'macro-scale:' the perspectives of the entire *cultural evolution*, its long-range and super long-range perspectives (see Petrov 2004). Here the phenomenon of long-range *divergent development* takes place, being caused mainly by the inclination to economize the resource available (Golitsyn & Petrov 2005). This phenomenon is quite similar to the phenomenon of divergence of biological species investigated by P.Teilhard de Chardin (1959). The heart of the matter is in the following. Different branches of cultural life, kinds of art and genres, in the process of their evolution, reveal inclination to become more and more autonomous, independent of each other. Sooner or later, each of them finds its own 'ecological niche', i.e. its own, 'genuine' kind of influencing upon the recipients. So, certain '*splitting*' is observed, concerning both the entire system of art and each of its branches – kinds of art (see Petrov 2007).

For instance, in Assyria the church, the circus, the theatre, and the brothel were firstly combined with each other, in the framework of the entire festive action. But afterwards each of these objects (and kinds of behavior) 'put forth' and separated from other objects (kinds of behavior). Theatre, circus, religion, etc. – each of them started its autonomous functioning, with its own evolutionary trends. Another example of 'splitting' is the appearance of easel painting, when the picture separated itself from the church walls (where the pictorial structure had put forth, elaborating its own devices, and first of all its color language, during the stage of the frescoes). At last, even a separated kind of art can be further 'split' into certain genres and/or stylistic directions, each of them responding to definite *modalities of perception* (as it took place in the above mentioned situation of genres of figurative painting, as well as painting in general). Thus, in Russian prose two its branches showed 'divergent evolution' after 1830's (Petrov 1994): 'sensual' oeuvres (oriented on concrete images depicted and their perception, realized mainly by means of right-hemispheric processes) – and 'image-free' oeuvres (oriented on 'purely formal' structures, perceived manly via left-hemispheric processes). Many examples of this phenomenon may be found in the field of contemporary vanguard art: it is constantly intruding into new zones of activity which previously have never been connected with the sphere of art (e.g., various versions of happenings). At last, the divergent evolution of science and art was described by Martindale (1990): long-range increasing conceptual (abstract) constituent of science is opposed to decreasing this component in art and literature.

However, this divergent process will not be continued till the eternity. Sooner or later, each branch of cultural life (or each kind of art, or each genre or stylistic direction) will find its own, *final modality of perception* (or a group of such modalities). Besides, almost all such branches and modalities do exist now. Hence, we are very close to the '*final state*' of the entire system of culture.

Apropos, many concrete branches of cultural life showed such 'end of history.' Thus, *religious systems* of most cultures came from polytheism to monotheism – because of the phenomenon of 'centralization' (Golitsyn & Petrov 2005). In the techniques of *painting*, its final stage is also reached, due to oil paints. The principal evolution of *musical instruments* was completed when the piano appeared, and so forth.

In the contemporary informational era, due to decreasing role of the resource in comparison with information, all these processes of 'approaching to the final point' are becoming more and more swift.

So, everywhere we do see both the phenomenon of finiteness and infinite evolution. The very idea of finiteness is not original, as well as the idea of eternal development. However, now we know something about the *systemic roots* of both phenomena, hence, we can apply this knowledge in our investigations, including forecasting the development of different branches of our intellectual life.

Literature

Golitsyn, G.A., & Petrov, V.M. 1995 *Information and creation: Integrating the 'two cultures,'* Basel; Boston; Berlin: Birkhauser Verlag.

Golitsyn, G.A., & Petrov, V.M. 2005 *Social and cultural dynamics: Long-range tendencies (Information approach),* Moscow: Kom-Kniga (in Russian).

Martindale, C. 1990 *The clockwork muse: The predictability of artistic change*. New York: Basic Books.

Petrov, V.M. 1994 "Perception of prose: A struggle with the matter of the texts (A trial of an empirical investigation)", *SPIEL (Siegener Periodicum zur Internationalen Empirischen Literaturwissenschaft)* 13 (1), 22-45.

Petrov, V.M. 2004 "Perspectives of cultural evolution: Methodology of long-range and super long-range forecasting (Information approach)", *Rivista di Psicologia dell'Arte* 15, 71-102.

Petrov, V. 2007 "The Expanding Universe of Literature: Principal long-range trends in the light of an informational approach", in: L.Dorfman, C.Martindale, & V.Petrov (eds.), *Aesthetics and Innovation*, London: Cambridge Scholars Press, 405-434.

Teilhard de Chardin, P. 1959 *Le phenomene humain*. Paris.

Zabrodin, Yu. M., & Lebedev, A.N. 1977 *Psychophysiology and psychophysics*, Moscow: Nauka (in Russian).

Email: vmpetr@yandex.ru

Russell, Wittgenstein, and the Project for "Analytic Philosophy"

Nikolay Milkov, Paderborn, Germany

The last three decades have seen the publication of a number of books (see, for example, Clark 1975, McGuinness 1988, Monk 1996) that have broadened our knowledge of the relationship between Russell and Wittgenstein in 1911-12. Unfortunately, the documents that these books present remain under-investigated. In this paper it will become clear that this is also the case as regards the history of the introduction of what was later called "analytic philosophy". Despite the fact that Russell and Wittgenstein were in full agreement in their antipathy towards the old-style philosophy, for example, that of Bergson, each had his own conception of the New Philosophy. For Russell, it meant "examined philosophy", or philosophy advanced through "scientific restraint and balance", and resulted in a series of logically correctly constructed theories. For Wittgenstein, it resulted in syncopated, short logico- philosophical "discoveries". In the years to come, the two conceptions of "rigorous philosophy" embraced by Russell and Wittgenstein often came in conflict.

1. Russell Meets Bergson

The claim of this paper is that the New Philosophy, later called "analytic" (in 1912-13 Russell often called it "scientific"), was formed during the first months of Russell's acquaintance with Wittgenstein: October 1911-May 1912. In these months, Russell also met Henri Bergson, with whom he was engaged in a critical discussion. Russell's attitude to Bergson was rather negative. Be this as it may, his discussion with Bergson nevertheless shaped in him the idea for a New Philosophy that is radically different from the conventional, Bergson-style philosophy.

To Russell, the main problem with the Old Philosophy, and with Bergson in particular, is that it

> does not depend upon argument, and cannot be upset by argument. His imaginative picture of the world, regarded as poetic effort, is in the main not capable of either proof or disproof. Shakespeare says life's but a walking shadow, Shelly says it is like a dome of many-colored glass, Bergson says it is a shell which bursts into parts that are again shells. If you like Bergson's image better, it is just as legitimate. (Russell 1912, p. 336)

In other words, the insufficiency of the Old Philosophy is connected with the fact that its results are not apodictic. You can agree with the philosopher - if you are sympathetic to his style of thinking - but you can also disagree with him.

2. Rigorous Philosophy

In contrast to Bergson's philosophy, the New Philosophy produces "solid results" (Russell 1913, p. 38) - results that do not disintegrate when subjected to the "test of reason". In this connection it is interesting to notice that Wittgenstein himself criticized Russell's paper "Free Man's Worship" (1901) in that there is not "something solid" behind it.

(# 387[1]) Apparently, this paper was still not a part of the New Philosophy - not for Wittgenstein, at least.

This characteristic of the New Philosophy explains the penchant of the future "analytic philosophers" for taxonomies: for preparing lists of grammatical categories, or of other ontological "nomenclatures", which were often presented as philosophical products.[2] If nothing else, such practices yield solid results that cannot be disproved. Russell, incidentally, arrived at the idea that "the study of grammar … is capable of throwing far more light on philosophical questions than is commonly supposed by philosophers" (Russell 1903, p. 42) long before he met either Bergson or Wittgenstein: he already espoused it in *The Principles of Mathematics.*

On the face of these facts, it appears that the most appropriate name for the New Philosophy would be "rigorous philosophy". Ironically, this term was first used by Husserl in the title of his book *Philosophy as a Rigorous Science* (1910/11). It is ironic since "analytic philosophy" was for decades considered to be opposite to phenomenology.[3]

Besides having solid results, the main characteristic of the rigorous philosophy is that it discusses the *fundamentals*. In a letter to Lucy Donnelly of 28 October 1911, Russell wrote: "Bergson's philosophy, though it shows constructive imagination, seems to me wholly devoid of argument and quite gratuitous; he never thinks about fundamentals, but just invents pretty fairy-tales" (Russell 1912, p. 318). In contrast, the New Philosophy is theoretical philosophy; it does not produce essays.

3. The New Philosophy as Examined Philosophy

We can arrive at a rigorous philosophy that studies the fundamentals in two ways: (i) Russell's way, using the "harmonizing mediation of reason"; (ii) Wittgenstein's way, by "unearthing" "solid thoughts". We shall underline right now that these two approaches to studying fundamentals also conditioned the different types of "analytic" philosophy Russell and Wittgenstein practiced: a difference that resulted in an open conflict between them in the years when they were together in Cambridge again, i.e. 1944-1947.

Russell believed that the New Philosophy achieves solid results by, above all, being an "examined philosophy" - philosophy examined by reason. He provided its best description in his paper "Mysticism and Logic": the New Philosophy is a philosophy which uses "the harmonizing mediation of reason, which tests our beliefs by their mutual compatibility, and examines, in doubtful cases, the possible sources of error on the one side and on the other" (Russell 1918, p. 17). This is a philosophy of "scientific restraint and balance". (ibid., p. 20) Its products are tested

---

[1] Here and later in the text such three digit numbers, put in brackets, signal the number of a letter from Russell to lady Ottoline Morrell, as indexed by the Humanities Research Center, University of Texas at Austin.
[2] This characteristic of "analytic philosophy" was best described, as regards Austrian analytic philosophy, by Kevin Mulligan: "Description of a domain must have priority over every type of explanation that refers to how a phenomenon comes into being" (Mulligan 1986, p. 87).
[3] In Milkov 2004 we have already shown that this was not the case.

by reason. Conversely, the Old Philosophy produces theories and ideas that are not examined this way. (In this sense, Russell also complained of Bergson's "dogmatic, pontifical style" [# 360]). As a result, they are consistent only to sympathetic minds. Seen from another, unsympathetic perspective, they quickly disintegrate.

Following this method, Russell adopted the practice of constructing philosophical theories: a practice developed to the full in Carnap's *Aufbau*. This kind of New Philosophy suggests ever new hypotheses (or models), the only objective of which is to better present (or order) the facts available. It does not claim to discover truths. A typical example of this approach is provided in Russell's *Theory of Knowledge* (1913), where he set up a new system of epistemology with the help of the apparatus of the New Logic, starting from a single epistemological premise - acquaintance.

4. The New Philosophy as Consisting of Discoveries

Russell claimed that this mediation of reason by establishing philosophical theories could be best achieved by the power of argument. He, however, was not such an ardent supporter of argument that he failed to notice that the New Philosophy could also be pursued in other ways. As the following quotation from Russell's letters shows, he also tolerated lack of arguments, for example, by his student Wittgenstein:

> I told him he ought not simply to *state* what he thinks true, but to give arguments for it, but he said arguments spoil its beauty, and that he would feel as if he was dirtying a flower with muddy hands. … I told him I hadn't the heart to say anything against that, and that he had better acquire a slave to state the arguments. (Monk 1996, p. 264)

Wittgenstein developed his version of New Philosophy following an approach that was rightly considered by some historians "Kantian": it fuses philosophy with logic. Thus strengthened, it produces rigorous thoughts that do not disintegrate under critical analysis. This variant of New Philosophy treats the fundamentals even more consistently than Russell's does. In this sense Wittgenstein sought to give "another and more fundamental account of the fundamentals of *Principia* itself" (McGuinness 1988, p. 104).

In this way, Wittgenstein produced above all some discoveries in the area of philosophical logic. A very good collection of such discoveries is presented in Wittgenstein's "Notes on Logic". Here is an example: "Frege said 'propositions are names'; Russell said 'propositions correspond to complexes'. Both are false; and especially false is the statements 'propositions are names of complexes' " (Wittgenstein [2]1979, p. 97). Three years later, in 1916, Wittgenstein found that this method could help him to produce solid philosophical results in ethics as well: "The work of art is the object seen *sub specie aeternitatis*; and the good life is the world seen *sub specie aeternitatis*" (p. 83). In fact, Wittgenstein's logical-philosophical method could be applied not only to logic and ethics but also to any other philosophical discipline.

Elsewhere, we have called this method of working of Wittgenstein's the "sculpture method". This was a method of systematic parting away all the raw material from the "ultimate" philosophical truths (cf. Milkov 1997, i, pp. 355 f.). From a different perspective, this method was that of step-by-step "sculpturing" - or monolithic building - of all those "ultimate" philosophical truths which Wittgenstein himself believed he had access to. This approach accepts that every happy philosophical discovery is ultimate, so that it settles the problem under scrutiny once and for all; we do not need to return to it again. It produces crystals, the purest of which was the *Tractatus* itself.

Wittgenstein himself described his idiosyncratic method also using other metaphors. Sometimes he felt that his task "was something to be discharged, not by patient and cumulative removal of partial problems but by some great insight achieved as a result of effort" (McGuinness 1988, p. 172). Intriguingly enough, this method of working was not completely foreign to Russell, that adept in arguments and systems, either. On March 22, 1912, he wrote to Lady Morrell: "[Wittgenstein's] attitude justifies all I have hoped about my work … he has even the same similes as I have - a wall, parting him from the truth, which he must pull down somehow. After our last discussion, he said: 'Well, there's a bit of wall pulled down'" (Clark 1975, p. 172).

In general, however, it should be said that Wittgenstein's talent for philosophy, when compared with that of Russell, was of a rather different kind. In short, Wittgenstein was simply not good at systematic reasoning. In this sense Russell reported that "when there are no clear arguments but only inconclusive considerations to be balanced, or unsatisfactory points of view to be set against each other, he [Wittgenstein] is not good" (23.4.13[4]). This means that Wittgenstein was no good at constructing series of logically impeccable philosophical theories, which was, however, Russell's forte. On the other hand, when Russell was confronted with "philosophical walls" which were to be destroyed, he felt that even when he "put out *all* [his] force" he was " only just equal" to Wittgenstein (17.3.12).

Wittgenstein did his kind of philosophy using the method of concentration - he needed to concentrate in order to make his ultimate philosophical discoveries: "Prolonged concentration was his usual method" (McGuinness 1988, p. 154). Indeed, "[t]his *was* work for Wittgenstein - the effort of concentration on problems that he saw plastically before him. […] His notebooks were the distillate of long periods of concentration" (p. 181).

5. Wittgenstein's Theoretical Aestheticism

The practice of discovering philosophical truths, of removing "philosophical walls" that shadow the truth in a fit of deep concentration, led Wittgenstein to aspire "to be creative", an attitude well documented in Carnap's "Autobiography":

> When [Wittgenstein] started to formulate his view on some specific philosophical problem, we often felt the internal struggle that occurred in him at that very moment, a struggle by which he tried to penetrate from darkness to light under an intense and painful strain, which was even visible on his most expressive face. When finally, sometimes after prolonged arduous effort, his answer came forth, his statement stood before us like a newly created piece of art or a divine revelation. (Carnap 1963, pp. 25-6)

Carnap, of course, was unfair to Wittgenstein when he compared him to "a religious prophet or seer". Wittgen-

---

[4] Here and later in the text, such tripartite digit numbers indicate the date of a letter of Russell to Lady Ottoline Morrell.

stein's objective was not to invent religious truths but philosophical ones. His truths were rigorous and threw light on the fundamentals. In this sense he was a New Philosopher. Wittgenstein's singularity consisted in the fact that he was "the [passionate] artist in intellect", a characteristic which, as Russell emphasized, "is so very rare" (27.5.12).

This type of philosophy was creative, very difficult to do and exhaustive in the extreme. Russell, in particular, often reported to Lady Ottoline Morrell: "Wittgenstein is on the verge of a nervous breakdown, not far removed from suicide, feeling himself a miserable creature, full of sin" (31.10.12). "He strains his mind to the utmost constantly, at things which are discouraging by their difficulty, and nervous fatigue tells on him sooner or later" (5.11.12).

This practice of philosophy made Wittgenstein's relationship with Russell in 1912-13 rather dramatic. "Both men agreed that 'logic was hell!'" (McGuinness 1988, p. 154). Furthermore, the belief that only honest philosophy reaches the fundamentals, while the Old Philosophy is phony, or "bourgeois",[5] was of central importance for both philosophers. This was indeed what connected Wittgenstein's logic with ethics, a tendency that led him to Tolstoy in the first days of the First World War.[6]

Literature

Carnap, Rudolf 1963 *The Philosophy of Rudolf Carnap*, P. A. Schilpp (ed.), La Salle (Il.), Open Court.

Clark, Roland 1975 *The Life of Bertrand Russell*, London: Jonathan Cape.

McGuinness, Brian 1988 *Wittgenstein, A Life*. London: Penguin Books.

Milkov, Nikolay 1997 *The Varieties of Understanding: English Philosophy Since 1898*, 2 vols., Frankfurt: Lang.

Milkov, Nikolay 2003 "Tolstoi und Wittgenstein: Einfluss und Ähnlichkeiten", *Prima philosophia* 16: 187-206.

Milkov, Nikolay 2004 "Analytic Philosophy and Phenomenology: Common Sources, Related Results", in S. Kaneva (ed.), *Challenges Facing Philosophy in United Europe*, Sofia: IPhR, pp. 119-26.

Monk, Ray 1996 *Bertrand Russell: The Spirit of Solitude*, New York: The Free Press.

Mulligan, Kevin 1986 "Exactness, Description and Variation: How Austrian Analytic Philosophy Was Done", *Schriftenreihe der Wittgenstein-Gesellschaft* 12(2), 86-97.

Russell, Bertrand 1901 "Mathematics and the Metaphysicians", in *idem*, 1918, pp. 59-74.

Russell, Bertrand 1903 *The Principles of Mathematics*, London: Allen & Unwin.

Russell, Bertrand 1912 "The Philosophy of Bergson", in *idem*, *Collected Papers*, vol. 6, London: Routledge, 1993, pp. 313-37.

Russell, Bertrand 1913 "The Place of Science in a Liberal Education", in *idem*, 1918, pp. 31-9.

Russell, Bertrand 1918 *Mysticism and Logic*, London: Allen & Unwin.

Wittgenstein, Ludwig [2]1979 *Notebooks 1914-1916*, Oxford: Blackwell.

Email: nikolay.milkov@uni-bielefeld.de

---

[5] Wittgenstein meant this designation literally. To be sure, it was planned that he should lecture at the Working Men's College, London. (McGuinness 1988, p. 170)

[6] See on these developments Milkov 2003.

Internet: some collateral effects

Fábio Jesus Miranda, Goiânia, Brazil

The individual finds his place in the symbolic network in which he is immersed. This symbolic space is formed by the superimposition and integration of all aspects and elements that make up human existence in a determined socio-cultural context.

One aspect of this socio-cultural context is composed of instruments developed by technology with the intention of facilitating tasks and assignments, improving our use of time and space. However, the constant technological innovations assimilated into our lives generate impacts on our existence and the meaning we assign to it.

The relationship between life style and technological organizations, mediator of means of production, indicates historically that as new technologies are introduced, changes occur in social structure and function that, together, penetrate the private life of individuals and are capable of causing important changes at the most subjective level.

Since the last decades of the twentieth century, the world has been in a process of radical change. The most recent stage of technological evolution, generated by revolutionary innovations, follows the expansion of computer sciences and the convergence of microelectronic technology, software and hardware, that have determined the form technologies of production, of information and of telecommunications is transforming society and it is impossible to foresee with certainty what the results will be since this transformation is still occurring.

We are living in a period of profound change. In the decade of 1990´s, technology, which was already in existence for some time outside Brazil, definitively entered the homes of middle class Brazilians in the form of the personal computer. And, from 1995 on the use of the Internet, the international network of computers, became common practice in Brazil. It is easy to see how the use of the computer became an integral part of daily life. This causes us to think about how the computer is fast becoming an indispensable part of daily life.

Among the technological advances in computer sciences, the Internet has, without doubt, had the greatest impact. The Internet is a paradigm of what analysts describe as space in today's terms, "space of flows" (Castells 2000). An alternative, non-conventional space is created by networks of computers, fiber optics, cables, satellites and cellular phones in which society moves and interacts in real time sharing that which is not material.

There is no doubt regarding the revolutionary impact of the Internet. The fact that it has penetrated many areas (economical, political, educational, etc.) of contemporary societies to such an extent that the resulting exclusion and illiteracy in the digital world that includes a huge percentage of the worlds´ population raises great concern (Bauman, 1999).

On the other hand, from the point of view of individual subjectivity, the studies of various researchers indicate that, directly (or better, from the direct use) or indirectly the Internet is giving birth to a new form of life (Leitão & Nicolaci-da-Costa, 2000; Bauman, 1999; Jameson, 1991; Sennett, 1998; Turkle, 1995). Notably, young people are the principal users of the Internet, which presents the main

screen on which we can analyse the projection of a new era.

There seems to be no doubt that our behavior and habits will suffer alterations due to the development of new technology. However, even though it is easy to detect the changes in habits and behavior that new technology brings about, it is considerably more difficult to document how it can radically alter our very being (how we think, perceive and organize our external and internal worlds, how we relate to others and to ourselves, how we feel, etc.).

In general, all who have studied the impact of the Internet have reported new behavior patterns. Young's book (1998 *Caught in the Net*, related the emergence of a new pathological behavior: the intensive use of the Internet, which she believes has the characteristics of an addiction.

From a broader point of view, in the same year, Nicolaci-da-Costa (1998) analyzed new manners of thinking, of writing, of learning, of beginning and maintaining relationships of all types, of loving, of acquiring knowledge about oneself, etc. in internet users.

In addition to new behaviors, the analysts of the new digital order deal with new problems and psychological conflicts as well. Technological stress is the theme of the book, *TechnoStress* by Weil and Rosen (1997). The excess of information is examined by Schenk in *Data smog: surviving the information glut (1997). V*irilio (1999) points to virtual sex as a consequence of present social disorder. Isolation and depression are subjections of investigation in research done by Kraut and collaborators (2001).

Finally, new subjective organizations can be identified with the results of empirical inquires with users of the Internet, done by researchers. In *Life on the Screen: identity in the age of the Internet* (1995), a North American psychoanalyst, Sherry Turkle, argues that a new model of psychic organization is emerging as a result of the use of the Web. The model is one of "multiple selves" or individuals who, as occurs on the computers, live as if they were in several "windows" open simultaneously.

The first evidence seen when we examine what has been produced by the Internet Revolution is to notice that in the same way as previously occurred with other technological innovations, the new forms of social organization (virtual and in network) and new space (imaginary, lived as if real) generate and continue to generate alterations not only in behavior, but also in the constitution of the psychic of men, women and children in our days.

These alterations present some facets: the creation of new living space, significant changes in life styles and the way we act as men and women, the proliferation of terms we use to express new interests, new necessities, new relationships, new conflicts, etc. Ultimately, new ways of life.

Next, based on the observation and analysis of behavior and reports of users, we will relate some aspects that characterize an overflow of a new computer aesthetic that stamps new qualities of lifestyle on young people,

ICQ – Observing the use of the Internet, we see that the basis for research for innumerous themes was broadened. Children and adolescents alike see this as a great help with their studies. It seems that everything is right at ones fingertips. Never has so much been "written", never has so much been typed. The use of the keyboard seems to be a diversion, we never hear complaints about the amount of typing that is done. However, if students were asked to write the same amounts manually, there would certainly be complaints.

One aspect does not escape the notice of professors; many texts are only reproduced, (copy and paste), placed here or there, without having been elaborated in the least. Another aspect that cannot be overlooked is that the grammar and spelling of children and adolescents leaves a lot to be desired. This may be one of the negative aspects of the use of the Web. Everything happens so fast that there is not time for accents or full words, abbreviations are necessary and the impression is that the language they use is not the same one as in grammar books.

The open Windows – the Windows system brought great mobility to the operational use of the computer. While this was a big step in the development and of the extension of the use of home computers, it also brought some reflexes as collateral effects.

When we observe the practical use of Windows, we notice that it is common for various "windows" to be open for different tasks. The user can be in a "chat room", and have other programs like texts editors, games and navigators. This way, it is possible to move from one to another rapidly and in such a natural way that one has the sensation that the user is performing several activities at the same time. The observer would be incapable of following the velocity with which the user moves from one space to another, the interaction is restricted to the points connected by video.

The open window, as Turkle (1995) sees it, characterize a present-day subjectivity. The individual, as one who has multiple selves that act simultaneously is without a central state of being. It is so quick and easy to go from one self to another as if these selves were always available like the open screens of Windows. We think that the absence of a central state of being is an error. No matter how much the individual fragments himself into others, there exist a need for a system of organization that connects all of the parts. And, it is this system of organization that suffers the excesses since its "software" and "hardware" is not adequate to handle the insane speed of developing and upgrading technologies. The multi-tasking individual, forces himself (body and mind) to do several things at the same time, trying to keep up with the "upgrade" of his machine. In what concerns his "hardware", we are aware of the growing wave of physical problems such as posture poblems that results from long hours of activities in front of the monitor, injuries caused by repetitive effort due to excess and ever increasing rapidity in typing. In the area of "software", there are growing numbers in statistics reporting anxiety (panic syndrome), sleep disorders, inability to function satisfactorily in school or at work, impulsivity, lack of concentration, etc.

Caught in the Net – observations before and after the appearance of *Word Wide Web* show that "virtual reality" captures the individual isolating him from "real reality". The anonymity of *nicks* makes it easier for the individual to express himself on-line than when in the presence of other people. Many times, the individual feel more "intimate" and committed to people they have never seen than with the people in their family. However, even followed by a feeling of depth, we believe these interactions are marked by superficiality in the relationship; after all, how can one be intimate while hiding behind a mask? How can one be committed protected by a wall that prevents real contact? If as Lacan (1999) says it is the symbolic wich is determinant of individual subjectivity, what is to expect? If caught in the Net, the individual increases his virtual relationships at the price of a deficit in his inter-social relationships in the real world.

Without Limits – In virtual space the references which introduce limits to our desires are suspended. The simplest aspects of life are relegated to second place as pleasure determines what the individual does *on-line* triumph over all consideration for the time needed for the activities of life *off-line.* When obliged to abandon *on-line* activities, the individual often express dissatisfaction and often reaches the point of acting aggressively. This life of liberty experienced *on-line* may be related to a decline in respect for authority that is seen more and more in relationships *off-line.*

If, on the one side, life *on-line* transmits great pleasure, on the other hand, the individual remains eternally dissatisfied because he never finds the balance between his resources (technical and personal) and the final version. In this sense, logged on to the Internet, the individual has few limits for his desires. On the other hand, he has difficulties in finding formulas that protect him from the excesses generated by its abundance, mobility and diversity, if for no other reason, because he is not aware of this excess.

As each day passes, many begin to live in this space and this reality in the absence of that which is material, where he experiences new forms of life on the screen of computers which serve as platforms and access routes. What attracts the attention of those who are interested in understanding the human consequences of the Internet Revolution is the surprising power that this new space and this new reality has in capturing and holding its audience in such a way that the experiences lived on-line are so attractive and so real and intense that they can occupy a major amount of time in the individuals life.

A new space has been created by the emergence of the Internet. The dominant characteristic is that it is a virtual space in which a virtual reality is shared. This new space is accompanied by new necessities, new demands, new rules of production, sociability, survival skills, etc. As a result of all this, new behavior and habits emerge that show up in the processes of transformation in the way of life.

In a general form, all technology, in its essence, is developed with the intent of improving the quality of life. In this brief exposition, we have tried to show evidence based on observation that in spite of its positive potential the interaction with new technology can bring also collateral effects.

Literature

Bauman, Z. (1999). *Globalização: as conseqüências humanas.* Rio de Janeiro: Jorge Zahar Editor.

Castells, M. (2000). *A Sociedade em Rede.* São Paulo: Editora Paz e Terra. http://www.apa.org/journals/amp/amp5391017.html].

Jameson, F. (1991). *Pós-modernismo: a lógica cultural do capitalismo tardio.* São Paulo: Editora Ática.

Kraut, R., Lundmark, V., Patterson, M., Kiesler, S., Mukopadhyay, T. & Scherlis, W. (2001). Internet paradox. A social technology that reduces social involvement and psychological wellbeing? *American Psychologist*, janeiro de 2001. http://www.apa.org/journals/amp/amp5391017.html.

Lacan, J. (1998). *Escritos.* Rio de Janeiro: Jorge Zahar ed.

Leitão, C. & Nicolaci-da-Costa, A. M. (2000). Psicologia clínica e informática: por que essa inusitada aproximação? *Psicologia Clínica*, 12/2, pp. 189-205.

Nicolaci-da-Costa, A. M. (1998). *Na Malha da Rede:os impactos íntimos da Internet.* Rio de Janeiro: Editora Campus.

Schenk, D. (1997). *Data smog: surviving the information glut.* San Francisco: Harper San Francisco.

Sennett, R. (1998). *A corrosão do caráter: conseqüências pessoais do trabalho no novo capitalismo.* Rio de Janeiro: Record.

Turkle, S. (1995). *Life on Screen: identity in the age of the Internet.* New York: Touchstone Edition.

Virilio, P. (1999), *The game of love and chance.* Grand Street, 52. Disponível em: http://www.grandstreet.com/gs/gs52/virilio.html.

Young, K. (1998). *Caught in the Net: how to recognize the signs of the Internet Addiction and winning strategy for recovery.* New York: John Wiley & Sons.

Weil, M. & Rosen, L. (1997). *TechnoStress: coping with technology @work, @ home, @ play.* New York: John Wiley & Sons.

Email: fabiomiranda@ucg.br

Wittgenstein *versus* Mauthner: Two critiques of language, two mysticisms

Elena Nájera, Alicante, Spain

One of the paths pursued by the philosophy that interlinks the 19th and 20th centuries is the critique of language (*Sprachkritik*), which was cultivated intensively in *fin-de-siècle* Central Europe. Its various programmes coincided in questioning the expressive possibilities of words and ended up pointing to a paradoxical alternative in silence.

The present paper seeks to illustrate the impact of this tradition on Wittgenstein's early philosophy by analysing his reception of Mauthner's work. Mauthner devoted himself to denying the epistemological competence of words in his monumental study *Beiträge zu einer Kritik der Sprache*. In this and other texts – such as his outstanding dictionary of philosophy, *Wörterbuch der Philosophie*, subtitled *Neue Beiträge zu einer Kritik der Sprache* – he developed a critique of language which had devastatingly sceptical conclusions. Against them, the *Tractatus Logico-Philosophicus* explicitly took up its position.

This paper is developed in two parts. The first part analyses Mauthner's proposal, which, incidentally, will give us an opportunity to verify its strong Nietzschean accent. The second part is devoted to Wittgenstein's counterproposal, which, in the *Tractatus*, also peered into the abyss of silence, though with a different motivation from that of the *Beiträge*.

1. Mauthner's *Sprachkritik*.

Largely coinciding with the results achieved by Nietzsche in *Über Wahrheit und Lüge im außermoralischen Sinne*, but nearly three decades later, Mauthner insisted in his *Beiträge* on the cooperation of imagination in the formation of language. It was, he concluded in an example, "a poetic genius who in primitive times was able to fix his isolated ideas of fir trees, oaks, etc., in the sound sign 'tree'" (Mauthner, 1901–1902). Words thus show an irreducible conventional character that also contains an arbitrary operation of abstraction. Being constituted and functioning as concepts, our terms do indeed avoid particular cases and singular differences in favour of a kind of archetype.

Thus language sanctions universal meanings, ideas whose validity seems to be due to a cause, to something real. In fact, it lends its protection to a metaphysics given over to which Mauthner attaches the label of "superstition" or "word fetishism" (Mauthner, 1901–1902). For the fact is that our vocabulary gives an illusion of a supernatural, ideal world.

Words and the logic that orders them ultimately sustain a web of fiction – a "mythology" (Mauthner, 1901–1902) – which is managed by a specific interpretation of reality. The key to it is the rudimentary voluntarism and animism with which the human being faces the world in order to make it intelligible. Consequently, his creation is irremediably anthropomorphic – "hoministic", Mauthner says (Mauthner, 1901–1902).

The fact is that for this great hermeneutic operation that words perform in the service of the precarious human condition there is a corresponding theory of knowledge ready to renounce the essence of things. Nietzsche did so

enthusiastically, redefining truth in literary terms as a "mobile army of metaphors, metonyms and anthropomorphisms" (Nietzsche, *KSA* 1, 880). Mauthner drives the idea home by pointing out that with our senses, which are strictly "accidental", we can never get "beyond a metaphorical description of the world" (Mauthner, 1910, vol. 1, p. 12).

Consequently, in an exercise of "nihilistic scepticism" Mauther ends up by condemning language as a "useless device for knowledge". Our dictionary, therefore, cannot have any scientific utility, though it can have a "high artistic value". And, as an artistic medium, words promise to give voice to idiosyncrasy and express personal experiences. In this regard Mauthner recognizes the moral quality of the poet, who is someone "whose individual language is richer, stronger or deeper than common language" (Mauthner, 1901–1902). This is so because, with a voice of his own, a different voice, he knows how to exploit the connotations and evocations contained by the metaphors of our vocabulary.

However, the subject's original, creative playing with words, despite being the part of language that is "most valuable for the personality", reveals itself to be of little significance socially, "the most worthless in the stock market of human intercourse", to the extent that –according to the *Beiträge* – it proves to be "untransferable, incomprehensible, unsharable". This difficulty of divulging the individual's viewpoint is due to the fact that language corresponds more to general than to particular expectations.

Indeed, both for Nietzsche and for Mauthner, our expressive resources are a corollary of life in community. For Nietzsche, their development corresponds to the human being's need to communicate with his peers in order to shield his own weakness and ward off the possibility of a generalized excess of violence. Language –as paragraph 354 of *Die fröhliche Wissenschaft* notes – originates in order to overcome distances and unify criteria, to act as a "bridge" between human beings (Nietzsche, *KSA* 3, 529). Therefore it is a "useful invention", as Mauthner also describes it, an anthropological resource that ministers to human survival (Mauthner, 1901–1902).

The *Beiträge* confirm the social use of language and its levelling action, adducing that "it has never gone beyond the convention of herd actions". Therefore, Mauthner concludes, it serves as a collective memory and acts as an instrument of tradition, exercising an impersonal coercion on individual thinking: "what thinks in us is language". Words are made not to express the exceptional destiny of each individual but to manage the small needs of all.

In view of this analysis, it seems that the measure of linguistic creativity is gregariousness and that, as a result, the expression of authenticity is condemned to the most intimate of monologues. Therefore Mauthner contemplates the possibility of silence, the "magnificence of silence" as he says, with the support of the teachings of Meister Eckhart. In his *Wörterbuch der Philosophie* he reconstructs the history of the term "*Mystik*", closing with a proposal of "sceptical nominalist mysticism", which, in keeping with the *enlightenment* of language undertaken in the *Beiträge*,

discards the encounter with the divine (Mauthner, 1910, vol. 2, pp. 362 ff.). Consequently, it is a "godless mysticism" (*gottlose Mystik*) – as he describes it in *Der Atheismus und seine Geschichte im Abendlande* – which designates the difficult exercise of thinking outside the fetishistic herd metaphysics of words.

As a result of this approach, Mauthner induces language to a suicide that is mentioned in the following passage from the *Beiträge*:

"Men learned to speak in order to understand one another. Cultural languages have lost the ability to help men to advance beyond the most rudimentary level and attain understanding. It seems that the time has come to learn to be silent once again".

And Mauthner's time is also Wittgenstein's time. In *fin-de-siècle* Europe they shared the same concern for language. In fact, in proposition 4.0031 of the *Tractatus* we can read that "All philosophy is a 'critique of language' (*Sprachkritik*)", with a parenthesis that specifies "though not in Mauthner's sense" (Wittgenstein, 1971). Yet it is actually Mauthner who, in defining his philosophical project, provides an image of transition:

"I must do away with the language that is behind me, beside me and before me; step by step, therefore, I must tread on and destroy each rung in the ladder" (Mauthner, 1901–1902).

This metaphor certainly helps us to link up with Wittgenstein, because he too looks into silence from the ladder that he sets up a few years later – in 1918 – against the penultimate proposition of the *Tractatus*, which reveals the paradoxical status of his critique of language. He says, as you will recall:

"My propositions are elucidatory in this way: he who understands me finally recognizes them as senseless, when he has climbed out through them, on them, over them. (He must so to speak throw away the ladder, after he has climbed up on it.)" (Wittgenstein, 1971, §6.54).

2. Wittgenstein's reply to Mauthner.

Thus, for Wittgenstein, philosophy presents itself as a propaedeutic path, the real teachings of which are waiting at the end. And the conclusion of the *Tractatus* is, quite simply, that "What we cannot speak about we must pass over in silence" (Wittgenstein, 1971, §7). It is a question, therefore, of drawing a precise boundary between language and silence, scrupulously respecting their respective domains, which are those of *saying* and *showing*, those of the clearly *expressible* and the irremediably *inexpressible*. And so the "Preface" of the *Tractatus* sums up the sense of the book by indicating that "what can be said at all can be said clearly, and what we cannot talk about we must pass over in silence".

For Wittgenstein, unlike Mauthner, does consider that words are competent to represent reality – although, as we shall see, that is precisely where their poverty lies. The fact is that the scepticism that provides an essential unity to the *Beiträge* is flung, in the pages of the *Tractatus*, against the mathematical certainty of the propositional calculus that its author had learnt with Russell. Thus it seems possible to base language on a logic immune to all psychologism and any historical or anthropological consideration.

Indeed, the logic that is valid for Wittgenstein is not, like the one that Mauthner criticizes, a useful invention, but

the faithful translation of the structure of thought, and therefore not an empirical matter but a transcendent one. Logic is the condition of possibility of any scientific description of the world: "The truth is that we could not *say* what an 'illogical' world would look like" (Wittgenstein, 1971, §3.031). Thus, on the basis of their isomorphism, propositions and events share with thinking one and the same logic, which can be defined with a highly expressive metaphor: "the great mirror" (Wittgenstein, 1971, §5.511).

But it is precisely this epistemological competence of language, its suitability for science, that seems to disappoint Wittgenstein. "We feel", he writes in the *Tractatus*, "that even when all *possible* scientific questions have been answered, the problems of life remain completely untouched" (Wittgenstein, 1971, §6.52). And the fact is that language is of no use for tackling those problems. In his *Lecture on Ethics* Wittgenstein explains this by saying that words are like "vessels" with a capacity only for expressing facts: "as a teacup", he says, "will only hold a teacup full of water and if I were to pour out a gallon over it" (Wittgenstein, 1965). And the logic of the *Tractatus* can, indeed, only grasp an atomized, quantitative reality in which facts are equally insignificant.

Outside any context, impermeable to the nuances of interpretation, the world that can be said is, therefore, a monotonous, fortuitous scene, given over to solipsism. For the self – my self – is presented as its necessary condition, at the cost of shrinking "to a point without extension" which is coordinated with those very things. At the limit of facts, this subject is the master of a private but desolate space in which "God does not reveal himself" (Wittgesntein, 1971, §6.432). In short, it is a world without opportunities for the unconditioned, incapable of accommodating what has value. Wittgenstein writes:

„In the world everything is as it is, and happens as it does happen: in it no value exists" (Wittgenstein, 1971, §6.41).

This *extra-worldliness* of value is at the far side of words and requires one to edge from there along the boundary of language so as not to knock into it, for "This running against the walls of our cage", Wittgenstein says metaphorically in his *Lecture on Ethics*, "is perfectly, absolutely hopeless".

It seems that for Wittgenstein, too, the time has come for silence. In fact, in a famous letter to Ludwig von Ficker he explains that the *Tractatus* consists of two parts, "the one which is here" and "everything I have not written", emphasizing that it is precisely the latter that is important. Yet proposition 6.522 ot the *Tractatus* points out that "There are, indeed, things that cannot be put into words", assigning the domain of the mystical to them. What prevails here is a view of the world *sub specie aeterni* –foreign to factic atomism – which covers the questions connected with the meaning of existence (Wittgenstein, 1971, §6.45). This concerns ethics and aesthetics – and also religion – and, far from calling for a discursive development, they are quietly resolved on the basis of intuition and feeling. Thus they show themselves, they only show themselves, without even admitting doubts or clarifications. In this regard, Wittgenstein indicates in proposition 6.521 that "The solution of the problem of life is seen in the vanishing of the problem", going on to wonder, in parentheses:

"Is not this the reason why those who have found after a long period of doubt that the sense of life became clear to them have then been unable to say what constituted that sense?"

This firm renunciation of the word by Wittgenstein when it comes to tackling extra-scientific matters offers a pretext for reconsidering the comparison with Mauthner and, above all, for establishing a definitive difference between the two authors.

As we have seen, Mauthner's silence was sceptical. Declining all transcendence and any longing for totality, it gave content to an *atheistic* mysticism devoted to a worldly individual who had to be on guard against superstitions and ideals, someone whom we might sum up in this context as an *enlightened* subject. Wittgenstein, on the other hand, formulates his mysticism in an undogmatic but religious tone, shoring it up with terms such as "God", "grace" and "spirit", which are strewn throughout the *Tractatus* and saturate the *Geheime Tagebücher*. What is shown in this way is the desire to reconnect the individual to a higher, transcendent, extra-worldly meaning. And this inclination fits in with the fact that Wittgenstein's mysticism decides – as we read in his *Notebooks*, in the entry for 11 June 1916 – that "The meaning of life, that is, the meaning of the world, we can call God."

Literature

Mauthner, F. 1901–02 *Beiträge zu einer Kritik der Sprache*, Leipzig: Felix Meiner.

Mauthner, F. 1910 Wörterbuch der Philosophie. Neue Beiträge zu einer Kritik der Sprache (3 vols.), Vienna: Böhlau Verlag.

Nietzsche, F. 1999 *Sämtliche Werke. Kritische Studienausgabe in 15 Bänden* (*KSA*) herausgegeben von G. Colli und M. Montinari, Berlin–New York: Walter de Gruyter.

Wittgenstein, L. 1971 *Tractatus Logico-Philosophicus*, London: Routledge & Kegan Paul.

Wittgenstein, L. 1965 Lecture on Ethics, The *Philosophical Review* 74, 3-12.

Wittgenstein, L. 1979 *Notebooks* (1914–1916), Oxford: Basil Blakwell.
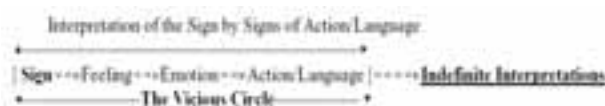
Email: elena.najera@ua.es

The Epistemology of "Text" Meaning:
The Context is the Proof-Conditions Upon Which We Prove the Truth of Our Interpretation of the Text

Dan Nesher, Haifa, Israel

1. Introduction: Can We Have Text without Context?

The *Oxford Dictionary* defines Text as "the original words of author" and Context as "parts that precede or follow a passage and fix its meaning; ambient conditions." If we explicate *text* as any cognitive sign operation, as verbal and non-verbal cognitive behavior and creations, and *context* as the conditions upon which we interpret the meaning of the *text*, then a text without context has no meaning (Eco, 1979). So what is the *context* and its function in conducing fixed meaning to *text*? The question is how to understand the concept of context; how upon the "ambient conditions" we fix the meaning of the text, which cannot be done without the *context* (Searle, 1979). In discussions of context the usual explanations are very general and vague so we have to fix the meaning of *context* (Stout, 1982). The common knowledge is that we fix meanings by interpretation, but how may we explicate the interpretation of text in context? I will discuss some major problems of text and context in theories of interpretation and how to overcome the predicaments of "hermeneutic universalism" and "hermeneutic contextualism." If universalism means that everything is interpretation we are apparently involved in an *indefinite series of interpretations*, and contextualism implies that truth is relative to some *interpretive vicious circle* since there are no external or outside grounds that would warrant the validity of interpretation (Hiley, 1991; Bernstein, 1983; Palmer, 1969).

[1] The Two Phenomenological Predicaments in Interpretation of Cognitive Signs:

Interpretation of the Sign by Signs of Action/Language.

| Sign ··· Feeling ··· Emotion ··· Action/Language | ··· **Indefinite Interpretations** |
| The Vicious Circle |

Assuming that every cognitive operation involves interpretation, the question is if we can interpret, understand, and explain the meaning of the text without being entangled in the paradoxes of phenomenological hermeneutics (Heidegger, 1930; Craige, 1983; Guignon, 2002; Nesher, 2002-2005).

2. Can the Language-game be the Context of the Textual Meaning?

Wittgenstein understood the difficulties of an endless series of interpretation and attempted to find a solution to this predicament by rejecting the function of interpretation in understanding the meaning of text and looking into criteria for teaching and learning the meaning of words through their use in the language-games (Wittgenstein, 1953). In analyzing Wittgenstein's conception of *explanation of meaning* of a word in *its use* in the language it can be shown that knowledge of the meaning of words must precede their use in language, otherwise we cannot know how to use them (Nesher, 1992). What can be the *criterion* for teaching and learning the *meaning* of the word in the

language-game? We face a Fregean difficulty because if the criterion is a private-subjective experience how do we know that persons experience the same phenomenon? And if the criterion is external to the language-game and to our experience, how do we know that our experience represents it truly (Wittgenstein, 1969; Guignon, 2002)? Thus we have to revise Wittgenstein's Grammatico-Phenomenological conception of *criteria* with the pragmaticist theory of meaning and truth. The criterion of *meanings* should be the *proof* or *quasi-proof*, as with perceptual judgments, of the truth of their *interpretation* in propositions that make them *clear* by being *true* representations of reality. However, without confrontation with and representation of reality independently of the text and its context we cannot explain the operation of interpretation, its truth, and how we fix the meaning of the text. Yet if we can know the *meaning* of a text only through the context, then the context must be the conditions of our instinctive and practical quasi-proofs or rational proofs of the truth of our interpretation of the text. In my pragmaticist theory the *criterion of the true interpretation of meanings* must be the *proof-conditions* of the text which are its specific *truth-conditions*, the mental and social conditions of the speaker, scientist, or the artist creating the artwork, and the *proof method*, (with *epistemic logic* not just *formal deduction*), namely the procedure to prove or quasi-prove the true interpretation of the text upon its truth-conditions (Nesher, 2005).

3. Different Contexts of the Same Text Can Allow Different True Interpretations of Its Meaning.

This understanding of interpreting text also solves an essential difficulty in the theories of interpretation: are interpretations a matter of opinions and always relative to the interpreters, so that different interpretations of the same text are incompatible (Garcia, 1999)? Ricoeur suggests understanding text as an entity, a kind of *semantic autonomy*, as if language and even actions have meanings independent of their agents, as in the Fregean-Russellian formal semantic conception of the sentence (Ricoeur, 1976; Wimsatt and Beardsley, 1954; Barthes, 1971; Hirsch, 1967). Ricoeur accepts the formal semanticist position when the autonomous text refers by itself to the world through "the genuine referential power of the text" (Ricoeur, 1976), since otherwise there is only the interpreter's subjective meaning or the author's subjective intentional meaning in creating the text, which we cannot reach (Fish, 1980). Without any criterion for interpretation of the text how do we know that we understand the genuine referential power of the text "disclosing a world that constitutes the reference of the text?" We must know this "world" in order to interpret the text because otherwise we enter either into indefinite interpretations or into a vicious circle of hermeneutics. However, we can know the world represented by the text through our knowledge of the world of the creator of the text. We learn the initial meaning of texts by being ostensively taught the language in our culture

through true interpretation of our perceptual experience representing our world. And when we encounter a text that belongs to our culture we interpret it *instinctively* in the common way, what Ricoeur calls a "guess" (Ricoeur, 1976; Hirsch, 1967). Sometimes, when we are not certain about our initial interpretation of the text, we continue on, explaining it by a *rational* interpretation called exegesis (Fish, 1980; Stecker, 2003). Our knowledge of the proof-conditions, which include the author's intentional *spirit* and the images and emotions embedded in her language, is always relative and develops with the inquiries the interpreters make about them (Jakobson, 1987; Wimsatt and Beardsley, 1954; Hirsch, 1967; Barthes, 1968; Carroll, 1997). Therefore, based on different methods of inquiry operating upon different truth-conditions, the interpreters can prove true different interpretations of the same initial meaning of text. Thus the same *text* can have different true interpretations if they are based upon different contexts, so that they intersect but do not contradict (Hirsch, 1967; Margolis, 2002). Therefore, there is no "conflict of interpretations" between different true interpretations since they are based on different proof-conditions of the same text (Hirsch, 1967; Ricoeur, 1969; Stout, 1982; Barnes, 1988; Thom, 2000). However, since there can also be false and doubtful interpretations, only different true interpretation are compatible (Krausz, 2002).

4. Hirsch on Validity in Interpretation without Truth.

The question is how can context stabilize the meaning of the text as its significance. According to Hirsch the main criterion for the validity of the interpretation of the text is the coherence of its components' meanings (Hirsch, 1967, 1976). The problem is how to find the coherence of the initial meaning of the text since the interpreter's coherence of its meaning may deviate from the author's intended coherent meaning of the text. The principles or laws of "the criterion of coherence" operating our interpretation of the text cannot be formal artificial ones since they have to explain human cognitive behavior of interpretation whose truth depends on the true representation of reality. To understand the original meaning of the text we have to understand the author's meaning and the truth of his text in representing reality (Nesher, 2004). Hirsch's basic difficulty is with accepting the Husserlian phenomenological epistemology which cannot explain human confrontation with reality, hence also the proof of the truth of our interpretation of the initial *meaning*, the "verification" of its *significance* (Hirsch, 1984). So interpretation is thoroughly circular: "the context is derived from the submeanings and the submeanings are specified and rendered coherent in reference to the context" (Hirsch, 1967). Validation of the interpretation of the meanings as the Husserlian experiential-intentional objects should place an independent restriction on finding common ground between the meaning of the author's text and its interpreter's. Moreover, Hirsch holds the Popperian conception of absolute truth, namely that since we cannot prove it but only refute our hypothetical theories we will never know whether the truth has been reached. Thus he rejects the possibility of verifying the truth of our interpretations of texts, and thereby of stabilizing their meanings. The question is how we prove the truth of interpretation of the text, which is always limited and relative to its known proof-conditions.

5. The Context as the Proof-Conditions to Prove the Truth of Our Interpretation of the Text.
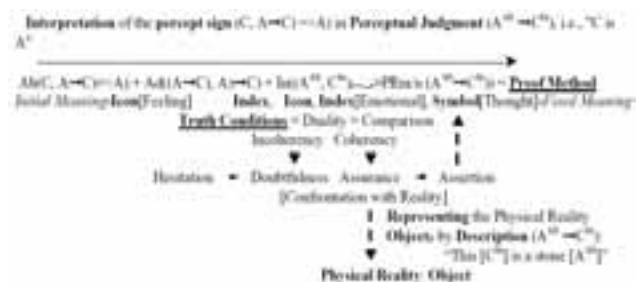
The proof of the true interpretation of the text upon its proof-conditions is by its true representation of reality. This can be explained only through confrontation with reality, both physical and psychical, such that *interpretation* of cognition and *representation* of reality are the *twin* components of the cognitive operation of mind.

[2] Siamese Twins of Interpretation of Meaning and Representation of Reality:
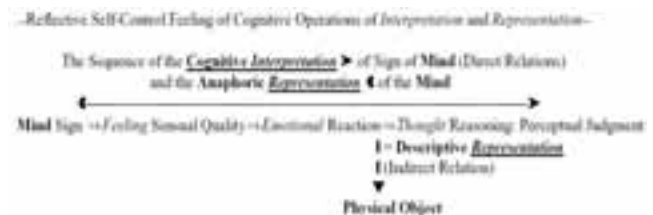
We cannot represent physical reality without representing our own cognitive minds, and vice versa. So we represent physical reality when we prove it cognitively and we represent psychological reality when we prove its interpretation on the constraints of physical reality. Thus the interpretation of mind's cognitive signs is the essential twin component of the representation of both physical and psychical reality (Iser, 2000; Thom, 2000). With this understanding of our cognitive minds we can avoid both the *indefinite series of interpretations* of "hermeneutic universalism" and the *vicious circle* of "hermeneutic contextualism" (Habermas, 1998). Through confrontation with reality with our reflective self-control of interpretation of the initial vague meaning we can continue to quasi-prove or prove, locally, the truth of our cognitive interpretation and representation of reality on specific proof-conditions. One can call the instinctively and practical interpreted meaning the *meaning*, and the rationally proven true interpretation of the initial meaning, its exegesis, *significance* (Gadamer, 1960; Hirsch, 1967, 1984). Yet interpretation can go beyond the initial meaning of the text, into its Reconstruction according to our knowledge of the author's intended spirit of the text. Still, we have to distinguish between the interpretation of the *initial meaning* of the original text as *Significance* and its *Application* to new historical proof-conditions which might be foreign to the author of the text (Gadamer, 1984; Hirsch, 1984). To explain the conception of *context* as the *proof-conditions* we can start with our perceptual judgments as our basic factual knowledge and ask what is context for their meanings (Peirce, *CP*). The *proof-conditions* of perceptual judgment are the *method* of quasi-proving the perceptual judgment upon its *truth-conditions* (Nesher, 2002:V, X).

[3] The Context of Perceptual Judgment Text Is Its Proof-conditions

The general cognitive *method* is the Peircean *trio*, the sequence of the inferential rules of Abductive Discovery (Ab), Deductive Expectation or Prediction (Dd), and Inductive Evaluation (In), to prove the truth of the interpretation of the meanings of our texts. The *truth-conditions* of our perceptual judgments are the relations between its cognitive components, the Iconic Feeling of an object and the Indexical Emotional reaction to it. By continuously reflecting on them instinctively and practically we feel their coherence as the condition for their synthesis in truly interpreting the meaning of the perceptual judgment (Nesher, 2002). However, the applications of this general cognitive *method* of proof are specific to any field of inquiry and its particular *truth-conditions* (Hirsch, 1967).

6. Conclusion: If the Context of Text Is Its Proof-Conditions What Are Their Proof-Conditions?

As I have theorized elsewhere, facts are our proven true propositions and genuine facts are our quasi-proven true perceptual judgments as our basic contexts upon which we prove the truth of interpretations of other propositions and theories (Nesher, 2002:X). Therefore, contexts are not given arbitrarily and not self-proven or self-defined but are proven true in our cognitive confrontation with reality. The *proof* of the *truth* of any proposition or hypothesis is always relative to its *proof-conditions* (Hirsch, 1967; Wachterhauser, 2002). The relative advantage of one true interpretation over another is in respect to how their different *proof-conditions* comprehend the subject matter of the interpretation and representation (Thom, 2000). There is no absolute proved truth but only local truths, although as in our scientific, aesthetic, and other cognitive activities representing reality, they evolve and extend as we develop the proof-conditions to represent reality better (Croce, 1901; Nesher, 2002: X). So it is similarly with our interpretive activities, when we develop our proof-conditions of the text to understand its meaning better by proving the true interpretation; thus true interpretations with different *proof-conditions* can continue indefinitely (Stout, 1982; Margolis, 1995; Nesher, 2002; Krausz, 2002, Habermas, 2003). We can follow the Peircean epistemology showing that the *trio* of Abduction, Deduction, and Induction is our basic epistemic complete method to prove the truth of our interpretations of texts as representation of reality. Hence the truth of this method itself cannot be proven by one of these logical inferences, and so nor can any one of them prove another, and thus surprisingly only when the trio comprises the entire sequence of these inferences can we prove its truth. I claim that by self-controlling our local proofs as true interpretations and representations of reality, in a long run we prove this *trio* as conducing truth relative to our truth-conditions, hence as a relative true method of proof.

Literature

Barnes, A. (1988) *On Interpretation: A Critical Analysis*. Oxford: Basil Blackwell.

Barthes, R. (1968) "The Death of the Author." In Ronald Barthes, *The Rustle of Language*. Translated by R. Howard. Berkeley: University of California press 1989:49-55.

Barthes, R. (1971) "From Work to Text." In Ronald Barthes, *The Rustle of Language*. Translated by R. Howard. Berkeley: University of California press 1989:56-64.

Bernstein, R. (1983) *Beyond Objectivism and Relativism: Science, Hermeneutics, and Praxis*. Philadelphia: University of Pennsylvania Press.

Carroll, N. (1997) "The Intentional Fallacy: Defending Myself." *The Journal of Aesthetics and Art Criticism*, Vol. 55, No. 3, 1997:305-309.

Craige, B.J. (1983) "What Is Relativism in the Arts." In Craige, B.J., ed., *Relativism in the Arts*. Athens, GA: University of Georgia Press, 1983:1-20.

Croce, B. (1901) *The Aesthetic as the Science of Expression and the Linguistic in General*. Cambridge: Cambridge University Press 1992.

Eco, U. (1979) *The Role of the Reader*. Bloomington: Indiana University Press.

Fish, S. (1980) *Is There a Text in the Class? The Authority of Interpretive Communities*. Cambridge Mass.: Harvard University Press.

Gadamer, H-G. (1960) *Truth and Method*. New York: Crossroad 1989.

Gadamer, H-G. (1964) "Aesthetic and Hermeneutics." In his *Philosophical Hermeneutics*.

Gadamer, H-G. (1984) "Text and Interpretation." In Wachterhauser, B.R. ed., (1986) *Hermeneutics and Modern Philosophy*. Albany: State University of New York Press: 377-415.

Garcia, J. J. E. (1999) "Relativism and the Interpretation of Texts." In Margolis, J. & T. Rockmore, eds., *The Philosophy of Interpretation*. Oxford: Blackwell 2000:43-62.

Guignon, Ch. (2002) "Truth in Interpretation: A Hermeneutic Approach." In Krausz, M., ed., 2002:264-284.

Habermas, J. (1998) *On the Pragmatics of Communication*. Edited by M. Cooke. Cambridge Mass.: MIT Press.

Habermas, J. (2003) *Truth and Justification* Cambridge Mass.: MIT Press.

Heidegger, M. (1930) "On the Essence of Truth." In *Martin Heidegger: Basic Writings*. Edited by D.F. Krell, New York: Harper-Collins, 1977:111-138.

Hiley, D.R. et al., eds. (1991) *The Interpretive Turn: Philosophy, Science and Culture*. Ithaca: Cornell University Press.

Hirsch, E.D. Jr. (1967) *Validity in Interpretation*. New Haven: Yale University Press: Context, 86ff.

Hirsch, E.D. Jr. (1976) *The Aims of Interpretation*. Chicago: The University of Chicago Press.

Hirsch, E.D. Jr. (1984) "Meaning and Significance Reinterpreted." *Critical Inquiry*, Vol. 11, No. 2 Dec. 1984:202-225.

Iser, W. (2000) *The Range of Interpretation*. New York: Columbia University Press.

Jakobson, R. (1987) *Language in Literature*. Cambridge Mass.: Harvard University Press.

Krausz, M., ed. (2002) *Is There a Single Right Interpretation?* University Park, Penn.: Pennsylvania State University Press.

Margolis, J. (1995) *Interpretation Radical but not Unruly: The New Puzzle of Arts and History*. Berkeley: University of California Press.

Margolis, J (2002) "'One and Only One Correct Interpretation'." In Krausz, M., ed., 2002:26-44.

Nesher, D. (1992) "Wittgenstein on Language, Meaning, and Use." *International Philosophical Quarterly* Vol. XXXII, No. 1, March 1992.

Nesher, D. (2002) *On Truth and the Representation of Reality*. Lanham: University Press of America.

Nesher, D. (2003) "The Beauty of Artworks Is in Their Aesthetic True Representation of Reality: The Epistemology of Creation,

Interpretation And Evaluation of Artworks as an Aesthetic Language Representing Reality." Presented at the International Society of Phenomenology, Fine Arts, and Aesthetic: The Eighth Annual Conference. Harvard Divinity School, May 16-18 2003.

Nesher, D. (2004) "Meaning as True Interpretation of Cognitive Signs: A Pragmaticist Alternative to the Shortcomings of Analytical Philosophy and Hermeneutic Phenomenology Conceptions of Meaning, Interpretation, and Truth." Presented at the Conference on Meaning and Its Meanings. December, 2004, University of Haifa.

Nesher, D. (2005) "Can Wittgenstein Explain Our Knowledge of Meaning? Pragmaticist Revision of His Conceptions of *Interpretation* and *Criteria*." Presented at the 28th Wittgenstein International Symposium, Kirchberg, Austria, August, 2005. Published in the volume of the symposium: *Time and History*. Vienna: Holder-Pichler-Tempsky. Kirchberg 2005.

Palmer, R.E. (1969) *Hermeneutics: Interpretation Theory in Schleiermacher, Dilthey, Heidegger, and Gadamer*. Evanston: Northwestern University Press 1969.

Peirce, C.S. (1931-1958) *Collected Papers*, Vols. I-VIII, Harvard University Press. [*CP*]

Ricoeur, P. (1969) *The Conflict of Interpretations*. Evanston: Northwestern University Press 1974.

Ricoeur, P. (1976) *Interpretation Theory: Discourse and the Surplus of Meaning*. Fort Worth: Texas Christian University Press.

Searle, J. (1979) *Expression and Meaning: Studies in the Theory of Speech Acts*. Cambridge: Cambridge University Press: Chap. 5–Literal Meaning (on meaning and context).

Stecker, R. (2003) *Interpretation and Construction: Art, Speech and the Law*. Oxford: Blackwell Publishing.

Stout, J. (1982) "What is the Meaning of a Text?" *New Literary History*, Problem of Literary Theory, Vol.14, No.1, 1982:1-12.

Thom, P. (2000) *Making Sense: A Theory of Interpretation*. Lanham: Rowman and Littlefield Publishers Inc.

Wachterhauser, B.R. (2002) "Getting it Right: Relativism, Realism and Truth." In Dostal, R.J., ed., *Cambridge Companion to Gadamer*. Cambridge: Cambridge University Press 2002:52-78.

Wimsatt, W.K. and M.C. Beardsley (1954) "The Intentional Fallacy." *The Verbal Icon*. University of Kentucky Press, 1954:3-18.

Wittgenstein, L. (1953) *Philosophical Investigations*, Oxford: Basil Blackwell, 1969 (*PI*).

Wittgenstein, L. (1969) *On Certainty*, Oxford: Basil Blackwell.

Email: dnesher@research.haifa.ac.il

Unnatural Nonsense? On the expectancy of consistency in the *Tractatus*

Yrsa Neuman, Turku, Finland

What *is* Wittgenstein's conception of nonsense? Cora Diamond's understanding of Wittgenstein's and Frege's view of nonsense in "What Nonsense Might Be" (Diamond 1991) has been extensively debated but also applied (Hertzberg 2004, Phillips 2002). I try to find evidence for and against Diamond's view of Wittgensteins conception of nonsense in the *Tractatus* by taking a look at Wittgenstein's actual use of the word "nonsense" (*Unsinn* and *unsinnig*) and related terms. I find that Wittgenstein is not consistent in his own use of words and may not have a coherent conception of nonsense at all, and conclude that "cherry-picking", the style of reading and arguing about Wittgenstein's work in which paragraphs are cited as evidence without regard to their context is problematic. My aim is not to argue for or against a certain reading of the *Tractatus*, but to show that traditional and "new" readers of Wittgenstein may end up in the same difficulty of interpretation.

I. What nonsense might not be

Diamond distinguishes between what she calls the natural view of nonsense, which she criticizes, and the Frege-Wittgenstein view of nonsense (also called the substantial view as opposed to the austere view in later debates, for example Conant 2006). One example Diamond gives is (A) "Caesar is a prime number" (usually taken to contain a category mistake) and (B) "Scott kept a runcible at Abbotsford" (usually taken to contain a word which lacks meaning) (Diamond 1991). According to the natural view, the words (or logical elements) in (A) are combined in an "illegal" way, whereas in the second (B), one word has the wrong meaning. These "facts" explain why the sentence lacks sense. According to the natural view, "Caesar" is a proper name, and in *that* place of the sentence, in combination with "is a prime number" there could only be a number. Therefore, the combination is illegitimate. The result of this mistaken combination is a nonsensical sentence.

Contrary to that story, and in line with what Diamond promotes and calls the Wittgenstein-Frege view of nonsense, a word has meaning only in the context of a sentence. This is often referred to as Frege's context principle. The question is what "Caesar" means in *this* sentence. Psychologically, Diamond writes, we think that "Caesar" must be the same in (A) as in "Caesar crossed the Rubicon" but it can't be this way. Since words do not have meaning in isolation they cannot be combined in the wrong way to make a nonsensical sentence.

On the Wittgenstein-Frege view, a sentence is not nonsense because of some meaning that the words in a sentence already have, or consequently, because of the fact that some rules of combination of logical elements (such as putting a proper name in the place of a verb) are violated against. Only when a sentence makes sense, can it be seen as a combination of logical elements, as having "a structure". This is what a logically nonsensical sentence lacks. In a logically nonsensical sentence, no parts are to be discerned, and the "sentence" has no structure. There is only one way to produce nonsense, according to Dia-

mond – the two example sentences are, after all, nonsense in the same way.

> *Anything* that is nonsense is so merely because some determination of sense has *not* been made. (Diamond 1991: 106)

One could rephrase Diamond's view a bit: nonsense is *what cannot be put into any category*. Is not categorized in the same way as the items in the other boxes – it is actually not, in a sense, categorized at all, but goes into the rest bin. Another way of putting it: *there is no recipe for making nonsense*. Thinking that one can make a "diagnosis" of nonsense by showing that a proposition has two or more parts (that it is a combination of categories which cannot be combined) presupposes that one can discern a structure in it and *in a sense* understands the proposition. Then the sentence is seen *as* a sentence, and *does* say something, or we *have* given it some sense – and hence it is not completely nonsensical after all. That would be paradoxical: a nonsensical proposition with sense. Logically speaking, nonsense, the opposite of what makes sense, is not "sentences which lack sense". What lacks sense is not a sentence or a proposition or the like. There is simply nothing there. This idea is articulated in the *TLP*. A sentence has sense, per definition, and it is used, that is, "it is a *Satzzeichen* in its projective relation to the world".

A *Satz*, according to the *TLP*, has sense (*Sinn*), and is bipolar: it is either true or false. So called "*Scheinsätze*", or pseudo-propositions, are nonsensical, and they are neither true nor false. The word "pseudo-proposition" can be taken as shorthand for a proposition-like entity, which is no proposition because it lacks sense ("*Scheinsätze*", *TLP* 4.1272, 5.354, 5.535). A proposition-like entity, in my reading, is an expression which we are tempted to take as a sentence; perhaps something like "Caesar is a prime number" as opposed to "jsd ffdjiniobglfdsk". "Expression" is perhaps not a good choice of word here, because of course, it is not expressed by anyone if it is not a sentence.

Diamond's view in "What Nonsense Might Be" is not clear-cut, it may be argued. She retains elements of the natural view which she criticizes. Diamond keeps the idea of "nonsensical sentences", even though she gives another explanation to them – otherwise she would not accept A and B as *examples* of nonsense.

Diamond takes three examples from Wittgenstein and writes that

> I should claim that the view of nonsense expressed in those three quotations is one that was consistently held to by Wittgenstein throughout his writings, from the period before the *Tractatus* was written and onwards. (Diamond 1991:107)

Hertzberg (2001) has argued that this view does not hold for the *Philosophical Investigations*. I will take a look for support and counter-evidence to Diamond's claim in the *TLP*.

II. The *Tractatus* and Nonsense

In the *TLP*, Wittgenstein uses the word "*Unsinn*" or "*unsinnig*" (nonsense/nonsensical) altogether 22 times (preface, 3.24, 4.003, 4.124, 4.1272, 4.461, 5.473, 5.5303, 5.5351, 5.5422, 5.5571, 6.51, 6.54. "*Sinnlos*" is used four times: 4.461, 5.312, 5.1362, 5.5351).

Many paragraphs support Diamond's view. In 5.473, Wittgenstein gives an example of a nonsensical sentence: "Socrates is identical", and explains that there is no property called "identical". "The proposition is *unsinnig* because we have not made some arbitrary determination, not because the symbol in itself is unpermissible. In a certain sense we cannot make mistakes in logic." 5.4732: "We cannot give a sign the wrong sense."

5.47321, on Occam's rule, is interesting. Unnecessary elements in a symbolism "mean nothing", and signs which serve no purpose are logically *bedutungslos* (not "*unsinnig*"). A very frequently quoted remark in the debate on nonsense (cf. Conant 2004) is 5.4733:

Frege says: Every legitimately constructed proposition must have a sense; and I say: Every possible proposition is legitimately constructed, and if it has no sense this can only be because we have given no meaning to some of its constituent parts.

(Even if we believe that we have done so.)

Thus "Socrates is identical" says nothing, because we have given no meaning to the word "identical" as adjective. For when it occurs as the sign of equality it symbolizes in an entirely different way -- the symbolizing relation is another -- therefore the symbol is in the two cases entirely different; the two symbols have the sign in common with one another only by accident.

The paragraphs above support the idea that nonsense is a lack of meaning; that one has failed to give meaning. Also, Wittgenstein writes that we cannot give a sign the *wrong sense*. The thought that the sign may symbolise in many ways also supports Diamond's comments on for example the word Caesar, and "is a prime number".

However, in the first part of this paragraph a tension looms up: "if [the legitimately constructed proposition] has no sense, this can only be because we have not given meaning to any of its constituent parts". But is it possible to choose *not* to give meaning [*Bedeutung*] to a proposition? Can a proposition be without sense and still be called a proposition? And if it is without sense, does it have parts?

There is some support of Diamond's view in the *TLP*. Now let's see look at the paragraphs containing words for nonsense which seem to go against it.

III. Counter-evidence

At times, Wittgenstein allows for the possibility of using words so to say in the wrong way. He uses terms like "pseudo-concepts like object" and writes that when this word is used as a real concept word "nonsensical pseudo-propositions" arise. Expressions such as "1 is a number" ("and the like") are nonsensical. And it is nonsensical to say "There is only one 1" (4.1272). Wittgenstein seems to think that concept words can only be used *as* concept words – i.e. he accepts that there be a form of 'category mistake' which produces nonsense. That formal terms can only be used as formal terms also entails that they actually *do* take their category with them into whatever context, and produce nonsense by being used in the wrong way.

To Wittgenstein, words of logic can be toxic to sentences. That goes against Diamond's view.

Note that in this paragraph Wittgenstein passes over from "one cannot say" and "it is impossible to say" to "nonsensical" when he talks about expressions like ""There are 100 objects" and "1 is a number". He writes that "all similar expressions are nonsensical" and seems not to respect Diamond's version of Frege's context principle, but rules out both expressions and certain words beforehand. "Nonsensical pseudo-propositions arise" sounds as if there *is* after all a recipe for making nonsense, some way to produce pseudo-propositions, by combining words or signs of the wrong kind. The paragraph is part of an argument to show that it does not work to express the same as what is already apparent or internal to the symbolism. Something to be said about a concept script need not be said *in* it, it is obvious from the sign for it (i.e. from "1" you it is clear that it is a number). In this case "nonsensical" can be read as "superfluous".

There are also "unstable" remarks in the *TLP*. For instance 5.473 pulls both in Diamond's direction and in the direction of a substantial conception; the sentence is nonsensical because "*wir eine willkürliche Bestimmung nicht getroffen haben*", but Wittgenstein also gives the reason *why* the *Satz* is nonsensical – but a *Satz*, as mentioned, cannot be nonsensical – it would then be a *Scheinsatz*. In 5.5352 Wittgenstein hints that Russell's formalisation of "There are no things" is not a proposition.

Wittgenstein should not be ascribed a "conception" of nonsense, because he writes "*Es ist schon darum Unsinn...*" (5.5351). Does he not mean that it is simply unnecessary or even stupid? In this case, the *Unsinnigkeit* may amount to no more than a plain rejection. It is another talk, a non-technical talk of nonsense, which maybe should not be ignored. (The Pears-McGuinness translation of this remark harbours inconsistencies; *Unsinn* and *unsinnig* are translated into both meaningless and senseless.) My examination of the instances of the use of the words *Unsinn, unsinnig* and *sinnlos* and terms connected to them (such as *Satz*) reveals many other internal tensions in Wittgenstein's use of words.

IV. A conception of nonsense at all?

At this point, it is clear that the matter is much more complex than it seemed at the outset. Wittgenstein does not entertain only the conception of nonsense that Diamond claims, nor clearly another competing consistent conception. What then are we, as interpreters, warranted to say about Wittgenstein's conception of nonsense, and of the *Satz*, in the *TLP*, at all?

My method here was "negative cherry-picking": I specifically picked out paragraphs which go against a conception that has been ascribed to Wittgenstein. This is a very common, although certainly not unproblematic, way to treat Wittgenstein's texts.

He is not consistent in his use of the words '*sinnlos*', '*unsinnig*' in relation to for example "*nichts sagen*" (contrast 5.5303 to 5.473) either in the *TLP* or in the *Philosophical Investigations*. Apart from "*nichts sagen*" (5.5303, 4.733) in the *TLP*, there are related expressions like "*ihm entspricht nichts*" (cf. 4.063), "*heißt nichts*" (4.73), "*keinen Gedanken ausdrücken*" (6.21) as well as "*bedeutungslos*" and "*keinen Sinn haben*".

"*Unsinn*" and "*unsinnig*" are not always used in a technical or special philosophical way, but are sometimes

outright rejections of a claim. Therefore, when these words are used it is not always the expression of "a conception". One example of this is that "*Unsinn*" is used to say that something is pointless (5.351).

Even if these inconsistencies are only "verbal", they present us with a genuine difficulty to determine whether a point of interpretation of the work is correct or not. Even if I could show that there is a *lack* of consistency on some account, it does not mean that I have proven that there is a genuine *inconsistency*. In other words, Wittgenstein could have meant one thing and nevertheless failed to express it completely clearly, or he could have been careless. That there are counterexamples or residues, that is paragraphs unaccounted for in some reading, then, does not suffice to conclude either that Wittgenstein had no definite views of what nonsense is or should be, or that the reading proposed is simply to be dismissed. Now the difficulties do not end here: even if there are inconsistencies "only verbally", that nevertheless could be taken to show that readings of the *TLP* in which everything explicitly or implicitly is expected to be systematic, or readings, in which single remarks are brought to bear a heavy interpretative weight, are fundamentally problematic – as readings of Wittgenstein.

V. How should these inconsistencies be dealt with?

1. One could do some "positive cherry-picking" and simply ignore all inconsistencies and leave them out of one's account. This would lead to a one-sided interpretation.

2. One could try to grind down the faults by for example arguing that other parts of the work are more important or that Wittgenstein did not mean that anyway.

3. I think one should go a little "psychological" or "philological" here.

Perhaps Wittgenstein's ideas are still under development? This would *weaken* the idea that he would have "*a* conception of nonsense". We have to accept that he is not as aware and deliberate on this point as many a reader has thought. *Had* Wittgenstein been completely systematic, he could have looked through the work to straighten out the remaining "verbal inconsistencies" and the range of words used for similar ideas; had he been structured and deliberate, had it been important.

Now does the expectancy of consistency, and the lack of it, imply an interpretative inclination on my part? Inconsistencies could play in the hands of a resolute reader: they could be taken to support the idea that Wittgenstein did not care much about consistency because it was all to be rejected, recognized as nonsense in the end. A traditional reader again, could benefit from inconsistencies, they perhaps allow for more "support" in favour of positive theses. A psychological take on the slips would not be bad either – whatever remark that does not fit into the doctrine could be explained away as that.

Instead of trying to pull in either direction, I will take another route: The inconsistencies in the *Tractatus* show that when it comes to nonsense, Wittgenstein is not as deliberate *as many think*. If the word "nonsense" does not only have a technical use, but is used by Wittgenstein in the *TLP* with the variation of meaning it has in everyday circumstances, as "gollywop" and "pointless" and what not, then what would look like an inconsistency to an avid interpreter, looking for the ultimate conception, is not really a genuine inconsistency – rather it shows that we are trying to find a deliberate pattern where there does not *have* to be one. Our flinch at these "inconsistencies" reveals our expectations. The text itself reveals that even if we may treat the *TLP* as a rigorous work and Wittgenstein as a rigorous thinker, this rigorousness does not mean "complete consistency in choice of words".

In the face of this fact, it is less obvious what it is to follow the principle of charity, which in ordinary cases is to try, as much as one can, to find the text consistent and plausible. But in interpreting a text one is not allowed to help either, to improve the text to make it fit where it does not. We are only to try to make sense of it as it is, and we are not allowed to just disregard what does not fit in.

Some interpretative emphasis could be moved away from what one could call "Wittgenstein's conception of nonsense in the *TLP*". Where one might want to look for it, there may only be inconsistent splinters of uses; technical nonsense, something like category mistakes, rejections (as in everyday language). The craving for coherent "conceptions" in Wittgenstein's work is not always a successful application of the principle of charity, but may reveal expectations to the work which may be out of contact with a potentially human writer. In the case of nonsense, both traditional readings and resolute readings will end up sweeping remarks under the carpet.

Nevertheless, nothing should stop anyone from doing philosophy inspired by Wittgenstein's work, but that, one should not confuse with interpretation.

Literature

(Selected list)

Diamond Cora 1991: "What Nonsense Might Be" in *The Realistic Spirit: Wittgenstein, Philosophy and the Mind*, The MIT Press, Cambridge.

Phillips DZ 2002: "Propositions, Pictures and Practices" in *Ars Disputandi* July 26 2002: http://www.arsdisputandi.org/publish/articles/000061/index.html.

Hertzberg Lars: "The Sense Is Where You Find It", T. McCarthy & S. Stidd (eds.), *Wittgenstein in America* (Oxford: Clarendon Press, 2001).) or http://www.abo.fi/fak/hf/filosofi/Staff/lhertzbe/

Goldfarb Warren 2005 "Das Überwinden" forthcoming 2007.

Conant James 2006: "Wittgenstein's Later Criticism of the Tractatus" in Pichler & Säätelä (eds): *Wittgenstein – The Philosopher and His Work*.

Conant James 2004: "Why Worry About the *Tractatus*", *Post-Analytic Tractatus*, ed. Barry Stocker, Ashgate.

Wittgenstein Ludwig 1921: *Tractatus Logico-Philosophicus*. German original 1921. Pears-McGuinness translation 1961.

Email: yrsa.neuman@abo.fi

Ethical Tasks of Media Advocacy in the 21st Century

Giridhari Lal Pandit, Dehli, India

Citing UNESCO´s recent finding regarding children, the discussion focuses on the *forms of exclusion* impacting civil society worldwide and the future generations. With its enormous economic and scientific progress, how is it that today´s *knowledge society* excludes values of wisdom and moral progress? Are not the guiding principles for participation in social change, for human development and for policy framework for prioritizing investment in scientific knowledge production conspicuous by their absence? Quite alarming as the scenario sounds, it should wake us up to the darkest areas of *human condition,* which must be interrogated by asking: What are *its* most challenging frontiers today? How strategically and innovatively can ethics and the media address the most urgent issues the humanity is confronted by? It is in this context that I argue for *media advocacy* as a philosophy of participation for impacting the possible directions for policy change.

Introduction

At the beginning of the 21st century, how would have Ludwig Wittgenstein responded to a big change overtaking the main actors in our world which is so highly globalized? As the lives of citizens and civil society worldwide have been increasingly governed by the environment created by the corporate world of industry, business interests, market forces and the race for competitive, if not cleaner, technologies, hitherto unsuspected questions about meaningful stakeholder participation, human rights, justice, transparency, cultural values, health issues and policy change raise their heads in increasingly newer contexts. Being under their overwhelming influence, as we all are, how are such paradigms of governance to be interrogated? If we talk to the leaders of the corporate world in any part of the world, we would learn how much excitement there is over the prospect of *knowledge society* replacing (or having replaced) the industrial society. In their world-view, there is a paradigm shift taking place. The companies, organizations, educational institutions and the state are entering a new engagement with values and people. The lesson to be drawn is that, while chalking out new strategies of business promotion, they should take care of intangibles, such as information and cultural values, where previously all attention was focused on the tangibles exclusively.

But the world we have created, *if not inherited*, is a world where we think and act in a manner as if we were governed by *an undeclared emergency* with our fingers always on the access button: *have access, if you can pay*. In a big way, this brings the tangibles back in. Don´t we live in a world where *the state of emergency* has become the paradigm of governance as it tries to cope with the global and local contexts of structural violence, terrorism, retreat of the state, institutional breakdown, uprootment of threatened communities, mass extinction of species and climate change? We must not forget that *the state of emergency* is not a positive state. It is a negative state of the retreating state and its complicated mechanisms of governance (Strange 1998, Stevis, D. et al 2001). How can the world cope with such a negative state? In such a world, does science with or without wisdom have a future? This question deserves serious attention of every thinking person, including those who believe in a totalitarian takeover by *knowledge society* based on science and technol-

ogy on the one hand and the rules of the game called globalization on the other. More than the scientists themselves, is it not the state and its bureaucracy of funding mechanisms, its ever-growing nexus with industry and military and the corresponding institutional incentives for career-oriented scientists, which are in-charge of science and scientific knowledge production, its institutions and technologies (Saxena, R. K. et al 2005a)? The thesis which I propose to put forth has *media advocacy for moral progress* for its key concept. Most of the media advocacy scholarship which has emerged recently focuses, quite legitimately, on public health, public health goals and strategies for policy change and on health campaigns as part of health promotion. Taking a clue from (Wallack, L. et al 1993: pp.vii-xiii, 1-11, 25, 200-208) and building upon (Pandit 1995, 2001a, 2001b, 2005, 2006a, 2006b, 2006c, 2007), I argue that the concept and practice of media advocacy can be legitimately *extended* to *the frontier of all the frontiers, namely ethics in the public domain* (Pandit 2007). Think of the following ethical tasks which demand urgent attention of every community and every thinking person: (i) defending human life and dignity particularly at the interface between the basic and applied science (ii) debating climate change mitigation and adaptation and (iii) impacting policy change for improving the human condition of governance and stakeholder participation.

1. Industry, Science, Business and Policy.

Does science have a sub-text within its sub-culture which rarely surfaces in scientific practice or in discussions on science? The answer is yes, if with Nicholas Maxwell (2004) we want to admit that "The crisis of our times is that we have science without wisdom". There are powerful arguments amidst increasing evidence in favour of the view that a sub-culture in the culture of science exists with a sub-text which is neither made public nor debated openly. Where science itself suppresses its sub-text and sub-culture *and* the underlying aims, values, priorities, beliefs and ambitions, it is neurotic (Maxwell 2004: ix-xv; 83-99). On the contrary, where it practices transparency in the public domain it is not neurotic (Maxwell 2004: 83-99). What is worse is that the society which regards itself as a *knowledge society* is deeply caught in *the rituals of knowledge production*. It seeks to apply science in every conceivable manner in varied fields of human activity and cultural life, which are known to impact the very environments which, with their wonderful ecosystem services, nurture and sustain Earth and us. The question is whether it is not this sub-culture with a sub-text which facilitates a dogmatic extension of the scientists´ freedom of research to the varied applications of science. Ideally, every such extended freedom should be thrown open to debate and criticism before the potential applications of science can be pursued with wisdom. Who is not familiar with scientists and technocrats engaged, *neurotically as it were*, in building not just the utopian blue-prints but totalitarian schemes for changing the world beyond recognition? But how do they manage to extend the universal freedom of scientific research to all imaginable/possible applications of science including its grave misuses with such ease? No one questions their illegitimacy in doing so. Those whose fingers are always at the access button are not expected to do so. It

can be argued that the primary reason for this kind of tolerance, slowly leading to general acceptance, is the absence of a culture in which the scientists themselves would spare no effort to debate their sub-culture and its sub-texts, openly and critically. Its absence leaves us only with *the rituals of knowledge society*. No surprise, if mankind lands itself every time in knowledge production without that wisdom which ought to inform its varied applications. Bio-technology, bio-medical research and other fields of science provide spectacular examples of this human condition of knowledge production (Lanctöt 2002, Pandit 2006c, 2007).

The question is whether the applications of science that are being pursued worldwide really do fulfil ethical scrutiny through public debate. Invariably, the answer is in the negative, so long as there is no universal agreement on which ethical regulations to follow in which context for such scrutiny (Pandit 2007). Yet we must ask whether we can think of a world which is guided by the policies and values of pursuing moral progress along side scientific, economic and technological progress. Since moral progress and scientific progress can never be synonymous, these need to be debated publicly. More precisely stated, in no case can the criteria of moral progress come from science itself, since they have no roots in it. Therefore, instead of allowing them to pass as if they were part of its sub-text, they need to be debated openly. Although it is true that the state and private funding of scientific research does not come without its conditions, the freedom of research enjoyed by the scientists worldwide can neither dogmatically nor automatically be transferred to all imaginable applications of science. On the contrary, potential applications need public debate before crucial policy decisions to pursue them can be made. This raises a further question how we might identify the primary indicators of the biggest failure of mankind: The failure of pursuing *knowledge production without the values of wisdom.* We may also call it the failure of pursuing scientific, economic and technological progress *without* the values of moral progress. Among the primary indicators, consider the following:

(i) The world which mankind has inherited from the past century is a world divided against itself everywhere and in all spheres of human activity, most notably on the issue of which values to accept as universally binding in defence of human life and dignity; we are a witness to institutional breakdown which is taking a heavy toll universally.

(ii) Quite characteristically, our world creates technologies which repeat this conflict and raise the following paradox: There are people who may be in dire need of these technologies. But they have no access to them. And there are people who may not need them. Yet they want to have them because they can pay for them.

(iii) Add to this the fact that it is the nexus between the state, industry and military which determines the environment for *investment* on new technologies. But there is hardly any investment on *research* on *access to new technologies* (ANT), which is commensurate with such investment. As a result, new technologies arrive in our world even before the old technologies become accessible to people who need them.

The indicators (i-iii) unambiguously point to the following paradox of ANT. ANT cannot be defined in terms of a person´s capacity to pay for it, particularly within the *knowledge society.* But until now ANT has been taken to mean the capacity to pay. What is worse is that in the field of bio-

medical research on assisted re-productive technologies, it is generally taken to mean both one´s *capacity* to pay and *willingness* to become a part of an extended laboratory for carrying out experiments on human subjects, in absence of any *informed access* (Pandit 2007). Pregnant with far-reaching ethical implications and linkages, both *informed access* and *informed consent* depend upon ethical consultation service in diverse contexts. So long as people have no *informed access* in this standard sense, they would be incapable of any *informed consent*. In fact, it is true that most people have no ANT in the standard sense. If this is so, it implies that recording their *informed consent* in such experiments *ritualistically* makes no sense. Imagine the situation, if these are the same people who have no access even to the old technologies. Is this not paradoxical enough to warrant a preliminary explanation? At least a part of the explanation may come from the absence of debate on the complicated nexus between the state, industry and scientific institutions in terms of (i-iii), signalling absence of debate on *the sub-text of science*. Now, consider the following questions (to be discussed in §2 below), which our discussion raises at a deeper level: Divided against itself, is our world really getting closer and closer to becoming a *knowledge society*? How can we guard ourselves against new forms of totalitarianism which may not be visible to every one? How strategically should the real stakeholders think and act in order to impact participation, improvement of human condition, policy change and governance, when the world is caught in globalization and in *the rituals of knowledge society*, old as well as new? If the modes of scientific knowledge production are themselves in crises, is there a way forward for humanity where it would be guided by the values of wisdom and moral progress?

2. Beyond the Rituals of Knowledge Society.

A window to viewing what state *the knowledge society* has landed itself in is provided by the state of children´s human condition in the majority of economically advanced nations of the world. Any question in this regard may sound intriguing enough in the context of the recent human development initiatives at the highest level, notably the UN Millenium Development Goals (UNMDGs). The UNMDGs primarily address the poorer nations of the world. The initiative has attracted inadequate support from the developed nations, although all 192 members of the UNO have agreed to it. Interestingly enough, our picture of the state of children´s human condition worldwide gets far more clouded than one would have expected as soon as we shift our attention to the context of the most advanced nations of the world. A more recent finding of the United Nations Children´s Fund is highly disturbing (UNICEF report, February 14, 2007). It brings together the best of the currently available data in its *Report Card 7, Child Poverty in Perspective: An Overview of Child Well-being in Rich Countries,* providing an overview of the state of childhood in the majority of economically advanced nations of the world. The finding about the quality of life of children in the rich countries as against the poorer countries is not new. Who is not familiar with the global phenomenon of child poverty amidst a great diversity of *forms of exclusion* worldwide? What is *new* is that the report *for the first time* measures and compares overall child well-being across six dimensions: material well-being, health and safety, education, peer and family relationships, behaviours and risks, and young people's own subjective sense of their own well-being. In total, 40 separate indicators of child well-being – from relative poverty and child safety, to educa-

tional achievement to drug abuse – are brought together in this overview to present a picture of the lives of children. In the report, Britain has been identified as the worst industrialised country for children. By using 40 indicators to gauge the lives of children in 21 economically advanced nations -- the first study of its kind -- researchers found that Britain's children were among the poorest and most neglected. Britain lagged behind on key measures of poverty and deprivation, happiness, relationships, and risky or bad behaviour. It scored a little better for education but languished in the bottom third for all other measures, giving it the lowest overall placing, along with the United States. Children's happiness was rated highest in northern Europe, with the Netherlands, Sweden and Denmark leading the list. UNICEF UK's executive director David Bull declared that "All countries have weaknesses that need to be addressed and no country features in the top third of the rankings for all six dimensions".

More significantly, the study found that there was no consistent relationship between a country's wealth, as measured in gross domestic product per capita, and a child's quality of life. The finding is certainly disturbing in more than one sense. It reveals the disturbing fact that there is a *negative correlation* between a developed country´s wealth and children´s quality of life. If this is so, then it follows that the child poverty in poorer and developing countries has little to with the poverty of these countries. *What about the wise allocation of funds for wise investment on children´s well-being, their universal access to basic services in education, health, nutrition, shelter, come what may?* Irrespective of how rich or poor a country is, there could be uncompromising ways and means of ensuring high quality of children´s life. Think of a poorer family which sends their child to school because they believe quite wisely that educating the child will give it dignity and pave for a better life. A richer family, with a different set of beliefs, may end up sending the child to work. Does not this warrant another look at children´s well-being, more so if we want to be guided by the values of wisdom and moral progress? Does it depend, *first*, on the kind of values that are fostered by the state and its complicated mechanisms and, *then*, on the kind of values that are followed by the individuals, by the family and civil society in their actual organization of economic, cultural and intellectual life? I think that it is possible to argue for an answer in the affirmative. As I have shown, out of this situation, there arise deeper questions across many disciplines:

(1*) First*, how are we to interpret this finding regarding children in *ethical terms*?

(2) *Secondly*, how is it possible for us to act as stakeholders, particularly on behalf of children, with an empowering voice in an *information society,* particularly under the present situation?

(3)*Thirdly*, how does this finding impact the very formulation of the UNMDGs which are primarily addressed to the poorer countries of the world?

The questions (1-2) can be raised regarding any generalization we may arrive at in the context of civil society as a whole and the future generations. These questions will go on multiplying as we identify the issues of policy planning, decision-making and enforcement mechanisms and their contexts that cry for public debate. For example, think of the state of public health and public health policies worldwide (Wallack *et al* 1993), or rampant medical malpractices, the crucial yet unfulfilled role of ethics consultation service in biomedical research, informed ANT (Pandit 2007), sustainable development and climate change and

so on and so forth. The question (3) concerns the following UNMDGs:

(1) Eradicate extreme poverty and hunger; (2) Achieve universal primary education; (3) Promote gender equality and empower women; (4) Reduce child mortality; (5) Improve maternal health; (6) Combat HIV/AIDS, malaria & other diseases; (7) Ensure environmental sustainability; (8) Promote global partnership for development.

Do they need another look now in view of the UNICEF report (February 14, 2007)? The answer is in the affirmative. But its discussion is beyond the scope of this paper.

2.1. Media Advocacy for Impacting Policy Change.

We have briefly considered the question whether *informed consent* ritualistically taken from potential human subjects of experiments in biomedical research makes sense without *informed access* to new technologies/experimental procedures that promise solutions to their potential beneficiaries (Pandit 2007). How muddled and toothless are the ethical guidelines presently being followed in some countries in this context? We must now ask why everywhere in our world, individuals and whole communities, confronted by the challenges of alienation and caught in diverse forms of exclusion and deprivation, are prevented from *being as they would like to be*. Torn apart, they are deprived of spaces of participation and universal interconnectedness, culturally, ecologically, economically, morally and politically (Pandit 2001b, 2006a). Finally, the universality of the crises of *scientific knowledge production without the values of wisdom and moral progress* shows itself in *the rituals of knowledge society* which are supported and maintained by the state bureaucracies worldwide. It also shows itself in those forms of exclusion which proliferate with economic, scientific and technological progress. One of the most disturbing questions at the frontier of media advocacy is: Why do *media* themselves fail in fulfilling their normal ethical tasks, confronted as we are with such a situation?

Let us now consider the following set of questions: Which are the most challenging issues of concern to mankind, to civil society and to whole communities as *potential media advocates*? What are the frontiers, in defence of human life and dignity, which call for innovative and strategic use of media by the real stakeholders? And what are the presuppositions of media advocacy as a strategy of ethics in public domain? To take up the last question first, media advocacy presupposes that media themselves are in need of change in orientation and policy. It also presupposes that the debate on ethical and legal issues of principle can play a decisive role in the public perception of *problems* of stakeholder-participation, policy improvement and change of social-political environments for their proper solutions. Thus, it is a basic presupposition that it is possible to frame fundamental issues regarding human well-being interests, e.g., issues of children´s well-being, of public health, climate change, sustainable development and human rights violations, *differently* from the way in which the state and international institutions frame them *ritualistically*. Seen in this role, it can help in diagnosing a crisis-situation by asking who is to blame, who is accountable and who is it finally whose policies must change. More precisely speaking, the need for real stakeholders to take over media advocacy tasks in larger public and human interest arises where the state and other responsible institutions are in retreat, in breakdown or in a mode of passing the blame to the victims. I think that the best examples are provided by climate change and human rights

campaigns which are *ritualistically* carried out by the governments worldwide under the UNO programmes and guidelines. Whenever individual or collective cases of violation of human rights on massive scale are brought by independent organizations to public attention, the governments, particularly in the developing countries, come out increasingly in favour of huge budgets for investing in talk-shows to spread human rights awareness among the actual and potential victims. Beyond this, the victims, which include the whole communities terrorized by organized terrorists and criminals, are expected to make representations to human rights commissions and employ lawyers to demand from law courts not only justice but the restoration of dignity, of which they have been robbed. What is worse in this scenario of governance is the state-sponsored terrorism in many parts of the world (Pandit 2005, 2006b). And think of those innocent communities who have been made its victims, robbing their members of their dignity and freedom. Today their very survival depends on the prospects of media advocates taking up the task of highlighting their human condition and formulating proposals for change in the government policy. The main reason for this is that the governments themselves are incapable of exposing the criminality of the retreat of the state and the failure of state mechanisms in preventing the violation of fundamental human rights from taking place. Thus, media advocacy sets the agenda for change and improvement in the human condition by reframing issues of principle where the life and dignity of innocent people are at stake. What is most significant is that it shifts the focus of attention from the *individual frame* to the *environmental frame* by asking the following questions: Has the state created human rights developmental environment which is conducive to the safe-guarding of the life and dignity of ordinary citizens and vulnerable communities (Pandit 2001a)? Has it put in place institutions and enforcement mechanisms which can deliver the most essential services to civil society? Is there proper environment in which civil society can feel safe, secure and meaningfully interconnected? It is clear, then, that media advocacy presupposes a need for social and political change, particularly with regard to paradigms of governance. This includes a need for change in *how* the individuals, societies, the corporate world, the institutional mechanisms of governance, the governments and organizations, both regional and international, have organized themselves into a *knowledge society*. In particular, the most serious ethical task here is how values of wisdom and moral progress might be brought in as the guiding principles of *knowledge society* - as the guiding principles to bear upon public debate on policy issues whenever and wherever human well-being interests are at stake.

Thus, media advocacy entails a holistic approach to diagnosing and solving the issues of policy change. Environmental damage (Barlow, M. et al 2002, Stevis, D. et al 2001) and Climate change provide the most important examples at the regional as well as global level. The question is what should the policies on climate change mitigation and on cleaner technologies look like? Suppose each country were to follow its individual path for framing problems of climate change and finding solutions to them. Then we would be in a situation in which one could, blaming others, always argue that only those who pollute more should pay the price: "The polluter pays doctrine". There would be then no (need for) public debate at global and universal level. But the moment we universalize the problem of climate change, it invites media advocacy for impacting change in policy. As a matter of fact, media advocacy during the recent decades has played a crucial part in framing the issues of policy differently. It has brought science, technology, politics, governance and international relations under one umbrella (e.g., the Kyoto Protocol, in place till 2012, asks the developed countries to promote less carbon intensive technological developments). The role of media advocacy assumes crucial significance the moment the developing countries argue that the developed nations must share a greater responsibility for cuts in the greenhouse gas emissions, since they are to blame for climate change by emitting 10 times, in some cases by 8.5 times, more carbon dioxide between 1950-2003. By this logic, the developing nations should be allowed to develop and industrialize now by any means to any extent while sharing a lesser responsibility. If it finally depends on how the major *players* in the game choose to frame the problem of climate change and environmental damage, media advocacy by the stakeholders assumes crucial importance.

Is there then a way forward for humanity? The discussion above anticipates a crucial role for ethics and media advocacy. To answer the question what is media advocacy and who are the media advocates, much depends upon what is at stake, which problem-areas we are interested in and which paradigms we want to change. Consider a minority community in a civil society, which feels *excluded* and impoverished through the policies of the government of day. As a stakeholder wanting a change in the environment and policies of the government, industry and other responsible institutions, it could participate for impacting change in the necessary direction by using the media innovatively and strategically. With strategic access to the media, it could voice its concerns, highlight its problems and their possible solutions, promote the quality of public debate on issues of principle and influence changes in public policy and planning in the most desirable directions. *A move in media advocacy in this sense would entail a philosophically significant step in ethics in public domain. The best way to understand media advocacy as a philosophy of participation for impacting change is to consider it as part of individual and community initiatives to bring debates on issues of concern to civil society and mankind into the public domain.* Once it is so re-connected, it can be understood as "a significant force for influencing public debate and putting pressure on policymakers" (Wallack, L. *et al* 1993). Media advocacy entails a participatory *role* for whole communities either as stakeholders in their own right or on behalf of real stakeholders who have no voice. The innovative and strategic use of media by the real stakeholders changes not only the volume but the quality of advocacy on specific issues of common concern to civil society and to mankind. As they are heard interrogating the paradigms of governance, policies on quality of life and environment, the whole communities with least resources and rare access to centres of power and authority, and the values they uphold, become visible and effective in bringing about desirable change in the environment through policy change. An effective and innovative use of media to this end is not possible unless the media themselves assume the role of a stakeholder and the whole communities themselves take to *media advocacy* as a strategy of social change.

To sum up: *Media advocacy* does not merely refer to effective and responsible coverage of issues or events by the media. It goes beyond awareness campaigns aimed at informing or educating the individuals and public about issues of common concern. It has nothing to do with lobbying and lying through paid advertisements, the seemingly prime movers of news media in today´s *knowledge society*. For these often act as obstacles to debating and framing sound public policies on fundamental issues of public health, quality of life, clean technologies, and sustainable and clean energy sources. *Media advocacy* becomes im-

perative where our gaol is (i) to influence changes in policy to promote educational, social, political and environmental development; (iii) to focus public debate on policy makers and corporate executives whose decisions structure the environment in which policies affecting the quality of life of people are framed; and (iv) to enable whole communities which feel *excluded* or *threatened* to participate for impacting policy change in desirable directions. The most fundamental ethical task of *media advocacy* is then the innovative and strategic use of media to bring the stakeholder-perspective to bear upon problem-perception, policy–framework and decision-making as issues of deep concern to civil society and mankind. Therefore, the motto of the media advocate should be: *participate and re-connect in order to improve the human condition.*

Literature

Barlow, M. and Clarke,T. 2002 *Blue Gold: The Battle Against Corporate Theft of the World´s Water*", Earthscan: London, 2002, pp.xviii+ 278

Lanctöt, Ghislaine Saint-Pierre *Die Medizin Mafia* (English ed. 2002; der deutschen Ausgabe 2004).

Maxwell, Nicholas 2004 *Is Science Neurotic*?, London: Imperial College Press.

Pandit, Giridhari Lal 1995 *Von der Oekologie des Bewusstseins zum Umweltrealismus – Die Wiederentdeckung menschlicher und nicht-menschlicher Interessenssphaeren*. Wiener Vorlesungen Band 41, Wien: Picus Verlag

Pandit, G. L. 2001a "Tradition and Innovation in Asian Culture: India", in Raul Fornet-Betancourt (Hrsg.) *Kulturen zwischen Tradition und Innovation: Stehen wir am Ende der traditionellen Kulturen?* IKO – Verlag fuer Interkulturelle Kommunikation: Frankfurt, (2001, 48-64). Dokumentation des III. Internationalen Kongresses fuer Interkulturelle Philosophie: Aachen, 22.-25.November 1999

Pandit, Giridhari Lal 2001b "Participate and Reconnect: The Problem of Improving the Human Condition", in Gerard de Zeeuw, Martha Vahl and Ed Mennuti (Eds.) *Problems of Participation and Connection*, a Special Issue of *Systemica* 13 (337-341), the Journal of the Dutch Systems Group. Proceedings of the International Conference held in Amsterdam, the Netherlands, 5-9 April 1999. Lincoln Research Centre.

Pandit, Giridhari Lal 2005 "World´s Refugees: What Humanity Owes to Them" in *World Affairs*: *The Journal of International Issues* 9, Spring Issue (148-156).

Pandit, Giridhari lal 2006a "Leibniz´s Weltbild of Universal Interconnectedness," in Herbert Breger, Jürgen Herbst und Sven Erdner (Hrsg.) *Einheit in der Vielheit*. Vorträge 2. Teil , VIII. Internationaler Leibniz-Kongress Vorträge, (769-779).

Pandit, Giridhari Lal 2006b "Exclusion and Uprootment in Kashmir: From a Political Tragedy to an Ecological Catastrophe" in *World Affairs: The Journal of International Issues* 10, Autumn Issue (pp.152-171).

Pandit, Giridhari Lal 2006c „Neue ethische Fragen aus der biomedizinischen Forschung und dem öffentlichen Gesundheitswesen" („New Ethical Issues from Biomedical Research and Public Health"): Guest lecture at the Seminar für Übersetzen u. Dolmetschen, Universität Heidelberg, Germany (unpublished).

Pandit, Giridhari Lal 2007a "Ethics in Public Domain: Biomedical Research and Beyond", in: Alok Srivastava and Ipsita Roy (eds.), *Bio-Nano-Geo Sciences: Addressing Issues of Concern to Mankind*, Humboldt-Kolleg-Palampur (India), forthcoming. A pre-print is accessible in Indo-German Science Circle Website (www.science-cooperation.org / www.science-circle.org)

Saxena, R. K., Sheoran, A. and Pandit, Giridhari Lal 2005 "How not to Interpret the Advances of Biotechnology", in *Interpretation and Culture: Themes in the Philosophy of Michael Krausz* - A Special Issue of *Philosophy in the Contemporary World*, Vol. 12.1, Spring-Summer (93-102) *,* from USA.

UNICEF report on childhood in industrialised countries, News item 14 February 2007: see
http://www.unicef.org.uk/press/news_detail.asp?news_id=890

Stevis, D. & Assetto, V. J. (Eds.) 2001 *The International Political Economy of the Environment – Critical Perspectives*", Lynne Rienner Publishers, Boulder/London, pp.viii+309

Strange, S. (1998) *The Retreat of the State: The Diffusion of Power in the World Economy*", Cambridge: Cambridge University Press, pp.xvii+218

Wallack, Lawrence, Dorfman, Lari, Jernigan, David and Themba, Makani 1993 *Media Advocacy and Public Health*, Power for Prevention. Newbury Park/London/New Delhi: Sage Publications.

Email: Panditgl@yahoo.co.in

PhiloSURFical: browse Wittgenstein's world with the Semantic Web

Michele Pasin, Milton Keynes, United Kingdom

How many resources about Wittgenstein exist on the web? How do they relate to each other? What is the most productive way to navigate them, from the point of view of a learner? With the development of the PhiloSURFical tool, we aim at investigating these and other related issues. PhiloSURFical is a software environment which builds on Semantic Web technologies in order to facilitate the navigation and understanding of Wittgenstein's first work, the Tractatus Logico-Philosophicus. By relying on an ontology created to describe the philosophical domain at various levels of abstraction, PhiloSURFical presents the original text and other associated resources in a contextual manner. This can be achieved through a process of narrative pathway generation, that is, the active linking of resources into a learning path that contextualizes them with respect to one another. In this article we introduce the learning paths which PhiloSURFical makes available and highlight some of the modelling issues which emerged as fundamental in supporting such navigations, in the emerging web of data.

Vision: a semantic web *for* philosophers?

How could a web navigation enlighten or affect a philosophy scholar? Especially within an educational scenario, is the constantly increasing number of philosophical web materials a source of confusion, or an advantage? In our work we have been investigating the requirements and features of the possible navigation mechanisms a philosophy student could benefit from. In particular, in the context of the Semantic Web [1], we have identified some of the "learning pathways" which can be used for dynamically presenting these materials within a meaningful context.

For example, imagine that from the paragraph 7 of Wittgenstein's Tractatus, by selecting an *interpretative* navigation path, you could easily jump to Max Black's detailed commentary on it. And from there, being interested on Black's interpretation and wanting to gather information on its possible origins, you were able to query the web using a *comparative* navigation path, aimed at highlighting what Wittgenstein and Black had in common. Two main results are returned: both studied at Cambridge, both worked in the philosophy of language area. You decide to focus your attention on Cambridge, click on it, select an *historical* perspective and see that while in Cambridge, in the 20's, Black had the opportunity to listen to and meet some of the major scholars of the time: Russell, Moore and Ramsey were among them. Now you may want to reorganize these results, according to a *theoretical* perspective. Thus you discover that another link among all these philosophers is their interest in the philosophy of mathematics, and that actually Black's first book was centred on this topic. So you drift away for a moment, select again a *theoretical* navigation, pull up a small map of the important views in philosophy of mathematics in the last century, and see that among them there is also the first philosophy of Wittgenstein. You click on it, select a *textual* navigation and automatically you are taken back to the Tractatus, but this time to paragraph 6.2.

The sort of links that would make possible such navigations are of a slightly different nature than the famous hyperlink which, together with other things, made the

fortune of the web. And if Google [2] does a great job in meaningfully organizing for us the web of hyperlinks, it cannot do much if we wanted to query directly the web of relations existing among our world's entities. In order to do so, resources need to be indexed and described not only at the syntactic level (e.g. with respect to their status as an image, a text file or a video), but also at the semantic one, i.e. with respect to their content. The Semantic Web effort, or web of data, brings forward the ambitious vision of creating and maintaining this "semantic layer" of the web, so to allow software agents (e.g. programs like the navigation tool described above) to accomplish various operations which would not be otherwise possible.

Often, with great and inspiring visions, also come great and challenging difficulties. The Semantic Web makes no exception here [3]. During our work with the PhiloSURFical tool we faced many of them, some with an exquisitely philosophical flavour, others of an inherent technical character. In the rest of this article, we want to draw the readers' attention to some lessons learned during the construction of the ontology and hopefully show how, despite the various limitations, the benefits of such an approach make the enterprise worth pursuing.

The PhiloSURFIcal tool

PhiloSURFical is a pedagogical application which allows the contextual navigation of a semantically-enhanced version of Wittgenstein's Tractatus Logico-Philosophicus [4]. By relying on an ontology created to describe the philosophical domain at various levels of abstraction, users can benefit from multiple perspectives on the text and on related resources. Moreover, users can take advantage of the application for storing their own annotations about the Tractatus and possibly contribute to the creation of a network of philosophical resources centred around the text and its author. For the moment, as the availability of free and adequate semantic data on the web is still limited, PhiloSURFical strongly relies on an internal knowledge base, but its architecture attempts to be open and extensible so to allow future integration and querying of different repositories, using the appropriate web standards (e.g. RDF [5], SPARQL [6], OWL [7]).

Figure 1. Screenshot of the PhiloSURFical prototype

In general, the usage of PhiloSURFical can be framed within the educational activity of learning through discovery of related resources. According to doctrines such as constructivism and situated cognition [8], this learning style is particularly effective because it pushes students towards the active exploration of a subject and the subsequent discovery of the interlinked nature of all knowledge. By constructing their own "paths" through the available learning materials, students engage directly with a subject mat-

ter and are more likely to actively construct a meaning out of it.

Thus, the semantic model behind PhiloSURFical has been designed with a clear purpose: the model should support the reconstruction of the history of ideas, by relying on structured information about the practical domain and the theoretical domain of thinkers. Our approach takes the notion of a learning pathway as a "system of specially stored and organized narrative elements which the computer retrieves and assembles according to some expressed form of narration" [9] and attempts to transpose it within the specific scenario made up of philosophical entities.

However, these pathways cannot be completely open-ended. Instead, they should be semi-structured, so to avoid phenomena such as information overload or inconclusive navigations. As a possible solution, we have formalized a number of *generic* learning paths. These represent the most interesting ways to browse the ontology, across one of its dimensions (or more of them simultaneously). So, for example, we can have a *theoretical* learning path (which focuses on the relations among ideas), a *textual* learning path (which attempts to retrieve related information objects), a *historical* learning path (which keeps results in chronological order) a *geographical* one etc. Of course, the paths can also be specialized: within the theoretical path, there can be a *disambiguation* one (which highlights concepts having the same name, but being actually defined by different views), a *contrast* one (which highlights opposing views) etc.

In conclusion, the data from both the local knowledge base and other (previously mapped) information sources can be dynamically reorganized and presented with relevance to the actual context. As the emerging Semantic Web makes available a larger number of queriable resources (e.g. the DBpedia [10], a structured version of the Wikipedia), so the navigation mechanisms will develop with regards to their complexity and interestingness.

Issues in modelling the philosophical domain

As said above, the PhiloSURFical system relies on an ontology. In AI terms, an ontology is often defined as an "explicit specification of a shared conceptualization" [11] and practically consists of a rich formal taxonomy augmented with typed relations, quantifiers and rules. The key feature of ontologies, is that computers can *process* it, so to *infer* some new relationships among data. In the context of the Semantic Web, ontologies can be viewed as a sort of "web deduction mechanism", that is, a reasoning backbone for the web of data. But first of all, ontologies provide a way for guaranteeing the semantic interoperability among different information providers. We do not want here to delve into the many problems involving the ontological representation *capabilities* and *limitations*. It is noteworthy that these problems are possibly increasing when trying to represent philosophical ideas, and the relations among them. Instead, we would like to stress that, as claimed by the authors of a recent project for the indexing of the Stanford Encyclopedia of Philosophy "while no single ontology can possibly capture the full richness and interrelatedness of philosophical ideas, we are operating on the principle that having (at least) one ontology is better than none" [12].

The specific approach used to realize the Philo-SURFical ontology has at its centre the decision to employ

the CIDOC Conceptual Reference Model [13] as a starting point for our formalizations. The CRM ontology was originally an attempt of the CIDOC Committee of the International Council of Museums (ICOM) to achieve semantic interoperability for museum data. Since 1996, the formal model has improved considerably till becoming in 2006 an ISO standard (version 4.2). The choice of using the CRM was motivated by two reasons. Firstly, for its widely recognized status as a standard for interpreting cultural heritage data. In fact, by reusing and extending an existing and internationally recognized ontology, we will give our tool's users more chances to benefit from the emerging Semantic Web infrastructure. Secondly, for its extensive event-centred design. This design rationale, in fact, appeared to be appropriate also when trying to organize the history of philosophy: even if it is common to see it as an history of ideas, stressing the importance of the *theoretical* (i.e. meta-historical) dimension, this cannot be examined without an adequate consideration of the *historical* dimension. That is, a history of the events related (directly or indirectly) to these ideas.
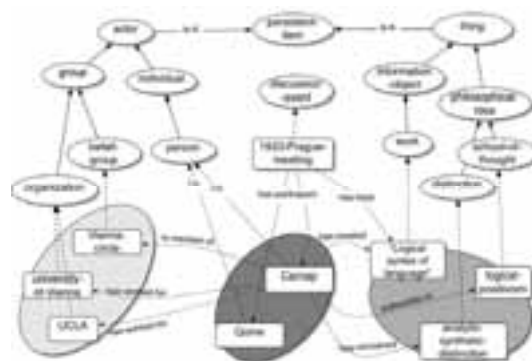
Figure 2. Example of an event-based representation

As an example, in figure 2 we can see an event-centred representation in the PhiloSURFical ontology. The *persistent-item* class, which is one of the five classes composing CIDOC's top layer (together with *time-specification*, *dimension*, *place* and *temporal-entity*) subsumes *thing* and *actor*. The two branches of the ontology departing from them can have various instances, which are related by taking part (in various ways) to the same event ("1933-Prague-meeting"). This kind of modelling, in the context of the PhiloSURFical tool, is extremely useful because of the multiple navigational pathways it can support (e.g. we could move to another event having the same topic, or to another topic treated during the same event, etc.).

In order to provide support for representing the multiple facets a philosophical fact can have, the ontology has been created by integrating other already existing models. In particular, we included knowledge about the domain of publications from the AKT reference ontology [14] and knowledge about information objects from the related module [15] of the DOLCE foundational ontology [16]. Moreover, as we are dealing with a domain where bibliographic resources are central, we have also attempted to build a model that is possibly compliant with a cataloguing standard. To this purpose, we are providing mappings and reusing notions from the Functional Requirements for Bibliographic Records (FRBR) specifications [17], which are a very influential standard for librarians. Finally, a large portion of the PhiloSURFical ontology is constituted by a series of new concepts and relations, mostly aimed at the description of philosophical events and ideas.

We can see with another example how these different formalizations can be used together. As CIDOC is not providing an easy way to model the social and intellectual activities of philosophers, we created various classes for this purpose, which are grouped under *social-activity* and *intellectual-activity*. Within the first group, we have five subclasses: *discussion*, *joining-a-group*, *educational-activity*, *close-social-contact* and *social-gathering*. Partially inspired by some AKT formalizations, these entities have let us extend the already supported event-based kind of reasoning. By instantiating such a model, as shown in figure 3, we can specify that the book by Kimberley Cornish (titled "The Jew of Linz" [18]) has as subject the fact that Wittgenstein, while studying at the Linz Realschule, had Hitler as one of his young school-fellows. Such a modelling can easily bring to a learning path which intertwines *publications* and *events* in the philosophical world.

Figure 3. Representing the content of a work through events

Of course, there are many other modelling issues which we could not present here, for space reasons. This is not a surprise, if we just consider the size and complexity of the philosophical domain. In particular, the modelling of concepts regarding ideas and their relations is difficult and mostly overlooked in the literature [19]. At the moment, the ontology is undergoing a refinement phase thanks to the feedback given by various domain experts, but thanks also to users' feedback on the narrative pathways PhiloSURFical makes available.

Conclusions

In this article we presented PhiloSURFical, a software tool which takes advantage of various Semantic Web technologies to support the learners' task of finding relevant resources. The tool is prototyped with Wittgenstein's Tractatus Logico-Philosophicus, one of the most influential philosophical texts of the twentieth century. We have described its operating principles and shown how the ontology it is based on can support various navigation features. As the modelling of a domain such as philosophy is subtle and challenging, we have briefly discussed our approach and provided references to other useful semantic models we integrated. The PhiloSURFical tool and ontology are still in the evaluation phase, but are available online at http://philosurfical.open.ac.uk.

Literature

1. Berners-Lee, T., J. Hendler, and O. Lassila, The Semantic Web, in Scientific American. 2001.

2. Beavers, A., Searching for Philosophy: A Review of Google Scholar and Google News. Teaching Philosophy, 2005. 28(4).

3. Halpin, H. The Semantic Web: The Origins of Artificial Intelligence Redux. in Third International Workshop on the History and Philosophy of Logic, Mathematics, and Computation, (HPLMC-04 2005). 2004. Donostia San Sebastian, Spain. .

4. Wittgenstein, L., Tractatus Logico-Philosophicus. 1921: Routledge & Kegan Paul.

5. W3C. RDF Primer. 2004; Available from: http://www.w3.org/TR/rdf-primer/.

6. W3C. SPARQL Query Language for RDF. 2007; Available from: http://www.w3.org/TR/rdf-sparql-query/.

7. W3C. OWL Web Ontology Language Overview. 2004; Available from: http://www.w3.org/TR/owl-features/.

8. Brown, J.S., A. Collins, and P. Duguid, Situated Cognition and the Culture of Learning. Educational Researcher, 1989. 18(1): p. 32-42.

9. Brooks, K.M. Do Story Agents Use Rocking Chairs? The Theory and Implementation of One Model for Computational Narrative. in ACM Multimedia. 1996. Boston MA, USA.

10. Auer, S. and J. Lehmann. What have Innsbruck and Leipzig in common? Extracting Semantics from Wiki Content. in ESWC. 2007.

11. Gruber, T.R., A translation approach to portable ontology specifications. Knowledge Acquisition, 1993. 5(2): p. 199-220.

12. Niepert, M., C. Buckner, and C. Allen. A dynamic ontology for a dynamic reference work. in Joint Conference on Digital Libraries - JDCL-07. 2007. Vancouver, British Columbia, Canada.

13. Doerr, M., The CIDOC conceptual reference module: an ontological approach to semantic interoperability of metadata. AI Magazine archive, 2003. 24(3): p. 75-92.

14. AKT. AKT Reference Ontology v.2 - AKTive Portal Ontology v.2. 2002.

15. Gangemi, A., et al., Task Taxonomies for Knowledge Content - D07 in Deliverable of the EU FP6 project Metokis. 2005.

16. Gangemi, A., et al. Sweetening Ontologies with DOLCE. in 13th International Conference on Knowledge Engineering and Knowledge Management (EKAW02). 2002.

17. IFLA, Functional requirements for bibliographic records : final report, K.G. Saur, Editor. 1998: München.

18. Cornish, K., The Jew of Linz 1998: Century Hutchinson.

19. Pasin, M. and E. Motta. Supporting Philosophers' Work through the Semantic Web: Ontological Issues. in Fifth International Workshop on Ontologies and Semantic Web for E-Learning (SWEL-07). 2007. Marina Del Rey, California, USA.

Email: m.pasin@open.ac.uk

Logic of finiteness: intellectual systems in the information era: 1. Types of structural changes and tendencies

Vladimir M. Petrov / Lidia A. Mazhul, Moscow, Russia

Among researchers dealing with the evolution of complex systems (including intellectual ones), there exist *two* opposite principal *standpoints* concerning such important problem as the existence of the final points of the system's development, i.e. the ends of their trajectories:

– Most theoreticians insist in the absence of any final point: those systems' states which now seem to be the limits of their evolution, in future occur constantly shifting, moving further and further – like a line of the horizon, which is ever moving away, when the observer tries to approach to this line. Therefore, we have the concept of *'endless' evolution*.

– Nevertheless, recently another standpoint appeared: according to opinions of some theoreticians, in certain cases the systems are evolving towards reaching their quite definite '*final states*' which are achieved sooner or later. [In turn, the character of these 'ends' can be determined either by internal processes within each given system or by certain outer influences.] Such concept was derived in application to the history of science, as well as to the history itself (see, e.g., Fukuyama 1992; Horgan 1996; Lindley 1993; Rescher 1984; Stent 1969).

Both standpoints are supported by the giant spectrum of real situations. In fact, some systems show 'endless' evolution. For instance, when considering various natural languages (English, German, Russian, Japanese, etc.), we see continuous evolutionary changes in their grammatical structures and lexical and semantic features. Nevertheless, some features of the language reveal almost no significant evolutionary changes (e.g., the nomenclature of the phonemes used – see Golitsyn & Petrov 1995, pp. 95-99). As well the development of most technical systems seems to be continued till the eternity, whereas the physical body of human beings shows almost no evolutionary changes during last many centuries (maybe exactly because the locus of the evolution of human cultures shifted to the realm of artificial means and devices – see, e.g., Teilhard de Chardin 1959). So the entire picture reminds of a play '*La cantatrice chauve*' by Eug*e*ne Ionesco: a company in a sitting-room hears a door bell ringing several times, and they conclude:

– sometimes such a signal means that there is somebody standing behind the door (in fact, in the play that was a fireman);

– however, sometimes this signal designates the absence of anybody behind the door (this situation occurred not cleared up in the play).

[Hence, this ambiguity described by Ionesco, is often treated by art theorists as an illustration to the 'principle of uncertainty' used in quantum mechanics.]

As a rule, such standpoints have *no strict theoretical foundations*. In best cases, there exist some empirical observations, indeed not capable of proving reliable conclusions concerning new fields to be considered. Meanwhile, there exist some tasks (both theoretical and practical) which need the solution of this problem. That is why it seems reasonable to *deduce* appropriate conclusions, resorting to the help of purely *logical, systemic analysis*.

The below consideration will be based on the so-called '*principle of the information maximum*' (see, e.g., Golitsyn & Petrov 1995, 2005; short description of this principle see in Appendix). This general principle will be consequently unfolded (as it was made in many other cases) to come to rather concrete situations which are of interest for our goals.

In the framework of the informational approach mentioned, both functioning of any system and its evolution are subdued to the main requirement: achieving *maximal 'mutual information'* between the system and its environment. In other words, any system possesses an inclination to be *maximally adapted* to the environment. So we should consider the consequences of this inclination concerning the *internal structure* of the system. What *changes* within this structure can take place, being caused by outer influences?

Appropriate changes can be, in principle, divided into *two* large *classes*:

* *Actual* (short-range) structural *changes* caused by concrete *current shifts* in the environmental conditions. For instance, such a system as a man reacts to changing air temperature (weather conditions), resorting to the help of due short-range structural changes: when cold weather, some of the internal blood vessels became wider in order to provide more intensive blood flux which is capable of heating definite parts of the body.

** *Fundamental* (long-range) structural *changes* responding to rather *universal 'fitness'* of the system to *various probable changes* in the environment. In other words, these structural changes provide due adaptive abilities '*in advance*,' in order the system would be ready to meet some unexpected future changes. An example of such structural changes is the very existence of mechanisms of controlling the cross-section of blood vessels, these mechanisms being formed in the course of the phylogenesis.

[Here we see a link between the structural changes belonging to the above classes (*, **): numerous actual changes of the first class, if they are regular, provide the basis for appropriate more fundamental structural changes belonging to the second class. So we deal with enhancing the perfection of the system's internal structure, its more perfect behavior in outer interactions.]

Examples of structural changes relating to the first (*) class, can be found in various intellectual systems, especially in contemporary conditions, when approaching of some systems to their ends is becoming very swift, mainly because of growing '*genuine information*' *social requirements* to their features. For instance, according to Martindale (2007), just now we observe the *end of art*. The matter is in that works of art, on the one hand, should *communicate* something, and on the other hand, they should be *novel* (such is the requirement of their social environment, especially in contemporary information society). Eventually, these regularities will come into conflict: if novelty, unpredictability, or entropy must increase continu-

ally, eventually a point will be reached where they conflict with the necessity of communication. That is, entropy will be so great that art will be incomprehensible. When that point is reached the art form will become extinct. Martindale presents evidences that poetry is on the verge of extinction and that classical music, painting, and sculpture are already extinct, art has come to its predestined end. So, in the framework of his model, "the high arts were defined in a way that guaranteed that they would evolve in a specific way and die in a specific way. It is time that aestheticians and critics accept what could be called the tragic end of art" (Martindale 2007, p. 118).

Other examples of such a kind may relate to processes of different scales. Thus, such social phenomenon as *intelligentsia* appeared in the 19th century, in some societies which should 'overtake' other societies 'outstripping' on their 'Common Cultural Way.' To do this, at an appropriate fragment of socio-cultural evolution, a certain social group is to be formed, capable of adopting mass consciousness to new conditions; exactly such are the functions of intelligentsia (see also Petrov 1999). That is why this phenomenon is typical only for conditions of sharp socio-cultural changes in the society, e.g., in Japan after Meiji Restoration (1867-68) and Russia after the emancipation in 1861. ('Outstripping' countries, e.g., England, didn't need such social group, because of rather 'flat' trajectories of their evolution; they needed only intellectuals, but not intelligentsia.) Hence, when the task to 'overtake' is solved, this social group has no foundations for its functioning, and it should disappear. Now we do really see such a process.

However, exactly the second class of changes (**) will be of most interest for our further consideration, as far as we focus on the perspectives of the system's evolution. In fact, any current events in the environment and appropriate adaptive changes in the system's structure, can contribute into the long-term 'universal fitness' of the system, only if these events are *followed by* due *long-term changes* (are intermediated by them). So what kinds of long-range structural changes can be found in the course of the evolution of the system, in order to provide better chances of the system's survival?

This question can be concretized if we take into account our principal purpose: *search for* possible *final limits* for the evolution. Are there any *logical regularities* in these long-range changes?

As far as we deal with growing perfection of the system's structure, its ability to provide adequate reactions to any probable environmental changes, we should inevitably introduce the concept of '*progress*' – as the growth of the structural *complexity* of the system. The progress and the complexity are going side by side (Golitsyn 2000; Golitsyn & Petrov 2005). [In fact, evidently, to provide adaptation to various, universal environmental conditions, is much more difficult than to provide simple adaptation to concrete conditions, so the last ones are 'embraced' by the former ones. For instance, to control the cross-section of the blood vessels, it is needed to have means which are capable both of enlarging this section and contraction.] Of course, the correlation of the progress and the complexity is only 'one-sided:' complexity is the necessary condition of the system's progressive development, but not its sufficient condition. (Really, sometimes arising certain features of complexity is not indicative of the system's progressive development – see in detail Petrov 2002; Golitsyn & Petrov 2005.)

How this necessary condition (growing complexity) can be realized? By which concrete ways?

Three main tendencies were theoretically deduced proceeding from the main equation describing the maximization of the mutual information between the system and its environment. [This main equation contains the sum of three items, each of them responding to appropriate main tendency – see Appendix.] Hence, the progressive development of any system should take place in the channel of one of these three tendencies (or sometimes of two of them, or all three):

A. Growing diversity of the system's states, or increasing entropy of the distribution of the system over these states.

B. Growing exactness of the system's behavior, or decreasing entropy of the system's errors.

C. Aspiration to the economy of the resource available (the role of the resource may be played by energy, substance, the number of operations while a certain kind of activity, etc.). This aspiration can be realized by two ways: choice of states with minimal resource expense, and providing the growth of the resource available.

The logical consequences of all three tendencies permitting to deduce some principal limits of the system's evolution, are considered in our next paper.

Appendix. Foundations of the «principle of the information maximum»

The principle uses the concept of *mutual information* between two variables (Fano 1951):

$$(1) \quad I(x,y) = \log \frac{p(x,y)}{p(x)p(y)}$$

where *p(x)*, *p(y)* are the probabilities of the values *x* and *y*, and *p(x, y)* is the joint probability of the combination of *x* and *y*.

Starting position: The *mutual information* between the *conditions* of the environment and the *responses* (parameters, traits) of the system is the most suitable *measure of* its *adaptation* (Golitsyn & Petrov 1995).

The principle of the information maximum: In the processes of evolution, behavior, problem solving, etc., the system chooses such reactions *r*, which provide maximization of average mutual information between the system and environmental conditions ("stimuli") *x*:

$$(2) \quad I(X,R) = \sum_x p(x) \sum_r p(r/x) \log[p(r/x)/p(r)] =$$
$$= H(R) - H(R/X) = \max$$

where *p(x)*, *p(r)* – probabilities of *x* and *r*; *p(r/x)* – conditional probability of *r* when *x* occurred; *H (R)* – unconditional entropy of reactions; *H (R/X)* – conditional entropy of reactions.

Usually there exist some *restrictions* which prevent the system from reaching the absolute (unconditional) maximum of information. Then the system has to be satisfied with the *conditional maximum*. A typical condition is the restriction of the average resource *E (X, R)*, e.g., energy:

$$(3) \quad \sum_{x,r} p(x,r) e(e,r) = E(X,R)$$

where *e(x, r)* is a resource expense in the state *(x, r)*.

Hence, it is possible to come to the *main equation*:

(4) $L = H(R) - H(R / X) - \lambda - \beta E(X, R) = \max$

where λ and β are the Lagrange multipliers. A physical sense of the multiplier β is a *deficit of resources*.

So *three principal tendencies* relating to appropriate three free items in equation (4), should be inherent in the *behavior and development* of any system:

1. *Expansion* – aspiration to increase the number and the variety of the system responses (reactions) *H (R)*: "search behavior".

2. *Idealization* – aspiration to increase the "exactness" of the responses, i.e. to decrease the entropy of the errors *H(R/X)*: "conservative behavior".

Economy of resources: on the one hand, to choose situations *(x, r)* with minimal resource expense *e(x, r)*; on the other hand, the aspiration to decrease the deficit of resource β, i.e. to increase the resource supply.

Literature

Fano, R.M. 1951 *Transmission of information,* New York; London: M.I.T. Press; Wiley.

Fukuyama, F. 1992 *The end of history and the last man,* New York: The Free Press.

Golitsyn, G.A. 2000 "High art and low art: The systemic role of an elite subculture", *Journal of Russian and East European Psychology* 38, 28-44.

Golitsyn, G.A., & Petrov, V.M. 1995 *Information and creation: Integrating the 'two cultures'*, Basel; Boston; Berlin: Birkhauser Verlag.

Golitsyn, G.A., & Petrov, V.M. 2005 *Social and cultural dynamics: Long-range tendencies (Information approach),* Moscow: Kom-Kniga (in Russian).

Horgan, J. 1996 *The end of science. Facing the limits of knowledge in the twilight of the scientific age*, New York: Broadway Books.

Lindley, D. 1993 *The end of physics,* New York: Basic Books.

Martindale, C. 2007 "The evolution and the end of art as Hegelian tragedy", Psikhologiya – Zhurnal Vysshey Shkoly Ekonomiki 4, 111-119 (in Russian).

Petrov, V.M. 1999 "Socio-cultural dynamics and functions of intelligentsia", in: T.B.Knyazevskaya (ed.), *Russian intelligentsia: History and fate*, Moscow: Nauka, 90-108 (in Russian).

Petrov, V.M. 2002 "High against Low: Hierarchies in Nature, Culture, and Art (Information approach)", *Bulletin of Psychology and the Arts* 3, 3-9.

Petrov, V.M. 2007 "The information approach to human sciences, especially aesthetics", in: C.Martindale, P.Locher, & V.Petrov (eds.), *Evolutionary and neurocognitive approaches to aesthetics, creativity, and the arts*, Amityville, NY: Baywood Publishing Co, 129-148.

Rescher, N. 1984 *The limits of science,* Berkeley: University of California Press.

Stent, G. 1969 *The coming of the golden age,* Garden City; New York: Natural History Press.

Teilhard de Chardin, P. 1959 *Le phenomene humain,* Paris.

Email: vmpetr@yandex.ru

The *Wikipedia*: Knowledge as social, fallible, externalist and holistic

Manuel Pinedo-García / Cristina Borgoni-Gonçalves, Granada, Spain

Most traditional accounts of knowledge are individualistic, internalist and intellectualist. Knowledge is attributed to an individual human being (and, perhaps, also to animals or to complex mechanisms, but we will leave this question behind), who knows what she knows and what she ignores, where knowledge is taken to be basically propositional in character. The emphasis on an individual who, transparently, knows facts makes a mystery out of many ordinary uses of the verb "to know". Let's think of the following situation: a group of friends are travelling from a city to another and they must get to a certain concert hall. One of them can find her way around the city quite well and has a clear idea as to the location, but has never seen the hall; another one has been driven to the hall in previous occasions but didn't pay much attention to the streets that lead to it. None of these two can drive. The third one is unfamiliar with the city but has driven to it in the past. *They know how to get there*, but their knowledge is far from propositional and none of them has it (and, if they don't trust each other's sense of directions very much, none of them could be said to know that they know). This phenomenon replicates no matter where we look. Human beings have managed to build airplanes or television sets, but it is doubtful whether any single person would know how to make one from scratch. No single human being can be praised for discovering the right time of year to harvest, to prune trees, or to choose the right seeds to plant. Even in cases that seem paradigmatic of individual abilities— say, write songs—, we find important examples where those abilities are spread across individuals—think of the standard division of labour between lyricist and composer in opera or in the American Songbook, but also on the abyss between Lennon's and McCartney's joint compositions for the Beatles versus their solo careers. Sometimes it takes two to know, sometimes it takes the whole village.

Even though we find the internalist and intellectualist commitments of traditional epistemology seriously questionable, in this paper we won't dwell on them and instead will concentrate on the shortcomings of individualism.[1] To do this we will examine the epistemological status of encyclopaedias and dictionaries and argue that the development of the Internet and the intrinsically collective nature of its use makes it even clearer that individualistic conceptions of knowledge are mistaken. We will focus on the stunning example of the *Wikipedia*, but will say something about dictionaries first.

In order to introduce the issues concerning the reliability, accuracy and breath of scope of collectively built bodies of knowledge, we'd like to illustrate the intuition behind our reasoning by reference to judgements about the correctness in spelling and grammar. Languages that bear the dubious blessing of a Royal Academy (as Spanish or French) have the advantage of counting with a committee of experts, often composed of some of the most prestigious (generally male) representatives of the language (writers, linguists, journalists...) dedicated to their study and preservation, but at the same time these academies are given enormous normative powers which tend to

be used in a rather conservative manner. Speakers have no saying on the election of the members, which gives rise to elitism, a variety of the intellectualism we mentioned at the beginning of the paper. In contrast, other linguistic traditions—such as the one represented by the English language—lack an ultimate authority on correctness, and this situation forces its lexicographers and grammarians to be much more up to date with the evolution of their language (an amusing example of this is the 19th Century grammatical rule "Never use a preposition to finish a sentence with"). Perhaps the most unfortunate consequence of this academicism is that a great number of speakers, generally those from more humble backgrounds, are dispossessed even of the right of being authorities in their own language. In opposition to this we feel compelled to side with Davidson in the claim that, in an important sense, a native cannot make mistakes in her own language—the idea being that a language should be spoken the way natives do (Davidson 1986)—, or with McDowell's reading of Wittgenstein's rule-following considerations (McDowell 1984)—there cannot be a general interpretation or a ready made universal rule with higher normative status than the practices under evaluation themselves. Dictionaries can, at their best, tell us what is generally done with the words of a language. Before the Internet there was no easy way to count uses; now any search engine would give you a very good idea of how people generally spell words (for instance, our text editor spelling tool does not approve of "encyclopedia", but 21 million entries found by Google versus a little more than 1 million for "encyclopaedia" should suffice to also accept the former spelling). We feel that this casts doubts on the very idea of a principled divide between the description of practices and the institution of norms and will briefly come back to the issue with regard to the *Wikipedia*.

A few months ago we read an article on a webpage that included the following caption: "This article is taken from the *Wikipedia*. The *Wikipedia* is an encyclopaedia freely written and revised by the users and any entry may include inaccuracies or factual errors. However, independent studies show that it is a highly reliable source of information." One of these studies was commissioned and published by the prestigious scientific journal *Nature* (15-12-2005), where 50 articles on scientific subjects from the *Wikipedia* and the *Encyclopaedia Britannica* were peer reviewed and a very similar number of serious and of minor errors were found in both publications.[2] Everyone is allowed to edit, a policy that follows from the explicit assumption of good faith (but good faith needs not be assumed in the presence of evidence to the contrary). Someone unfamiliar with the idea would think that the vandals would dominate. There are important correcting mechanisms: previous versions of the articles can be consulted, what allows readers and editors to recover good material that has been replaced by less accurate, or more biased texts; the *Wikipedia* is not a democracy and it distinguishes up to five different levels of privilege to users; users may be temporarily or permanently banned; some especially polemic entries are protected or semi-protected,

---

[1] "Individualism" is sometimes used as synonymous with "internalism" (Tyler Burge would be a clear case). However, our use of the term is meant to establish a contrast between the individual and the community, not between what is internal and what is external to the individual.

[2] In March 2006 the editors of the *Encyclopaedia Britannica* published advertisements in UK and US criticizing the survey and *Nature* responded, convincingly to our minds. The texts can be found in Britannica 2006 and Nature 2006.

etc. However, these mechanisms do not preclude that a user that registered as little as five days ago may change the title of page by moving it or edit a semi-protected page. These regulations and hierarchies are insufficient to grant an individualistic and elitist conception of knowledge.

Furthermore, besides the open question regarding the comparative frequency of errors or deliberate boycott, there are numerous areas where the *Wikipedia* fares better than most traditional encyclopaedias. For instance, it is constantly updated and the range of topics is much broader. More importantly, the decision regarding what portions of knowledge are relevant to deserve an entry or to appear within entries does not depend solely on the imagination and judgement of a person or small group of persons but it is open to a large group of collaborators, within the limits imposed by the control mechanisms discussed in the previous paragraph and by some hierarchical restrictions regarding what deserves or not an entry. This feature does justice not just to the collective elements of knowledge, but also to its essentially externalist nature: the massive number of contributors, editors and administrators guarantees that many more aspects of reality are embraced by the encyclopaedia.

The externalist consequences are important, but we also want to draw some conclusions regarding fallibilism, the ineliminable social aspects of knowledge and holism. The idea that any given entry in an encyclopaedia (written by experts or just by anyone willing to do so) may be wrong, as suggested by the quotation in the previous paragraph, can be taken to be food for sceptical worries. The argument is familiar from all forms of scepticism: if any *p* amongst my beliefs can be wrong, they all can. It can been argued, following Davidson, that the intelligibility of a body of beliefs demands that many of them are correct and shared by the interpreter (in fact, that many of them constitute knowledge). However, the idea that some of our beliefs should be certain and beyond any possibility of revision opens the door for a radically misplaced thinker: if it is conceivable that someone may know everything there is to be known, someone may be absolutely wrong and still count as a thinker (i.e., the world could play absolutely no role on the conditions of possibility of thought). In order to avoid the demand for incorrigibility—and the dogmatism that it invites by making room for an omniscient knower or intuitive intellect—we think that a certain level of caution is necessary regarding anything we think, hear or even see. This should be the lesson to learn from the sceptic. In order to have knowledge we do not need unshakable certainty. Rather the opposite: we can, *and must*, admit that any piece of information or belief may be wrong in order to make sense of the possibility of knowledge. The sceptical move from "there are mistakes" to "the source is unreliable" would affect not just the status of the *Wikipedia* as a valuable source of information, but the status of any source or person whatsoever. The *Wikipedia* policy guidelines insist that the information included should be reliable and verifiable; these are traditional epistemological values but, once again, they both point in the direction of a social understanding of knowledge.

The second consideration we would like to rehearse concerns the role that the community occupies not only as attributor of knowledge but as knowing subject. Encyclopaedias in general, as collectively built bodies of knowledge, show that the linguistic community plays a role sanctioning what counts as knowledge but also, and more fundamentally, that it is a genuine depository of culturally and historically accumulated knowledge. The *Wikipedia* makes the case even stronger, given its huge base of contributors. In connection with the fallibilist and externalism de-

fended above (i.e., with the issue of reliability despite the possibility of error), it is important to notice that we are not siding with any strongly naturalistic conception of reliability: the *Wikipedia* can be seen as a reliable system to generate beliefs and communicate knowledge precisely because of its externalist and social character. However, the analogy with the naturalistic version of reliabilism is useful: our visual system is generally reliable despite the existence of visual illusions.

We believe that seeing knowledge as social, externalistic and fallible leads to a broadly holistic view. A technical feature of the *Wikipedia*, shared to a much larger extent with other Internet resources than with traditional encyclopaedias, also points in the direction of such holism. Besides offering external references (often by giving links to sites where texts, music or reproductions of works of art can be found), the internal cross-referencing mechanisms highlight the intimate interdependence among pieces of information.

Of course, the view of knowledge that we are propounding by means of the example of the *Wikipedia* and other Internet resources is not new at all and it can be defended independently of any reference to them. We would like to finish this paper by pointing out three notable examples of such a view. The first constitutes a founding insight for Western philosophy, even though it is often ignored: Socrates's insistence on the essentially dialogical nature of knowledge. A very clear reminder of the centrality of communication for knowledge can be found in Sloterdijk 1988 (see especially chapter 3): he argues that what truly distinguishes Socrates from all other philosophers is his idea that questioning and dialogue should not be seen as a path to constructing philosophical theories, but rather as an acceptance of the philosopher's (the individual's) ignorance. As soon as a positive answer is attempted, we move away from the Socratic method into the realm of Platonism.

The importance of dialogue has been strongly defended by many authors within the hermeneutical tradition, most notably by Gadamer. However, we find Davidson to be its most inspiring champion. His ideas about radical interpretation, where the attribution of meaning must be done on the assumption that speakers and knowers have an ineliminably normative character and that interpretation is done in terms of the specific situation of interpretee and interpreter in their environment (Davidson 1973), his view that linguistic knowledge cannot be separated from general knowledge of the world (Davidson 1986) and his arguments for the idea that triangulation of self-knowledge, knowledge of the world and knowledge of other minds is a precondition for thought (Davidson 1991) say much in favour of the view we are putting forward.

Even though we lack the space to properly discuss his approach, we cannot ignore the contribution of Wittgenstein to the debate. We have already mentioned that his discussion of rule-following clearly gestures towards a social and externalist conception of thought and language. This discussion sits very well with one the "five pillars that define *Wikipedia*'s character": *Wikipedia* does not have firm rules besides the five pillars (it is an encyclopaedia, has a neutral point of view, is free content that anyone may edit, has a code of conduct, and promotes bold editing, moving and modifying articles). No less important is the idea that the normative aspects of language, knowledge and thought cannot be reduced to something outside the realm of normativity, and must be situated within the realm of forms of life, of socially constituted practices.

Literature

Britannica 2006
http://corporate.britannica.com/britannica_nature_response.pdf

Davidson, Donald 1973 "Radical Interpretation", in: *Inquires into Truth and Interpretation*, Oxford: Clarendon Press, 1984, 125-139.

Davidson, Donald 1986 "A nice derangement of epitaphs", in: *Truth, Language, and History*, Oxford: Clarendon Press, 2005, 89-107.

Davidson, Donald 1991 "Three varieties of knowledge", in: *Subjective, Intersubjective, Objective*, Oxford: Oxford University Press, 2001, 205-220.

McDowell, John 1984 "Wittgenstein on following a rule", in: *Mind, Value and Reality*, Cambridge, Mass.: Harvard University Press, 1988, 221-62.

Nature 2006
http://www.nature.com/nature/britannica/eb_advert_response_final.pdf

Sloterdijk, Peter 1988 *Zur Welt kommen – Zur Sprachen kommen*, Frankfurt am Main: Suhrkamp Verlag.

Email: pinedo@ugr.es / cborgoni@yahoo.com.br

Retrieving Culture from Language

Marcos Paiva Pinheiro / Jorge Alam Pereira dos Santos, Brasília, Brazil

1. The proposal

In this paper we would like to rethink the relation between language, thought and reality once the linguistic relativity hypothesis – the idea that different languages could exert characteristic and demonstrable influences on thought[1] – has been *completely* abandoned. Our idea is that, once the hypothesis has been abandoned, it remains possible to theoretically pursuit the relations between language diversity and people's ways of thinking and behaving. The relation between specific language structures and specific patterns of thinking and behaving would then be much like the relation between an excavation site and archaeological findings buried underneath it.

In attempting to show that good sense can be made of the suggestion our strategy will be as follows. First we will discuss the grounds on which the linguistic relativity hypothesis fails; the first part of the discussion will formulate an argument and the second part will generalize the argument in a discussion of two empirical approaches intended to support the relativity issue. Once this is done, we will try to offer a conciliatory position showing how the question as to relations between language and thought-cum-practical reality might be posed anew.

2. An underlying assumption of the linguistic relativity hypothesis

Any attempt to make sense of the claim that different languages influence thought in important and distinctive ways relies on acceptance of a *principled* distinction to be established between language and thought (Lucy 1997, p. 306; see also p. 295). If this is true, then from the very outset the proponents of linguistic relativity seem to be leaving aside the possibility that *no clear line* can be drawn between language and thought. In what follows we will give serious consideration to this possibility.

A principled distinction between language and thought demands that the concept of thought be theoretically kept inside definitional clothing. Scientists propose many different and differently structured grounds on which definitions of this sort might plausibly be attempted.

On the strongest proposal, that could be labeled 'radical linguistic determinism', relativity is sustained in terms of an identity relation between language and thought. Here the need to provide definitional clothing for the concept of thought is somehow trivialized: thought is defined as indiscernible from language from the outset. The problem with this approach can be stated in the following argument. If a way of speaking is the only evidence we have for claiming that some people think differently from ourselves, then at the end of the day we have no evidence at all: for then the criteria lack with which to sort the notion of 'thinking differently' out from that of 'speaking differently'. And, under the basic assumption of radical linguistic determinism, one can always contend that the linguistic differences brought up to bear on the relativity hypothesis amount to no more than differences in people's ways of *speaking*.

After discarding radical determinism, other possibilities of keeping thought definitionally apart from language remain to be considered. In the next section we shall consider two empirical approaches concerned with stating and supporting the hypothesis. Since even the weakest of these approaches proves misleading, serious consideration must be given to the idea that no theoretical boundary between thought and language can be drawn.

3. Critical remarks

The general form of our argument is: any attempt to definitionally enclose the concept of thought results in failure to make proper sense of the notion of 'thinking differently'. Therefore, the underlying assumption necessary for sustaining the hypothesis of linguistic relativity proves to be the *very* assumption that renders the hypothesis ineffective. But let us turn now to some concrete developments.

Boroditsky *et al.* 2003 attempts to offer empirical support for a strong version of the relativity hypothesis by posing the following concern: "Does talking about inanimate objects as if they were masculine or feminine actually lead people to think of inanimate objects as having a gender?" (p. 68). A series of experimental results are then intended to support an affirmative answer. What the authors do not present, though, is a sufficient discussion of the following question: what does it mean for someone to think of an inanimate object as having a gender? For an answer to this question obviously bear directly on the truth of the author's claims.

It lies beyond doubt that those scientists presented interesting results systematically relating grammatical patterns of one's language and one's dispositions to make certain kinds of mental association. These results, interesting in themselves as they are, still shed no light on the main question of thought – since the accurate way of describing them would have to run somewhat like: "According to experimental results obtained so far, talking about inanimate objects as if they were masculine or feminine actually lead people to think of inanimate objects as *associated* with a gender". But it is obvious enough that to think of something as associated with a gender is different from thinking of it as having a gender. People might think the same about objects (e.g. that they are genderless) while making different mental associations with them. So it seems plainly incorrect to claim that people think differently about objects at all just because objects make them (however systematically) think about different things.

A rather different approach is presented in Slobin 1996. Recognizing difficulties within traditional deterministic views, Slobin proposed to investigate how different languages could differently affect that specific part of the process of thinking which is directed at "formulating an utterance" (p. 71). Thus it seemed plausible to the author that, even if linguistic diversity had no major consequences for thought in general, it should have fairly specific detectable effects on a process of "thinking for speaking".

What should be questioned here is the plausibility of applying the concept of thought to the process labeled by the author as 'thinking for speaking'. If someone is embar-

---

[1] See Lucy 1997, pp. 294-5.

rassed because of a question, perhaps we may correctly say that she is thinking for speaking. But our statement may be correct only because it does make sense to say, in a whole range of different situations, that someone is speaking *without* thinking. Obviously enough, what Slobin envisages is a quite different thing. He wants to use the concept of thought in such a way as to make it reasonable that we are thinking for speaking *whenever* we are speaking. But then a difficulty quite similar to the one faced by linguistic determinism arises: Slobin's usage does not provide criteria for sorting the notion of 'thinking for speaking' out from that of 'speaking'. The result is that we can only regard speaking in different languages as connected with different thought processes because of the trivial fact that different speech processes are involved.

The above discussed approaches illustrate a common difficulty faced by cognitive scientists of whichever persuasions: if they insist on keeping thought inside definitional clothing they run the constant risk of making experimental results irrelevant to the issue experimentation is supposed to throw light on. The whole problem is summed up in Wittgenstein's remark that "An 'inner process' stands in need of outward criteria" (2001, p. 129). The intended necessity is not that we should stipulate outward criteria for inner processes; our stipulations would arise only from neglect of the point brought about by the remark. On the contrary, we can only be sure that a given inner process is what it is and not something else if we rely on the pre-given criteria according to which that process can be publicly recognized by anyone of us.

4. A conciliatory position: retrieving culture from language

All difficulties exposed in the last sections result, in one way or another, from failure to attend to the uses of the concept of thought in everyday situations. We think a proper understanding of Wittgenstein's idea that language reflects reality only because it is part of reality helps to relieve a good deal of our theoretical drive towards the question of language and thought.

Language can be pictured as a set of tools appropriate to the practical contexts of involvement in which they are applied. These tools do not relate to reality or thought by mirroring the latter. Nevertheless, such an "instrumental" conception of language can still be justly charged of insufficiency. It seems to make too little of the fact that, if language is indeed like a set of tools, these tools still happen to have a very typical character that must somehow be accounted for: they have their own inner laws of composition. The inner structure of languages, and specially the patterns that force us to convey certain kinds of information, is probably the main linguistic fact whose force lead people to explore the relativity hypothesis.

Here we would like to propose a conciliatory position. Language can be seen from the instrumental perspective without exclusion of the possibility that linguistic diversity be explored on the theoretical level: we just need to concede that the inner structure of our linguistic tools could suitably adapt itself to the situations in which the tools are repeatedly employed.

We cannot help thinking of the causative verb forms in Hindi as related to the deeply-ingrained structure of castes existing in Indian society; or of cardinal coordinates employed for spatial orientation as connected with people's need for precision in outdoor handlings. These strongly intuitive observations have been traditionally rejected by researchers concerned with linguistic relativity, but they turn quite plausible once their leading hypothesis is rejected. For asserting that causative verb forms in a language could determine the existence of a given social structure (by determining people's "ways of thinking") is certainly much more doubtful than considering those verb forms to be part of a process by which the structure of language adapted itself to the necessities presented by a given social situation (and that, in so adapting itself, it probably improved language's contribution to the effectivity of that form of social organization).

Finally, some might say that our suggestion is bound to leave too many interesting facts about distinct linguistic structures out of the picture; but then again no one ever thought that linguistic relativity research would succeed in finding a corresponding effect for each interesting feature about language structure. The main attractiveness of our conciliatory idea lies in the fact that it finds a place (however timid) for an account of differences among inner linguistic structures without conflicting with the outer use-bound nature of language.

Literature

Boroditsky, Schmidt, and Philips 2003 "Sex, Syntax and Semantics", in: Dedre Gentner and Susan Goldin-Meadow (eds.) 2003 *Language in Mind: Advances in the study of language and thought*, Cambridge, Mass.: MIT Press, 61-79

Gentner, Dedre and Goldin-Meadow, Susan (eds.) 2003 *Language in Mind: Advances in the study of language and thought*, Cambridge, Mass.: MIT Press.

Gumperz, John and Levinson, Stephen (eds.) 1996 *Rethinking linguistic relativity*, Cambridge: Cambridge University Press.

Lucy, John 1997 "Linguistic Relativity", *Annual Review of Anthropology*, 26, 291-312.

Slobin, Dan 1996 "From 'thought and language' to 'thinking for speaking'", in: John Gumperz and Stephen Levinson (eds.) 1996 *Rethinking linguistic relativity*, Cambridge: Cambridge University Press, 70-96.

Wittgenstein, Ludwig 2001 *Philosophical Investigations*, Oxford: Blackwell.

Email: mppinheiro@gmail.com / alam.japs@dpf.gov.br

Analytische Medientheorie? – Überlegungen zum Verhältnis von Medientheorie und analytischer Philosophie

Martin Pleitz, Münster, Deutschland

Obwohl das Verhältnis von Medientheorie und analytischer Philosophie gegenwärtig schwierig ist, ist eine Annäherung wünschenswert (1). Ich schlage eine Analyse des Begriffs „medientheoretisch" vor (2), nach der sich auch einige Theoriestücke der analytischen Philosophie als medientheoretisch einstufen lassen (3). Daraufhin versuche ich die weitgehende Medienblindheit der analytischen Philosophie zu erklären und weise auf einige Mittel zu ihrer Überwindung hin (4). Die Skizze einer Theorie der Laut- und Schriftsprache soll plausibel machen, dass es erfolgversprechend ist, medientheoretische analytische Philosophie zu betreiben (5). Ich sehe meine Thesen als Vorüberlegungen zum Programm einer analytischen Medientheorie (6).

1. Einleitung

Obwohl es viele Bezüge zwischen Medientheorie und Philosophie und sogar eine eigene Medienphilosophie gibt, ist das Verhältnis zwischen Medientheorie und *analytischer* Philosophie schwierig. Wahrscheinlich würden viele analytische Philosophen und Philosophinnen Medientheorie als ungenau und unklar beurteilen, während von medientheoretischer Seite analytische Philosophie als medienblind eingeschätzt würde. Jedenfalls finden sich kaum wissenschaftliche Arbeiten, die sowohl der analytischen Philosophie als auch der Medientheorie zuzuordnen sind. Krämer und Ramming greifen in ihren Untersuchungen der Schrift auch auf die analytische Tradition zurück (Krämer 1991, Ramming 2006). Abgesehen davon aber gibt es m. W. bisher keine Reflexion über die systematischen Bezüge zwischen Medientheorie und analytischer Philosophie.

Eine größere Zusammenarbeit von analytischer Philosophie und Medientheorie ist aber wünschenswert, denn die Untersuchung *sprachlicher Bedeutung* spielt eine zentrale Rolle in der analytischen Philosophie, während Medientheorien viel zu den *konkreten Trägern sprachlicher Bedeutung* zu sagen haben. Dabei sind insbesondere Laut- und Schriftsprache interessant, weil diese die beiden grundlegend unterschiedlichen *sprachlichen* Medien sind.

Mit meinem Vortrag will ich zur Verbesserung des Verhältnisses zwischen Medientheorie und analytischer Philosophie beitragen.

2. Eine Analyse der Begriffe „medientheoretisch" und „Medium"

Ich schlage folgende nach zwei Graden differenzierte Analyse der Begriffe „medientheoretisch" und „Medium" vor:

Eine wissenschaftliche Untersuchung ist genau dann *proto-medientheoretisch*, wenn sie folgende zwei Thesen impliziert:

M1. Der konkrete Bedeutungsträger bestimmt die Bedeutung mit.

M2. Die Bestimmung der Bedeutung durch den konkreten Bedeutungsträger hat im Rahmen der betrachteten Untersuchung gewichtige Folgen.

Eine proto-medientheoretische Untersuchung ist genau dann *eigentlich medientheoretisch*, wenn sie auch die folgenden beiden Thesen impliziert:

M3. Unterschiedliche konkrete Bedeutungsträger bestimmen die Bedeutung auf unterschiedliche Weise mit.

M4. Diese Unterschiede in der Bestimmung der Bedeutung haben im Rahmen der betrachteten Untersuchung gewichtige Folgen.

Ein konkreter Gegenstand ist genau dann ein *Medium* (bzw. ein *Proto-Medium*), wenn er von einer medientheoretischen (bzw. proto-medientheoretischen) Untersuchung als konkreter Bedeutungsträger behandelt wird.

Eine kurze Erläuterung dieser Analyse soll plausibel machen, dass sie tatsächlich den wissenschaftlichen Gebrauch der Begriffe „medientheoretisch" und „Medium" einfängt.

Schon aus M1 ergibt sich, dass nur solche wissenschaftlichen Untersuchungen, in denen es um *Bedeutung* geht, überhaupt medientheoretisch sein können. Z.B. die Physik des Schalls ist auch dann nicht medientheoretisch, wenn sie die Lautsprache zum Gegenstand hat. Aber längst nicht alle Untersuchungen, in denen es um Bedeutung geht, sind medientheoretisch. Z.B. sprachwissenschaftliche Untersuchungen zum Bedeutungswandel mancher Wörter würden wir nicht als „medientheoretisch" bezeichnen, wenn sie keinen Unterschied zwischen konkreten Bedeutungsträgern, also etwa zwischen gesprochenen und geschriebenen Wortvorkommnissen, machen würden.

Ich habe nicht das Substantiv „Medientheorie", sondern das Adjektiv „medientheoretisch" definiert, um der Tatsache Rechnung zu tragen, dass medientheoretische Untersuchungen in sehr vielen Disziplinen durchgeführt werden: Sprachwissenschaft, Altphilologie, Kulturwissenschaft, Soziologie, Geschichte, Kommunikationswissenschaft, Publizistik, Philosophie usw. Auch wenn sich die Wissenschaftlichkeit medientheoretischer Untersuchungen nicht bestreiten lässt, ist die Frage offen, ob es *eine* Medienwissenschaft, also eine einzige Disziplin mit einheitlichem Gegenstand und einheitlicher Methode, gibt.

Die Thesen M1-4 sollen ein Charakteristikum aller medientheoretischen Untersuchungen explizit zu machen. Sie besagen, dass die konkreten Bedeutungsträger die Bedeutung auf gewichtige Weise mitbestimmen, und dass sich aus Unterschieden zwischen den Bedeutungsträgern wichtige Unterschiede in der von ihnen getragenen Bedeutung ergeben. Dies scheint mir in McLuhans berühmten Slogan „The medium is the message" und in der typisch medientheoretischen Benennung ganzer Gesellschaften und Epochen nach deren wichtigstem Medium (z.B. „orale Gesellschaft", „Gutenberg-Galaxis") implizit zu sein. McLuhans Slogan besagt mindestens, dass nicht jedes Medium jede Botschaft tragen kann, dass also die Beschaffenheit eines konkreten Bedeutungsträgers zumindest mitbestimmt, welche Bedeutung dieser tragen kann. Die Benennung von Gesellschaften nach ihrem wichtigsten Medium ist dadurch gerechtfertigt, dass der Bestimmung der Be-

deutung durch das Medium gewichtige Folgen zugeschrieben werden. Z.B. beeinflusst einer typischen medientheoretischen These zur Folge die Nutzung der Schriftsprache Denkstrukturen und Wahrnehmungsmuster (z.B. Ong 1982, 49ff. und 115ff.).

Die Definition von Medien als den Gegenständen medientheoretischer Untersuchungen erklärt die Kontextabhängigkeit des Medienbegriffs. Ob ein konkreter Gegenstand ein Medium ist, hängt davon ab, ob er als Bedeutungsträger betrachtet wird, der die Bedeutung wesentlich mitbestimmt. Die Kontextabhängigkeit des Medienbegriffs erklärt seine oft erwähnte Weite und scheinbare Ungenauigkeit.

3. Medientheoretische Theoriestücke der analytischen Philosophie

In der analytischen Philosophie kann es medientheoretische Theoriestücke geben, die nicht so bezeichnet werden. Die Analyse im 2. Abschnitt fordert von einer medientheoretischen Untersuchung ja nur, dass sie die Thesen M1-4 *impliziert*. Proto-medientheoretische Theoriestücke der analytischen Philosophie finden sich bei Kripke, Kaplan und Goodman; ein eigentlich medientheoretisches bei Frege.

Nach Kripkes kausaler Theorie der Referenz von Eigennamen kommt die Referenz dadurch zustande, dass von einem Taufakt zu jedem Vorkommnis des Eigennamens eine durchgehende Kette von Kausalverbindungen führt (Kripke 1980, 91ff.). Dies impliziert, dass Eigennamen sich nicht auf zukünftige Individuen beziehen können, denn von dem Taufakt kann keine Kausalkette zu einem *früheren* Vorkommnis des Eigennamens führen. Also hat nach Kripkes Theorie die zeitliche Lokalisierung der konkreten Bedeutungsträger eine wichtige Einschränkung der von ihnen tragbaren Bedeutung (hier: des Bezugs) zur Folge. Kripkes kausale Theorie ist daher proto-medientheoretisch. Für Kripke gibt es allerdings keine wichtigen Unterschiede zwischen verschiedenen Medien, insbesondere macht er keinen Unterschied zwischen den geschriebenen und den gesprochenen Vorkommnissen von Eigennamen. Daher ist seine Theorie nicht eigentlich medientheoretisch.

Kaplan vertritt, dass ein Wort eine andauernde Entität ist, und dass die Wortvorkommnisse deren Phasen sind. Ein Wort ist demnach ein konkreter Gegenstand. Diese Theorie ist ein Gegenentwurf zu der verbreiteten Ansicht, nach der ein Wort ein Typ, also abstrakt ist (Kaplan 1990, 96ff.). Kaplans Theorie ist proto-medientheoretisch, da sie eine rein syntaktische Lösung für das Problem bieten soll, warum Identitätsaussagen mit zwei direkt referierenden singulären Ausdrücken informativ sind. Die Wörter „Hesperus" und „Phosphorus" sind nach Kaplans Theorie zwei verschiedene konkrete Gegenstände, und das kann den Erkenntniswert von „Hesperus = Phosphorus" erklären (Kaplan 1990, 93). Kaplans Theorie ist aber nicht eigentlich medientheoretisch. Obwohl er detailliert auf die Unterschiede zwischen gesprochenen und geschriebenen Wortvorkommnissen eingeht, haben diese Unterschiede keine Unterschiede auf der Bedeutungsebene zur Folge (Kaplan 1990, 99ff.).

Goodmans Theorie der Inskriptionen (d.h. der konkreten Zeichenvorkommnisse) steht in engem Zusammenhang mit dem von ihm vertretenen Nominalismus. Als konsequenter Nominalist muss Goodman davon ausgehen, dass alle Zeichen konkret sind und kann sie daher nicht als Typen oder Klassen auffassen. Stattdessen geht er

davon aus, dass diejenigen Inskriptionen, die wir vortheoretisch als Vorkommnisse desselben Zeichentyps bezeichnen würden, echte Kopien voneinander sind (Goodman 1976, 131). Goodmans Theorie der Inskriptionen nimmt offensichtlich eine zentrale Stelle in seinem Theoriegebäude ein (Goodman et al. 1947; Goodman 1951, 287ff.; Goodman 1976, 127ff.), sie ist also proto-medientheoretisch. Allerdings spielt der Unterschied zwischen Laut- und Schriftsprache für ihn keine wesentliche Rolle (Goodman 1951, 288; Goodman 1976, 131), daher ist sie nicht eigentlich medientheoretisch.

Es gibt m. W. nur sehr wenige eigentlich medientheoretische Theoriestücke der analytischen Philosophie (also Theoriestücke, die alle vier Thesen M1-4 implizieren). Zu nennen ist aber Freges Lob der graphischen Zeichen für die logische Notation. Freges Begriffsschrift, d.h. seine logische Notation, ist offensichtlich eine *Schrift*, also ein geschriebenes, nicht ein gesprochenes Zeichensystem. Das ist kein Zufall: Frege fragt, „ob die Zeichen fürs Ohr oder die fürs Auge den Vorzug verdienen" und entscheidet sich, dass „die Schrift dem Laute vorzuziehen" sei. Neben der Übersichtlichkeit der zweidimensionalen Schreibfläche und der größeren „Schärfe" des Gesehenen im Gegensatz zum Gehörten sind es ihre zeitlichen Eigenschaften, nämlich „die größere Dauer und Unveränderlichkeit", die laut Frege für die Schrift sprechen (alle Zitate Frege 2002, 72-74). Da die Entwicklung einer formallogischen Sprache ein zentrales Anliegen Freges war, ist dieses Lob der Schrift als eigentlich medientheoretisch einzustufen (zum Zusammenhang von Formalisierung und Schriftlichkeit im Allgemeinen vgl. Krämer 1991 und Ramming 2006).

4. Die Medienblindheit der analytischen Philosophie

Auch wenn einige Theoriestücke der analytischen Philosophie proto-medientheoretisch und wenige sogar eigentlich medientheoretisch sind (Abschnitt 3), ist offensichtlich, dass das für die überwiegende Mehrzahl der Arbeiten im Bereich der analytischen Philosophie nicht gilt (z.B. die Bedeutungstheorien von Frege, Russell, Quine, Davidson, Grice, Austin, Searle und Brandom). Ich sehe für diese weitgehende Medienblindheit der analytischen Philosophie zwei Erklärungen: Erstens die Tatsache, dass Medien konkrete Gegenstände mit nicht nur physischen Eigenschaften sind und zweitens den historischen Umstand, dass die zwei Hauptströmungen der analytischen Sprachphilosophie, die Philosophie der idealen Sprache und die Philosophie der natürlichen Sprache, jeweils nur an einem der beiden sprachlichen Medien Laut- und Schriftsprache orientiert waren.

Medien sind merkwürdige Gegenstände, denn sie sind konkret, haben aber nicht nur physische Eigenschaften. Die sprachlichen Medien sind konkrete Gegenstände wie Luftbewegungen und markiertes Papier, aber sie erschöpfen sich nicht in ihren physischen Eigenschaften. Nicht jeder konkrete Gegenstand beispielsweise, der dem Buchstaben „A" ähnelt, ist ein Vorkommnis des Buchstabens „A". Wenn das Meer zufälligerweise die Kiesel am Strand zu einem Muster der Form „A" anordnet, dann ist dieses kein Vorkommnis des Buchstabens „A". Damit das konkrete Ding der Buchstabe ist, muss eine Person da sein, die ihn geschrieben hat oder liest. Verallgemeinernd lässt sich sagen, dass Medien auf Personen, die sie nutzen, angewiesen sind. Konkrete Gegenstände werden also nicht allein durch ihre intrinsischen physischen Eigenschaften zu Medien. Dieser Umstand erklärt, warum die analyti-

sche Philosophie Medien bisher so wenig beachtet hat, denn dort ist die Ansicht weit verbreitet, dass alle intrinsischen Eigenschaften konkreter Gegenstände physisch sind.

Fines Theorie der Qua-Objekte und Searles Theorie sozialer Gegenstände können helfen, das Nicht-Physische an Medien besser zu verstehen.

Fines Theorie der Qua-Objekte soll Probleme der folgenden Art lösen: Die Statue hat ihre Form notwendigerweise, das Marmorstück hat seine Form zufälligerweise, aber die Statue und das Marmorstück sind derselbe Stein. Nach Fine ist ein Qua-Objekt a-qua-F ein Paar aus dem Gegenstand a und der Eigenschaft F, für das u.a. folgende Bedingung gilt: a-qua-F existiert genau dann zu einer Zeit t in einer möglichen Welt w, wenn a zu t in w F ist (Fine 1982, 100). Medien sind Qua-Objekte in Fines Sinne, denn Medien sind nicht einfach bedeutungstragende Gegenstände, sondern diese Gegenstände *als* bedeutungstragende. Schon die problematische Statue ist ein Beispiel für ein Medium, das man als Qua-Objekt begreifen kann: Der Stein-als-Statue hat (im Gegensatz zum Stein-als-Marmorstück) seine Form notwendigerweise, denn der Stein-als-Statue existiert nur zu solchen Zeiten und in solchen Welten, wo der Stein eine Statue ist. Entsprechendes gilt für das Papier-als-Schriftstück, den Klang-als-gesprochenes Wort usw.

Searle hat eine Theorie der sozialen Wirklichkeit und insbesondere von sozialen Gegenständen entwickelt. Er schreibt: „there are portions of the real world, objective facts in the world, that are only facts by human agreement. [...] I am thinking of things like money, property, governments, and marriages." (Searle 1995, 1) Auch einige objektive Tatsachen, die Medien betreffen, bestehen nur aufgrund der Übereinkunft von Menschen, z.B., dass manche Wörter gleich klingen aber unterschiedlich geschrieben werden. Medien bestehen Searles Test für soziale Gegenstände: Sie würden nicht existieren, wenn es nie Menschen gegeben hätte (Searle 1995, 11). Das liegt nicht allein daran, dass Medien im Normalfall Artefakte sind, sondern an der noch wichtigeren Tatsache, dass sie als Medien genutzt werden müssen, um welche zu sein. Die *konstitutiven Regeln* der Mediennutzung gehen den einzelnen Medien systematisch voran, sie haben die Form „X zählt als Y im Kontext K" (Searle 1995, 27ff.). Die Form dieser Regel macht übrigens schon klar, dass alle sozialen Gegenstände Qua-Objekte sind.

Eine weitere Erklärung der weitgehenden Medienblindheit der analytischen Philosophie ergibt sich aus einem medientheoretischen Blick auf ihre Geschichte. Es lassen sich zwei Hauptströmungen unterscheiden, die Philosophie der idealen Sprache (Frege, Russell, Wittgenstein I, Carnap, Quine, ...) und die Philosophie der natürlichen Sprache (Wittgenstein II, Austin, Searle, ...). Ich halte folgende These für plausibel: Die Philosophie der idealen Sprache war vorrangig an der Schriftsprache orientiert, die Philosophie der natürlichen Sprache dagegen vorrangig an der Lautsprache, und diese Orientierung an jeweils nur einem sprachlichen Medium wurde selten bewusst reflektiert. Für die Philosophie der idealen Sprache sind Sätze abstrakte Gegenstände, wie es der geschriebenen Sprache angemessen ist, während für die Philosophie der natürlichen Sprache Sätze konkrete Ereignisse (oder sogar Handlungen) sind, wie es der Lautsprache angemessen ist. Aufgrund ihrer Orientierung an jeweils nur einem der beiden grundlegenden sprachlichen Medien, sind beide Strömungen nicht medientheoretisch im eigentlichen Sinne geworden, denn dazu gehört das Bewusstsein für die *Un-*

terschiedlichkeit zwischen Medien (vgl. M3 und M4), also hier für den Unterschied von Laut- und Schriftsprache.

5. Eine medientheoretische Analyse von Laut- und Schriftsprache

Der Unterschied zwischen den Medien Laut- und Schriftsprache lässt sich mit mereologischen Begriffen genau fassen. *Dinge* sind diejenigen Entitäten, die in räumlichen Teilbeziehungen stehen, und *Ereignisse* sind diejenigen Entitäten, die in zeitlichen Teilbeziehungen stehen. Diese Analyse impliziert einen kategorialen Unterschied zwischen Laut- und Schriftsprache: Geschriebene Sätze sind Dinge, denn ihre Teile sind räumliche Teile. Gesprochene Sätze sind Ereignisse, denn ihre Teile sind zeitliche Teile.

Dieser mereologische Unterschied hat zur Folge, dass nur in der Lautsprache echte zeitliche Indexikalität – die Abhängigkeit des Bezugs eines Zeichens von der Zeit seines eigenen Vorkommens – möglich ist. Die ereignishaften gesprochenen Wörter stehen in festen zeitlichen Relationen zu Zeitstellen und können daher einen indexikalischen Zeitbezug haben. Die dingartigen Schriftzeichen dagegen sind von Dauer und taugen daher nur für einen kontextfreien Zeitbezug. Der geschriebene Satz „Jetzt regnet es" kann viele Wetterwechsel überdauern und würde daher oft seinen Wahrheitswert wechseln, wenn er ständig neu bewertet würde. Darum hat er eine andere temporale Semantik als sein gesprochenes Pendant. Das geschriebene „jetzt" ist nicht echt indexikalisch, sondern anaphorisch: es steht für eine Datumsangabe im selben Schriftstück.

Da der kategoriale Unterschied zwischen gesprochenen und geschriebenen Wörtern diese weitreichenden Konsequenzen für die temporale Semantik der Lautsprache und der Schriftsprache hat, ist die hier skizzierte Theorie der Laut- und Schriftsprache medientheoretisch im eigentlichen Sinne.

6. Schluss

Ich hoffe gezeigt zu haben, dass eine Annäherung zwischen Medientheorie und analytischer Philosophie wünschenswert und möglich ist.

Literaturangabe

Fine, Kit 1982 „Acts, Events and Things", in: Werner Leinfellner, Eric Russert Kraemer und J. Schank (Hg.), *Proceedings of the 6th International Wittgenstein Symposium: Language and Ontology*, Wien: Hölder-Pichler-Tempsky, 97-105.

Frege, Gottlob 2002 „Die wissenschaftliche Berechtigung einer Begriffsschrift", in Ders., *Funktion - Begriff - Bedeutung*, Göttingen: Vandenhoek & Ruprecht, 70-76.

Goodman, Nelson und Quine, W.V.O. 1947 „Steps Towards a Constructive Nominalism", *The Journal of Symbolic Logic* 12: 105-122.

Goodman, Nelson 1951 *The Structure of Appearance*, Cambridge, Massachusetts: Harvard University Press.

Goodman, Nelson 1976 *Languages of Art*, Indianapolis: Hackett.

Kaplan, David 1990 „Words", *Proceedings of the Aristotelian Society* Supplement 64: 93-119.

Krämer, Sybille 1991 *Berechenbare Vernunft. Kalkül und Rationalismus im 17. Jahrhundert*, Berlin und New York: de Gruyter.

Kripke, Saul A. 1980 *Naming and Necessity*, Cambridge, Massachusetts: Harvard University Press.

Ong, Walter J. 1982 *Orality and Literacy*, London und New York: Routledge.

Ramming, Ulrike 2006 *Mit den Wörtern rechnen*, Bielefeld: transcript.

Searle, John R. 1995 *The Construction of Social Reality*, New York: The Free Press.

Email: martinpleitz@web.de

'Seeing-as' and forms of life

Regina Queiroz, Lisbon, Portugal

We can not separate the rule from its application when attempting to overcome the agostinian conception of language. Wittgenstein distinguishes the normal rule from the abnormal based on the fact that different applications depend on different reactions from people to the order given by rules, and these can be understood from the point of view of a language whose accord is not established from the expectation that man normally has under the common aspect. This therefore leads to an answer that can be different from the usual and common application of rules.

However, since the normativity of rules, i.e. its normal application, is based on the accord about forms of life, and if we separate the abnormal application of rules from forms of life, we are then faced with a language without any reference to those forms. But, forms of life as the last fact of language make such a separation unthinkable. The abnormal application of rules must also correspond to forms of life.

By analysing the concept of 'seeing-as' (*Sehen als*) we sustain that the experience of 'seeing–as' is a possible condition to the comprehension of how an abnormal rule application corresponds to a form of life and clarifies how the co-existence of several forms of life is possible.

Wittgenstein distinguishes the normal rule from the abnormal (PI, 142, 143, 144) and since the normativity of rules is based on the accord regarding forms of life, the separation of the abnormal application of rules from the forms of life leads us to a language without any reference to those forms. But in the context of the interpretation of forms of life as the last fact of language that separation is unthinkable. The abnormal application of the rule, i.e. the abnormal rule, must also correspond to a form of life.

Any application depends on people's different reactions to the order given by rules (PI, 206), and applications are understood from the point of view of a language whose accord is not established from man's expectation which is normally held under a — common — aspect. So, just as that answer can be different from the usual and common application of rules we must not eliminate the possibility of an accord related to a different aspect from that expectation. For example, the duck-rabbit image shows the possibility of there being two competing accords. This image, related to the emergence of the different aspect problem, implies that the reflection about language overcomes the privileged relation of rules just as it is presented in the first part of *Philosophical Investigations* and is later replaced in the second part by the experience of 'seeing as'. This experience, which points us to the genesis of the change of aspect, allows us to comprehend how an abnormal rule application corresponds to a form of life and clarifies how the co-existence of several forms of life is possible.

In Wittgenstein's philosophy seeing has several meanings:

a) a continuous description;

b) acquaintance, recognition (*Ibid.*, p. 197e, 198e);

c) 'seeing-as' is to see in an other way, in the dawning of an aspect (*Ibid.*, p. 193e-194e)

d) habit (*Ibid.*, p. 201e);

e) state — state of seeing (*Ibid.*, p. 212e);

f) attitude to the picture (*Ibid.*, p. 205e).

Wittgenstein uses seeing in the sense of a continuous description, recognition, perception of similarities and 'seeing-as'. This is not a perception, but the report of an aspect's change. If this implies a continuous vision and sudden flash, 'seeing-as' does not belong to perception and it is at the same time an act of seeing and not seeing (*Ibid.*, p. 197e). However, Wittgenstein also affirms that the change of aspect describes the transformation of a perception's description. In this case 'seeing-as' corresponds to a new perception in which the visual experience is an expression of a new and at the same time an unchanged perception (*Ibid.*, p. 196e). The change of aspect describes a transformation on how we describe a perception, not as a continuous perception of similarity or recognition, but as a new perception, which is identified as a sudden illumination, a half visual experience, a half thought (*Ibid.*, p. 197e), and whose representation of object is a change of aspect.

The problem of 'seeing-as' is related to representation, which is the content of perception. This representation is the criterion of visual experience (*Ibid.*, p. 198e). However, if it is subsumed by the model of *mimesis* and if this model understands a copy of seeing as a continuous aspect, then how is it possible to represent, in accord with the same model, the change of aspect? If seeing is the continuous description of a visual perception — which is a thought — this perception is not able to see the ambiguity of the object's aspects (*Ibid.*, p. 195e) and, the spaces of representation. Besides this, if spatial representation depends on the capacity to see the change of aspect, this implies a new perception of the objects and the space. Then, if the criterion of a perception is the (exact) representation of the perception's content and that representation is subsumed by the model of *mimesis,* we can understand why Wittgenstein says that:

a) seeing is not thinking , i.e. the exact representation of visual perception can not be applied to the experience of 'seeing-as' (*Ibid.*, p. 196e);

b) the representation of change of aspect can not be understood under the visual experience of a continuous aspect. 'Seeing-as' is seeing and not seeing. In fact, the represented object is imitated and then it is accepted without being imitated (represented) (*Ibid.*, p. 210e).

c) 'seeing-as' is an attitude different from interpretation, because to interpret implies that something is being forced into a form it did not really fit (*Ibid.*, p. 200e) and is related to hypotheses which may be proven false (*Ibid.*,p. 212e). So Wittgenstein infers that seeing is a state whereas interpretation is thinking and doing something (*Ibid.*).

It seems that we have a contradiction when Wittgenstein says that seeing is a state, which is in opposition to doing something and thinking, as if seeing were not also a thought. However, since seeing is a visual perception's description and perception is a thought, then seeing is also a thought (*Ibid.*, p. 197e).

This apparent contradiction comes from the opposition of two types of thought, the interpretative, which is related to hypotheses and the realist, which is limited to representing the copy of the object placed in an outside space. If in the case of an interpretation something is forced into a form it did not really fit, in the realist perspective this representation corresponds to a perfectly determined description of the perception of a singular object. But, between seeing something in a different way, and interpreting it distinctively, Wittgenstein prefers the second type because interpretations are related to hypotheses which may be proven false.

'Seeing-as' is understood as a state, which remits to the usage. It is not an innate experience, but just as 'following a rule', depends on a technique obtained by apprenticeship, whose content is to learn the experience of change of aspect.

Then, we can infer that when Wittgenstein is asking if seeing is thinking he is referring to different cases:

a) seeing as a description of visual perception;

b) seeing as mere knowledge, which takes the picture as a working drawing and reads it as a blueprint;

c) 'seeing-as' where the perception describes a transformation. This is not only a description of a visual perception about what happens to me, something like a spatial materialization that can be looked at (*Ibid.*, p. 199e), but it is also connected with an attitude before an image. As an attitude 'seeing-as' demands the intervention of imagination depending on will and expressed in the orders 'Imagine this', 'Now see the figure like this' (*Ibid.*, p. 213e). This will can either transform the continuous description of the visual experience into the perception of a new aspect.

The visual experience of perception of a new aspect is an important fact to understand how an abnormal application of the rule always expresses a form of life. We said that a form of life corresponds to a common perception. 'Seeing-as' or change of aspect is suitable for a new perception where the visual experience is a new and at the same time an unchanged perception.

On the heart of change of aspect we have the double perception of a known form and another which is completely new. This can not be submitted to a process of superimposing the pictures, and reduced to mere similarity (*Ibid.*, p. 195e), but it implies seeing this simultaneously in different ways, such as in the description of a triangle's multiple aspects. The triangle "(…) can be seen as a triangular hole, as a solid, as a geometrical drawing; as standing on its base, as hanging from its apex; as a mountain, as a wedge, as an arrow or pointer, as an overturned object which is meant to stand on the shorter side of the right angle, as a half parallelogram, and as various other things" (*Ibid.*, p. 200e). In that picture the expression of something new and at the same time of an unchanged perception is present, as well as the plurality of expressions of new perceptions. These are not reduced to a continuous description, and are also common perceptions. So this experience of change of aspect allows us to understand the coexistence of several forms of life. When people conciliate a new perception with the preservation of the previous one, all share the experience of duplicity (or plurality) of aspects, and so they share the same forms of life. The problem faced by thought — how to include the abnormal applications of rules in forms of life — is therefore solved.

So, 'seeing-as' is for us a solution to the problems of the postulation of a plurality of forms of life and to the clarification of their compatibility and not directly connected to the process of 'following a rule', as is defended by Zemach. For Zemach 'seeing-as' replaces the sentence 'the meaning is the use', presented in the first part of *Philosophical Investigations,* to solve the paradox of following a rule formulated in section 201: "(…) no course of action could be determined by a rule, because every course of action can be made out to accord with the rule. The answer was: if everything can be made out to accord with the rule, then it can also be made out to conflict with it. And so there would be neither accord nor conflict here". So, in accord with Zemach we use language in two different ways. In the first, we use words appropriately, but we don't see their role in language games. In the second, when we learn to participate in language games, in a non-specified moment, 'seeing-as' appears and the base of language is changed forever. This way of thinking solves the problem of following a rule by introducing a new version of the pictoric theory of meaning. By seeing the words with meaning not only do we see them as pictures of the meaning of their use, but also when we see a sign under an aspect we see it internally related with signs. This seeing has no mediation of any other process. That is why 'seeing-as' overcomes the paradox of following a rule. When we see some uses in a right way we don't have any doubt about the application of the sign (1992, 32). Zemach presupposes an immediate relationship between the rule and the concrete case that excludes doubt and experience.

If Wittgenstein links the problem of following a rule to the experience of change of aspect, this association is far from eliminating the doubt. On the contrary, it underlies the ambiguity of the rule and thus its non-immediate application. The perception related to mere seeing does not have any competence to see the ambiguity, which happens with 'seeing-as'.

Although with 'seeing-as' people can share points of abnormal with normal perceptions, we don't agree with Simons' interpretation about the relation between different forms of life. He underlies the experience of the clash or the rupture between forms of life (1999, 209-212), resulting from the comprehension of a different form of life from the perspective of the own form of life (*Ibid.*, 209). This comprehension, mediated by the experience of verification of change of aspect, leads us to the non-understanding of strange forms of life (*Ibid.*). This interpretation hides in the perception of change of aspect the experience of plurality of forms of life. When the teacher tries to help the student to give up an abnormal rule and to follow the normal one, he makes at the same time the experience of two forms of life and recognizes the impossibility of superimposing those two forms, thus their non-reducibility. As the capacity to experience simultaneous forms of life is not only a fact of imagination and will, but is also linked to a technique, Simons sustains that this is only related to a particular form of life and is not able to describe any strange form of life (*Ibid.*, 206). However, in *Philosophical Investigations* Wittgenstein is clear when he recognizes that the capacity of 'seeing-as' is linked to a technique that allows for the description of strange forms of life not only from the point of view of our own or personal life, but also in the perspective of a difference and plurality. So 'seeing-as' shows the existence of the plurality of forms of life and the possibility of a not forcibly agonistic relation between them.

Literature

Simons, Joseph 1999 "Lebensform. Ubergang und Abbruche", in *Der Konflikt der Lebenformenin Wittgenstein Philosophie der Sprache* (herausgegeben von Wilhelm Lütterfelds und Andreas Roser), Frankfurt am Main: Suhrkamp, pp. 191-212.

Wittgenstein, Ludwig 1977 *Philosophical Investigations*, trans. G.E.M. Anscombe, Oxford: Blackwell.

Zemach, Eddy 1992 *The Reality of Meaning and the Meaning of Reality*, Hanover: NH-Brown.

Email: reginaqueiroz@clix.pt

Medien zwischen Medien-, Wissenschafts- und Technikphilosophie

Ulrike Ramming, Stuttgart, Deutschland

Der aktuelle Stand der akademischen Diskussion über Medien lässt sich dadurch charakterisieren, dass die Allgegenwärtigkeit des Medienbegriffs die allgemeine Akzeptanz des Medienthemas im wissenschaftlichen Kontext signalisiert; zugleich ist die Klage über die Beliebigkeit der Verwendung des Begriffs zu hören, wodurch beinahe alles und jedes zum Medium deklariert wird. So konstatiert Lambert Wiesing für die Medienwissenschaften:

"In der Tat scheint die Situation derart zu sein, daß die Medienwissenschaften zwar von ausgesprochen vielen, aber doch zumeist gleichermaßen weiten, ja teilweise sogar entgrenzten Medienbegriffen bestimmt ist – von Medien, die sich vom alltäglichen Verständnis des Mediums als Kommunikationsmittel bedenklich entfernt haben."[1]

Dieser Befund korrespondiert mit der Beobachtung, dass die in den Medienwissenschaften eingesetzten Medienbegriffe in extremer Weise theorieabhängig sind. So schreibt Matthias Vogel:

"Auch wenn ich im Kontext dieses eher kursorischen Durchgangs [durch die Medientheorien von Parsons, Luhmann, Habermas und McLuhan, U.R.] habe zeigen können, daß die vorliegenden Medienbegriffe mit schwerwiegenden Mängeln behaftet sind, hoffe ich doch wenigstens Zweifel daran geweckt zu haben, daß wir über ein belastbares Konzept der Medien verfügen. Ursachen dieses Mangels sind im Falle der soziologischen Theorien schwankende oder inkonsistente kriteriologische Bestimmungen des Medienbegriffs, die einer weitreichenden Inanspruchnahme des Medienbegriffs für die Lösung vorgängiger theoretischer Probleme geschuldet sind."[2]

Ausdehnung des Gegenstandsbereichs bis zur Beliebigkeit und extreme Theorieabhängigkeit, die eben dazu führt, dass mit der jeweiligen Theoriearchitektur der Gegenstandsbereich neu bestimmt wird – dieser Befund wird durch die jüngst von Nagl und Sandbothe herausgegebene Anthologie zur Medienphilosophie scheinbar bestätigt, die beansprucht, einen repräsentativen Überblick über den aktuellen Forschungsstand für den Bereich der Philosophie zu bieten.[3] Neben den erwartbaren Kandidaten wie Schrift, Buchdruck, Fotografie, Film, Radio, Fernsehen, Internet, werden auch Kunstgattungen wie Bild, Musik, Tanz oder Theater aufgeführt. Die Philosophie fügt dem Katalog Kants transzendentale Formen der Anschauung, Raum und Zeit, sowie ganz allgemein Wahrnehmung hinzu.

Der Frage, der ich im Folgenden nachgehen möchte, lautet, wie aus der Perspektive des Fachs Philosophie der aktuellen Forschungssituation begegnet werden kann und inwiefern die Philosophie mit einem eigenen Medienbegriff einen konstitutiven Beitrag zur Diskussion leisten kann. Dieser Anspruch scheint verwegen zu sein, denn angefangen hat die Mediendiskussion ja mit geharnischten Vorwürfen gegen das Fach. Der Vorwurf der Schrift- und Medienvergessenheit ist beinahe schon zur Selbstverständlichkeit geworden.

Allerdings halte ich den Vorschlag, der Situation durch die Annäherung an das aktuelle Alltagsverständnis zu begegnen, für ein nur auf den ersten Blick probates Heilmittel. Denn, wie Stefan Hoffmanns begriffsgeschichtliche Studie zum Medienbegriff zeigt, änderte sich auch die alltägliche Bedeutung des Wortes >Medium< im Lauf der Jahrhunderte kontinuierlich und orientierte sich an zeitgeistigen Strömungen.[4] Vielmehr schlage ich vor, den Ausdruck >Medium<, im Sinne Konrad Ehlichs, als einen Begriff der "wissenschaftlichen Alltagssprache" zu verstehen. In ihm mischen sich "Elemente der alltäglichen Sprache, Elemente der alltäglichen Wissenschaftssprache und terminologische Elemente."[5] Als ein solcher kennzeichnet er weniger eine Klasse von Objekten bzw. Artefakten; vielmehr bezeichnet er eine Fächer übergreifende Forschungsperspektive, in die sowohl alltagssprachliche Bedeutungselemente wie Festlegungen der einzelnen Fachterminologien eingehen. Die Ubiquität des Medienbegriffs lässt sich als Beleg dafür interpretieren. Nimmt man Ehlichs Vorschlag in dieser Weise an, so wäre damit eine Metaebene bezeichnet, die auf zweierlei drängt: Einmal auf eine fachspezifische terminologische Festlegung; zweitens auf eine transdisziplinäre Verständigung über die jeweils verwendeten Terminologien.

Im Folgenden möchte ich einen Vorschlag für eine terminologische Festlegung im Fach Philosophie vorstellen, für den Folgendes charakteristisch ist: Erstens versteht er unter Medien weniger eine Klasse von Artefakten mit eindeutig bestimmbaren Eigenschaften. Mit anderen Worten: er löst sich von einem ausschließlich gegenständlich orientierten Verständnis von Medien. Zweitens lässt er sich als ein genuin philosophischer Beitrag zur Mediendiskussion verstehen, der ein Verständnis von Medien entwickelt, das in den einschlägigen Texten häufig aufscheint, selten aber extrapoliert wird.

I

Die These zu stützen, dass sich der Ausdruck >Medium< nicht ausschließlich auf eine bestimmte Klasse von Gegenständen bezieht, lässt sich nicht nur mit Beispielen aus der aktuellen Diskussion belegen. Vielmehr findet sie auch ihre Bestätigung aus der philosophischen Tradition. So hat Stefan Hoffmanns begriffsgeschichtliche Studie erbracht, dass der Medienbegriff durchaus in der Geschichte der Disziplin Philosophie verankert ist; sie machte außerdem deutlich, dass unter ihm nicht Kommunikationsmittel im heutigen Sinn subsumiert wurden. Vielmehr reicht das Spektrum von Medien der Wahrnehmung über technische Medien, den Mittelbegriff des aristotelischen Syllogismus bis hin zu den Reflexionsmedien, in denen sich Denken vollzieht. Ein kommunikationswissenschaftliches Medien-

[1] Wiesing, Lambert 2005: *Artifizielle Präsenz. Studien zur Philosophie des Bildes.* Frankfurt/M. 149.
[2] Vogel, Matthias 2001: *Medien der Vernunft. Eine Theorie des Geistes und der Rationalität auf Grundlage einer Theorie der Medien.* Frankfurt/M. 136.
[3] Nagl, Ludwig/Sandbothe, Mike (Hg.) (2005): *Systematische Medienphilosophie* (= Deutsche Zeitschrift für Philosophie, Sonderband 7). Berlin: Akademie.

[4] Hoffmann, Stefan 2002: Geschichte des Medienbegriffs (= Archiv für Begriffsgeschichte, Sonderheft). Hamburg. 24 ff.
[5] Ehlich, Konrad (1996): "Sprache als System und Sprache als Handlung". In: *Sprachphilosophie/ Philosophy of Language/Philosophie de language. Ein internationales Handbuch zeitgenössischer Forschung.* Berlin/New York. 954, Sp. 1.

verständnis kann in diesem Zusammenhang nur als Spezialfall betrachtet werden

Weitere Argumente gegen eine vorschnelle Orientierung an aktuellen Bedeutungsfestlegungen lassen sich aus Matthias Vogels Analyse aktueller Medienkonzepte ableiten. Diese macht deutlich, dass kursierende Auffassungen von den "prototypisch eingeführten" und behandelten Medien abhängen und zugleich "deutliche Spuren der theoretischen Kontexte, zu denen sie in Beziehung stehen", tragen.[6] Aus diesem Befund lässt sich schließen, dass der alltägliche Medienbegriff als eine Art Klammer fungiert, die die Breite des thematischen Spektrums zusammenhält. Bemerkenswert ist ein weiteres Ergebnis: Neben der Diversität der verwendeten Medienkonzepte sieht Vogel eine Gemeinsamkeit darin, dass diese sich auf "spezifische Möglichkeitsräume" beziehen. Es lässt sich ein Zusammenhang feststellen "... zwischen der Auszeichnung von Handlungsspielräumen, die sich im Rahmen medienintegrierter Interaktionen ergeben, und der Möglichkeit ..., Handlungen und soziale Prozesse vor dem Hintergrund dieser medialen Handlungsmöglichkeiten zu verstehen."[7]

Die Bestimmung eines Zusammenhangs zwischen Medien und Möglichkeit scheint auch in Sybille Krämers Charakterisierung von technischen Apparaten als Medien durch. Krämer differenziert zwischen der Nutzung technischer Artefakte als Werkzeuge (oder Mittel) im Rahmen eindeutiger Zweck-Mittel-Relationen und den medialen Aspekten dieser Artefakte bzw. ihres Gebrauchs. Letztere sind nicht als Eigenschaften von Medienartefakten zu begreifen; vielmehr handelt es sich darum, dass der Einsatz spezifischer Mittel auch neue Möglichkeiten eröffnet. Mit den Worten Krämers:

"Die Technik als Werkzeug erspart Arbeit; die Technik als Apparat aber bringt künstliche Welten hervor, sie eröffnet Erfahrungen und ermöglicht Verfahren, die es ohne Apparaturen nicht etwa abgeschwächt, sondern überhaupt nicht gibt. Nicht Leistungssteigerung, sondern Welterzeugung ist der produktive Sinn von Medientechnologien."[8]

In dieser Charakterisierung scheint die von John Dewey eingeführte Unterscheidung zwischen äußerem und innerem Mittel durch. Unter ersterem versteht Dewey das, was Krämer als Werkzeug tituliert – gegenständliche oder symbolische Mittel, die zur Erreichung eines bestimmten Zwecks eingesetzt werden. Diese sind insofern als beliebig anzusehen, als sie von anderen ersetzt werden können.[9] Für innere Mittel gilt dagegen, dass sie in einem nicht kontingenten Verhältnis zum gesetzten Zweck stehen. Dewey bezeichnet sie als Medien.

"Mittel werden unter der Voraussetzung zu Medien, wenn sie nicht bloß der Vorbereitung oder als etwas Vorläufiges dienen. Als ein Medium aufgefaßt, ist die Farbe ein Vermittler für Werte, die in gewöhnlichen Erfahrungen schwach und disparat sind, und ein Vermittler für die neue konzentrierte Perzeption, wie sie durch ein Gemälde veranlaßt wird. Ein Plattenspieler ist ein Vehikel, dessen Zweck sich in einer bloßen Wirkung erschöpft. Die Musik, die ihm entspringt, ist ihrerseits ein Vehikel, aber gleichzeitig ist sie doch mehr: sie ist näm-

lich ein *Vehikel*, welches mit dem, was es überträgt, eins wird."[10]

Deweys Charakterisierung des Plattenspielers als äußeres Mittel fasst diesen als Wiedergabegerät für Musik- oder Sprachaufnahmen auf, das zum ästhetischen Wert eines Kunstwerks nicht beiträgt. Aus dem von Krämer skizzierten Medienverständnis heraus ließe es sich in anderer Hinsicht als Medium interpretieren: Als ein Artefakt, das Hörgewohnheiten verändert – sei es, dass unsere Aufnahmerhythmen sich an die Wiedergabe- und Speicherleistungen der jeweiligen Medien (Schallplatte, CD, I-Pot) anpassen; sei es, dass sich die institutionellen Rahmenbedingungen für das Hören von Werken der klassischen Musik grundlegend ändern. Das Beispiel des Plattenspielers zeigt deshalb, dass der Einsatz von technischen Geräten durchaus den Charakter eines bloßen Substituts überschreitet und dann Auswirkungen auf kulturelle und gesellschaftliche Teilbereiche ausübt, die das Merkmal eines kulturellen Wandels tragen können. Diese lassen sich in dem von Vogel umrissenen Sinn als Interdependenzen von medienintegrierten Aktionen und Interaktionen und den hieraus resultierenden Handlungsmöglichkeiten bestimmt werden.

II

Eine Konzeption des Mediums im Sinn der mit ihm gegebenen Möglichkeiten lässt sich, vielleicht überraschend, auch in Jacques Derridas frühen Arbeiten zum schriftlichen Zeichen finden. So griff Derrida in seiner ersten Veröffentlichung nicht zufällig Husserls Fragestellung, inwiefern Sprache und Schrift als Bedingungen für die Möglichkeit der Objektivität von Erkenntnis und Wissenschaft angesehen werden können, auf und verfolgte sie selbständig weiter.[11] Während Husserl dabei vorrangig die Dimension des inneren Mediums behandelte,[12] entwickelt Derrida weiterführend Dimensionen des Medialen, die auf allgemeine Möglichkeitsbedingungen hinzielen.

So verwendet er beispielsweise im französischen Original dieses Textes nicht nur die erwartbare Vokabel >médium<,[13] sondern auch >milieu<[14] und >élément<[15]. Vorschnell ließen sich die beiden letzteren mit "Mitte" übersetzen oder im Sinn des konstitutiven Bestandteils als Element interpretieren. Derridas Formulierungen deuten allerdings auch auf die naturwissenschaftlichen Konnotation der Wörter hin. Diese verweist auf das Mittel im Sinn der Vermittlung von Wirkungen[16] und impliziert eine Vorstellung von Medium, die als Unhintergehbarkeit zu verstehen ist. Von einem Medium in diesem Sinn ist anzunehmen, dass bestimmte Effekte von ihm abhängen und dass es gegebenenfalls nur über die Effekte zugänglich ist.

Der Gedanke eines vorgängigen Mediums, das nurmehr über seine Effekte, nur reflexiv zu erschließen ist, lässt sich weiter verfolgen an den medienpilosophischen Motiven, die Derridas *Grammatologie* durchziehen. Dies geschieht unter der Voraussetzung, dass der Ausdruck >Schrift< nicht ausschließlich zeichentheoretisch interpre-

[6] Vogel 2001: 114.
[7] Ebd.: 160.
[8] Krämer, Sybille 1998: "Das Medium als Spur und als Apparat". In: Dies. (Hg.): *Medien Computer Realität. Wirklichkeitsvorstellungen und Neue Medien*. Frankfurt/M. 85.
[9] Dewey, John (1980): *Kunst als Erfahrung*. Frankfurt/M. 229. Eine ausführliche Darstellung der Medienkonzeption Deweys findet sich in Vogel 2001: 137 ff.

[10] Ebd.: 231.
[11] Eine genaue Analyse von Derridas diesbezüglicher Husserl-Lektüre habe ich im zweiten Kapitel meiner Dissertation Ramming, Ulrike 2006: *Mit den Worten rechnen. Ansätze zu einem philosophischen Medienbegriff* Bielefeld: transcript, entwickelt.
[12] Husserl, Edmund 1987: "Der Ursprung der Geometrie". In: Derrida, Jacques 1987*: Husserls Weg in die Geschichte am Leitfaden der Geometrie. Ein Kommentar zur Beilage III der »Krisis«*. München: Fink. 204-232.
[13] Derrida, Jacques 1974: *Edmund Husserl, l'origine de la géométrie. Traduction et introduction par Jacques Derrida*. 2., verb. Auflage. Paris. 69.
[14] Ebd.: 91.
[15] Ebd.: 72.
[16] Brockhaus Enzyklopädie 1991, Bd. 6: 381, Sp. 2.

tiert wird.[17] Unter dieser Prämisse lässt sich erinnern an Derridas kritische Auseinandersetzung mit dem Modellcharakter, den das alphabetische Schriftzeichen für die Konzeption des sprachlichen Zeichens bei Saussure einnimmt,[18] in deren Zusammenhang dieser vom "Schriftfonds"[19] des gesprochenen Wortes spricht. Hierunter fällt aber auch die unter dem Stichwort >Urschrift< vollzogene Kritik an der strukturalen Anthropologie von Claude Lévi-Strauss. Diese lässt sich dahingehend zusammenfassen, dass Derrida unter Urschrift phylogenetisch die generelle Befähigung der Gattung Mensch zu graphischen Artikulationen versteht. Das phonetische Vorurteil von Lévi-Strauss besteht deshalb nach Derrida darin, dass dieser andere graphisch-schriftliche Artikulationen als phonetische Schriften nicht gelten lässt und deshalb den von ihm erforschten Völkern Schriftlosigkeit vorwerfen kann. Mit dem Ausdruck >Urschrift< führt Derrida somit Medialität im Sinne einer allgemeinen Ermöglichung ein, die sowohl als Befähigung zu bestimmten Typen von Handlungen als auch als vorgängige, systemische Strukturen aufzufassen ist.

Die wissenschaftstheoretische Dimension des Ausdrucks >Medium< erweist sich allerdings nicht nur in dem Modellcharakter eines vorhandenen Zeichenrepertoires. Edmund Husserl behandelte in der *Krisis*-Schrift auch Zirkel und Lineal als Mittel zur Konstruktion geometrischer Gegenstände ebenso wie wissenschaftliche Methoden. In diese Tradition philosophischer Mittelreflexion ist dann auch eine der ersten, im engeren Sinn medienphilosophischen Arbeiten einzuordnen, Sybille Krämers Untersuchung der wissenschaftlichen Relevanz algebraischer Schriftsysteme für die Entwicklung der methodischen Verfahren der Philosophie der Neuzeit.[20] In ihr zeichnet sich eine Bedeutung des Medienbegriffs ab, die darunter die Einheit von materiell-gegenständlichen resp. immateriell-elektronischen Mittel und den seinen Gebrauch regelnden Praktiken resp. methodischen Verfahren versteht. Mit ihr wird der Bereich einer im engeren Sinn verstandenen Medienphilosophie überschritten in Richtung auf aktuelle Diskussionen im Bereich der Technikphilosophie.

So macht Gerhard Gamm den medialen Charakter von Technik an der Unbestimmtheit des Computers als universeller Maschine fest. Zu dessen Charakteristika gehöre, dass mit ihm eindeutige Zweck-Mittel-Relationen, wie sie den klassischen Werkzeugen zugeschrieben werden, aufgegeben sind. Technik sei weniger als Instrument, vielmehr als materielles Dispositiv oder Medium zu verstehen, das dynamische Vermittlungszusammenhänge im Sinn vernetzter Systeme ebenso ermöglicht wie den Umgang mit Virtuellem.[21] Der transformative Charakter von Technik wird daran deutlich, dass nicht nur neue Räume für neue Zwecksetzungen eröffnet werden, sondern dass sich Technik "... in ein Etwas verwandelt, in das sich (nahezu) alles übersetzen läßt."[22]

Unbestimmtheit lässt sich aber auch im Sinne der "... Nichtwahrnehmbarkeit von Wirkmechanismen, hingergründigen Steuerungs- und Regulierungsprozessen, verdeckt gezeitigten (erwünschten oder unerwünschten)

Effekten ..."[23] verstehen. In diesem Sinn bieten auch für Christoph Hubig neueste Technologien den Anlass für eine erneute, medialitätsphilosophisch orientierte Reflexion von Technik. Allerdings schätzt er die mediale Dimension von Technik als hervorstechendes Merkmal nicht nur der neuesten Entwicklungen ein, sondern als Charakteristikum jedes technischen Typs von Artefakten: "Ein gebautes Haus ist Mittel zum Schutz vor der Witterung und zugleich Medium bestimmter Weisen des Wohnens."[24] Mittel werden dann zu Medien, wenn sie als äußere, gegenständliche Mittel, die zu einem bestimmten Zweck eingesetzt werden, zugleich Möglichkeitsräume erschließen, die erlauben, völlig neue Zwecke zu bestimmen. Sie sind einerseits in Möglichkeitsräume eingebunden, die als "vorausliegende Rahmenordnung" begriffen werden müssen, "... innerhalb deren konkrete Mittel realisiert und eingesetzt werden können."[25] Zugleich aber erfahren diese Möglichkeitsräume eine Strukturierung und Ausdifferenzierung über die in ihnen verwendeten technisch-kulturellen Mittel sowie die kulturell etablierten Praktiken ihrer Verwendung.[26]

Demnach wäre Medialität als ein Möglichkeits- (Hubig) oder Transformationsraum (Gamm) zu begreifen, der sich noch einmal untergliedern lässt in eine äußere Medialität, verstanden als "Welt äußerer Mittel" und in innere Medialität, charakterisiert als eine "... reine Struktur des Organisierens von Raum, Zeit, Zeichengebrauch, Information, Kommunikation ..."[27] Letztere bildet den Rahmen, innerhalb dessen jeder konkrete Mitteleinsatz realisiert, etablierte Handlungstypen aktualisiert werden.

IV

In Anbetracht eines derartig erweiterten Medienbegriffs, der technische Artefakte allgemein behandelt und unter den Technikbegriff auch Kultur- und Intellektualtechniken subsumiert, stellt sich die Frage, ob damit das Medienthema in seiner Neuheit für das Fach Philosophie und in seiner Spezifität nicht im Dunkel einer terminologischen Nacht, in der alle Medien gleich sind, aufgeht. In welcher Weise eine im engeren Sinn medienphilosophische Analyse, die Medien als Mittel zur Übermittlung, Speicherung und Bearbeitung von Informationen versteht, in den Rahmen einer allgemeinen Konzeption von Medialität eingebunden sein kann, ohne ihre Eigenart und Eigendynamik aufgeben zu müssen, möchte ich in der Auseinandersetzung mit Pirmin Stekeler-Weithofers Interpretation des Schriftbegriffs von Derrida aufzeigen.

Auch Stekeler-Weithofer geht von dem erweiterten Schriftbegriff aus, wenn er diesen als Repräsentation von Zeichen durch Zeichen interpretiert.[28] Diese Relation interpretiert er im Sinne der Unterscheidung zwischen type und token, von allgemeinem Zeichengebrauch im Rahmen einer gemeinsamen Praxis und der konkreten Verwendung.[29] Diese Differenzierung zwischen Form und Gebrauch stimmt mit der von Hubig entwickelten medialitätsphilosophischen Position in ihren pragmatischen Grundvoraussetzungen überein. Dabei geht es im technik-

---

[17] Vgl. Kimmerle, Heinz 2000: *Jacques Derrida zur Einführung*. 5., verb. Auflage. Hamburg. 32.

[18] Derrida, Jacques 1990: *Grammatologie*. 3. Auflage. Frankfurt/M. 90 ff.

[19] Ebd. 92.

[20] Krämer, Sybille (1991): *Berechenbare Vernunft. Kalkül und Rationalismus im 17. Jahrhundert* . Berlin/New York. Zur Diskussion der von Krämer entwickelten Position vgl. Ramming 2006, Kap. 1.

[21] Gamm, Gerhard 2005: "Unbestimmtheitssignaturen der Technik". In: Ders./Andreas Hetzel (Hg.): *Unbestimmtheitssignaturen der Technik. Eine neue Deutung der technisierten Welt*. Bielefeld. 19/20.

[22] Ebd.: 102.

[23] Hubig, Christoph 2005: ">Wirkliche Virtualität<. Medialitätsveränderungen der Technik und der Verlust der Spuren." In: Gerhard Gamm/Andreas Hetzel (Hg.): *Unbestimmtheitssignaturen der Technik. Eine neue Deutung der technisierten Welt*. Bielefeld. 39.

[24] Ders 2006: *Die Kunst des Möglichen I. Technikphilosophie als Reflexion der Medialität*. Bielefeld. 158.

[25] Ebd.: 156.

[26] Ebd.

[27] Ders. 2002: *Mittel*. Bielefeld. 20.

[28] Stekeler-Weithofer, Pirmin 2002: "Zur Dekonstruktion gegenstandsfixierter Seinsgeschichte bei Heidegger und Derrida." In: Andrea Kern/Christoph Menke (Hg.): *Philosophie der Dekonstruktion*. Frankfurt/M. 24.

[29] Ebd.: 25.

philosophischen Kontext darum, zwischen kulturell etablierten und institutionalisierten Handlungstypen und ihren jeweiligen Aktualisierungen zu unterscheiden. Die Unterscheidung zwischen äußerer und innerer Medialität fügt dem die Ebene der vorausliegenden Rahmenordnung ebenso hinzu, innerhalb derer derartige Aktualisierungen stattfinden, wie diejenige, durch welche diese bedingt werden. Stekeler-Weithofers Distinktion bleibt dem gegenüber unterbestimmt. Siedelt man sie auf der Ebene der type/token-Differenz an, dann vernachlässigt sie die medialitätsphilosophische Dimension, die nach den vorhandenen, zur Verfügung stehenden Potenzialen fragt. Dazu zählt unter medientheoretischen Gesichtspunkten die Frage, ob eine Kultur über Schrift verfügt, und wenn ja, über welche Art von Schrift. Unter äußerer Medialität wäre in diesem Fall zu verstehen, dass ein bestimmter Schrifttypus (phonetisch, syllabisch, ideographisch) vorliegt, dass spezifische Schreibtechniken entwickelt wurden (Keilschrift, Alphabetschrift, Buchdruck, Computer) und dass entsprechende grammatische und orthographische Regeln ebenso festgelegt sind wie die jeweiligen Kulturtechniken der Herstellung und des Gebrauchs schriftlicher Artefakte. Erst auf der Grundlage derartiger Voraussetzungen wäre dann der jeweilige Einsatz der vorhandenen schriftlichen Mittel als Aktualisierung realer Mittel-Möglichkeiten zu bestimmen, die sich in etablierten Praktiken, zu denen sich auch die impliziten Normen und inferentiellen Relationen der Bedeutungsfestlegung zählen lassen, manifestieren.

Stekeler-Weithofers Interpretation bleibt dem gegenüber in merkwürdiger Ambivalenz befangen. Einerseits erkennt sie die grundlegende Differenz zwischen oralen und literalen Kulturen an;[30] andererseits scheint sie den Ausdruck >Schrift< dann doch nur als Synonym für das methodische Primat der allgemeinen Form des Gebrauchs vor der aktualen Verwendung von Zeichen versteht. Wenn dieser Eindruck stimmt, so stellt sich nicht nur die Frage, weshalb der Ausdruck >Schrift< überhaupt benötigt wird. Gravierender an einer derartigen Synonymie ist aus meiner Sicht, dass sie die Einsichten der schriftwissenschaftlichen Forschung zum Verhältnis von Schrift und Sprache schlicht unterschlagen. Gerade Christian Stetter hat im Rahmen seiner sprachwissenschaftlichen und schrifttheoretischen Untersuchungen heraus gearbeitet, wie sehr die Vorhandenheit eines Schriftsystems wie des phonetischen Alphabets selbst normierenden Einfluss auf den Sprachgebrauch ausübt.[31] Wollte man eine formentheoretische Analyse schrifttheoretisch korrekt formulieren, so müsste unter der Überschrift >Schrift< folglich auch der normierende Einfluss vorhandener schriftlicher Mittel/Medien auf den allgemeinen Sprachgebrauch nicht nur mit aufgenommen, sondern auch explizit bestimmt werden.

V

Aus den vorausgegangenen Ausführungen wurde deutlich, dass der Ausdruck >Medium< auch da, wo sich seine Bedeutung nicht eindeutig auf Kommunikationsmedien beschränkt, dennoch eine klare Bedeutung hat: Er wird verstanden im Sinne einer Ermöglichungsbedingung. Thema der Medienphilosophie ist es, Medien, verstanden als Mittel der Informationsspeicherung, - übertragung und –bearbeitung, in Hinblick auf die mit ihnen gegebenen, spezifischen Potenziale zu behandeln. Am vorangegangenen Beispiel konnte außerdem deutlich gezeigt werden, wo die Differenzierungsleistung einer so verstandenen Medienphilosophie liegt: Erstens ist sie in der medienspezifischen Ausdifferenzierung der Relation von allgemeiner Form und Gebrauch in der von Stekeler-Weithofer

skizzierten Weise zu sehen. Dabei kann das Charakteristikum von Medienphilosophie in der Weise bestimmt werden, dass diese, im Unterschied zur Sprachphilosophie, die Verbindung von technischen und syntaktisch-semantischen Dimensionen zum Gegenstand der Erörterung macht. Als beispielhaft in diesem Sinn lässt sich die von Claus Pias entwickelte Fragestellung verstehen, inwiefern die unterschiedlichen technischen Formate digitaler Bildverarbeitung Einfluss nehmen auf Bildwahrnehmung und die Wiedergabe von Bildmaterial.[32]

Zweitens wurde deutlich, dass die Verbindung von gegenständlicher und nicht-gegenständlicher Bedeutung des Medienbegriffs nicht nur auf die Bestimmung von Veränderung auf der Bedeutungsebene zielt; vielmehr erfasst sie auch Veränderungen etablierter Handlungsoptionen oder die Generierung von neuen. So dient ein Medium wie das Internet nicht nur der Beschleunigung des Informationsaustauschs oder der Möglichkeit, in Computerspielen oder Chat-rooms fiktive Identitäten anzunehmen. Die Möglichkeit zum beschleunigten und globalisierten Austausch von Informationen wirkt sich auch auf die Wertentwicklung bei finanziellen Spekulationen im Internet aus und zeigt somit Folgen in der internationalen Ökonomie.[33]

Zurück zur Ausgangsfrage: Ich glaube, dass ich zeigen konnte, dass ein Medienbegriff, der sich nicht ausschließlich im Sinn unseres Alltagsverständnisses auf technische Artefakte der Übertragung, Speicherung und Bearbeitung von Informationen und Kommunikation bezieht, nicht zwangsläufig unscharf sein und in die Beliebigkeit führen muss. Beide Bedeutungen, die des gegenständlichen Kommunikationsmittels und der mit ihm gegebenen Möglichkeiten, sind Thema einer Medienphilosophie, die sich die Aufgabe stellt, den Einfluss von Informations- und Kommunikationsmedien innerhalb des Fachkanons der Philosophie auszubuchstabieren und zu bestimmen. Der Beitrag der Philosophie zur aktuellen Mediendiskussion liegt folglich in einem Medienbegriff, der die unterschiedlichen Dimensionen von Medien und der in ihnen angelegten Möglichkeiten zu bestimmen und zu differenzieren hilft. Damit zielt sie zugleich auf die Einbeziehung von Forschungsergebnissen aus anderen wissenschaftlichen Disziplinen. In der notwendigen Ausrichtung auf Interdisziplinarität bei gleichzeitiger Bestimmung des jeweiligen systematischen Ortes sind nach meiner Auffassung Reiz und die Herausforderung aktueller Medienphilosophie zu sehen.

Email: uramming@t-online.de

[30] Ebd.: 23.
[31] Vgl. hierzu Stetter, Christian 1997: *Schrift und Sprache*. Frankfurt/M.

[32] Vgl. Pias, Claus 2000: "Maschinen/lesbar. Darstellung und Deutung mit Computern". In: Manfred Bruhn (Hg.): *Darstellung und Deutung. Die Bildmedien der Kunstgeschichte*. Weimar.
[33] Koslowski, Peter 2004: "Virtual Reality as a Problem of the Electronic Economy". In: Ders./Christoph Hubig/Peter Fischer (Hg.): *Business Ethics and the Electronic Economy*. Alcatel SEL Stiftung für Kommunikationsforschung. Berlin/Heidelberg: Springer. 100.

Scepticism and Later Wittgenstein

Priyambada Sarkar, Kolkata, India

The thesis I like to defend in this paper is that in his book *On Certainty,* Wittgenstein challenges the hitherto unchallenged justificationist's model in epistemology and undermines the arguments of the philosophical sceptic in a consistent manner.

I

On certainty is, in fact, a report of Wittgenstein's reaction against Moore's refutations of scepticism. To the sceptic's question 'how can we prove that there is an external world?' Moore replies:

> I can prove now, for instance, that two human hands exist. How? By holding up my two hands, and 'here is one hand' and adding, as I make a certain gesture with the left hand and say 'here is another'.

> The question whether we do ever know such things as these, whether there are any material objects, seem to me to be questions which there is no need to take seriously: they are questions which it is quite easy to answer with certainty in the affirmative. (Moore, 1962,73)

Moore's view is that one can be entirely confident in the existence of two hands and other external objects. He does not even bother to examine the sceptical arguments that challenge the belief in the existence of the external world. Then Moore gives a long list of propositions like 'the earth existed for a long time before my birth', 'here is one hand and here is another,' I have never been far from the earth's surface',' etc. To Moore, these propositions are absolutely certain, because he believes that no sensible person under normal circumstances can doubt these propositions. Hence these indubitable propositions provide us with the rigorous proofs for the existence of the external world and a befitting reply to the original query of the sceptics.

Against Moore's proof of an external world Wittgenstein wants to point out that Moore cannot counter the sceptic's challenge 'you cannot know this' by simply saying that 'I do know this'. In fact, when the sceptic challenges our beliefs in the existence of the external world, his question is: whether and how far are our beliefs justified? There is a logical gap between our sense impressions and the physical object. The sceptic by challenging the notion of the external world is asking a logical question regarding the gap between sense impressions and the physical object. When Moore is saying 'here is one hand and here is another', he is not touching the logic of the sceptics. Hence it cannot be a reply to the challenge posed by the sceptics.

Wittgenstein says:

> His mistake lies rather in countering the assertion that 'one cannot know that' by saying 'I do know it' (OC 521)

Wittgenstein wants to point out that it is not enough to say that the sceptical conclusion is absurd. What is needed is an explanation of the absurdity in question, and Moore has failed to provide us with that explanation.

Moreover, Moore's use of the term "I know" is inappropriate. Moore cannot know these propositions, nor can others. Wittgenstein thinks that when Moore says that he knows such and such things, he is really enumerating a lot of empirical propositions, which have a peculiar logical role in the system of our experiential propositions. He says:

> Moore does not know what he asserts he knows but it stands fast for him, as also for me, regarding it as absolutely solid is part of our method of doubt and enquiry (OC 151)

Because, to Wittgenstein

> The propositions presenting what Moore knows are all of such a kind that it is difficult to imagine why anyone should believe the contrary. Nothing in my picture of the world speaks in favor of the opposite. (OC 93)

As no one can believe the contrary, it is misleading to say that we do or can know these propositions. Moore cannot know these propositions because he cannot doubt them. In *Philosophical Investigations*, Wittgenstein explains this point concisely. He says:

> 'I know' may mean 'I do not doubt' but it does not mean that the words 'I doubt' are senseless here or that doubting is logically excluded'. (PI p.221)

In the volume entitled *Nachlass* MS 138 (1949) Wittgenstein states that I know how to ascertain that I have two coins in my pocket but I do not know how to ascertain that I have two hands, for I cannot think of doubting it under normal circumstances. He then says that philosophers misuse the verb 'to know' when they use it where doubting is excluded. He says that usually one uses the verb 'I know' where the possibility of doubting makes sense. But philosophers say, 'I know' precisely where the possibility of doubting does not make sense, or where doubting is logically excluded. (p. 16a)

Wittgenstein argues:

> If someone doubted whether the earth had existed a hundred years ago, I should not understand that for this reason: I would not know what this person would still allow to be counted as evidence and what not. (OC 231)

To elucidate, we can say that when the verb 'to know' is used in the ordinary sense, one has to justify one's case by showing one's evidence and by explaining how one knows it. Now if someone doubts the existence of the earth hundred years ago then one would not know what this person would still allow to be counted as evidence and what not. A person cannot be doubtful about the matter and at the same time be employing our ordinary conception of evidence. Neither 'I know' nor 'I believe' are suitable expressions for stating this conceptual point. This is why Wittgenstein sometimes employs the metaphor 'it stands fast for me'. He suggests that Moore could have said this instead of 'I know' (OC 116). But he gives Moore the credit of pointing out the important fact that these propositions are very special in the sense that they belong to our frame of reference. Moreover, they play an important role in our everyday language and life.

II

Wittgenstein calls these propositions 'framework propositions' or 'hinge propositions', which, according to Wittgenstein, stand fast for us. He says that these propositions are neither true nor false, 'since it is the inherited background against which I distinguish between the true or false' (OC 514,515). He stresses that there are some things we have to accept in order to get on with our ordinary ways of thinking and speaking.

> If you are not certain of any fact, you cannot be certain of the meanings of your words. (OC 114)

> If you tried to doubt everything you would not get as far as doubting anything. The game of doubting presupposes certainty. (OC 115)

What is ironical is that Wittgenstein's arguments against scepticism are based mainly on these kinds of propositions, which Moore cited as proofs for the existence of the external world.

In the book *On Certainty* Wittgenstein points out that the sceptic cannot raise questions about the very possibility of knowledge, as his questioning or doubting presupposes the very existence of knowledge and certainty. Here Wittgenstein wants to say that the sceptic's use of the word 'I doubt' is also inappropriate.

No one can doubt the whole system as doubting and knowing are intimately connected. Both knowledge claims and expressions of doubt get their sense from these framework propositions where they are rooted. (OC 121-123, 317, 341-342, 354, 450, 519 and 625). Hence, he argues that the sort of questions the sceptic wishes to raise about the existence of knowledge or about the existence of certainty is self-refuting.

Such response to the sceptic is important as it challenges the hitherto unchallenged evidential justification theory of the epistemologists. To Wittgenstein, what makes a proposition certain or indubitable is not the fact that Moore has strong evidence for it, but the fact that it plays a special logical role in our everyday language and life. Evidence has no role to play here. Our belief systems rest on a foundation, which cannot be challenged, or challenging of which does not make any sense.

But there are paragraphs in the book *On Certainty*, which seem to undermine what he has said so far, and present Wittgenstein as being inconsistent.

III

> OC 96: It might be imagined that some propositions of the form of empirical propositions, were hardened and functioned as channels for such empirical propositions as were not hardened but fluid; and that the relation altered with time, in that fluid propositions hardened, and hard ones become fluid.

> OC 97: The mythology may change back into a state of flux; the riverbed of thoughts may shift. But I distinguish between the movement of the waters on the riverbed and the shift of the bed itself. Though there is not a sharp division of the one from the other

> OC 98: The same proposition may get treated at one time as something to test by experience, at another as a rule of the testing.

> OC 336: What men consider reasonable or unreasonable alters.

We have seen earlier that Wittgenstein by means of his framework propositions silenced the sceptic. But here we find him stating that these propositions, which constitute the very foundations of our belief system, are not stable or fixed. They also change with time. Hence the foundations of our belief system are relatively stable with respect to other changing facts of life.

And even the distinction between hinge propositions and ordinary propositions is not absolute. What appears to be a hinge proposition now may not appear so in near future and what appears to be an ordinary empirical proposition might turn out to be a hinge proposition later. These changes might occur slowly like the changing of riverbeds as compared to the changing flow of water in the river. But here the sceptic might raise his head and charge: So Wittgenstein, you are advocating relativism and relativism is nothing but a disguised form of scepticism.

How can we solve this puzzle?

The first alternative would be to suggest that Wittgenstein himself was a sceptic and his attempted refutation of scepticism is not to be taken seriously.

The second is that he is not a sceptic as such, but advocated context-relative-foundationalism.

The third is that he is neither a sceptic nor a nonsceptic. It is only our philosophical biases that tempt us to misunderstand him as a sceptic or a relativist or a foundationalist.

The first alternative cannot be accepted. The texts suggest that from the beginning of his career Wittgenstein was eager to prove that scepticism is non-sensical. The arguments varied in different phases of his life but he stuck to his original conclusion throughout his career. Hence our first alternative will not have the required textual support.

As far as the second alternative is concerned, commentators like Michael Williams have advocated such views. According to Williams, there will be a set of beliefs that will hold fast in a context, and they will be immune to epistemic evaluation in that context. But in different contexts different beliefs can play this hinge role and the former set of beliefs will then be subject to epistemic evaluation. Williams also claims that Wittgenstein did not want to establish hierarchy of hinge propositions. Hence one proposition cannot be treated as more fundamental than another. Therefore the sceptical context is just another context. He elucidates:

> The sceptic takes himself to have discovered under the conditions of philosophical reflections that knowledge of the world is impossible. But in fact the most he has discovered is that knowledge of the world is impossible *under the conditions of philosophical reflections.* (Williams 1991, 130)

This interpretation cannot be accepted as it also lacks textual support. Although Wittgenstein did not admit hierarchy of hinge propositions still he maintains that hinge propositions are more fundamental, as they provide the foundations of our belief system. Moreover, in these cases he would not use the verb 'to know'. He would prefer to say that they stand fast for us.

Again, on William's interpretation knowledge of the world may be possible under one condition. It may be impossible in another condition or it may be neither possible nor impossible in some other condition. Knowledge would then be relative to conditions, to contexts. How can this interpretation overcome the charge of relativism?

Finally, we can say that Wittgenstein in later years was opposed to any sort of theorizing. He believed that philosophers' inclinations to provide theories have led to various puzzles. In fact, he believed that the problem of scepticism arises on account of our not paying any attention to the usage of the verb 'to know'. He also believed that the foundations of our knowing, believing, doubting, assuring, etc. are not at all propositional. It is, one could say, praxis. He attempted to refute the all-important evidential justification theory of the epistemologists. He maintained that giving grounds or justifying evidence has to come to an end. But the end does not lie in certain propositions striking us immediately as true; rather it is our acting, which lies at the bottom of the language games. He clarifies:

> But that means I want to conceive it as something that lies beyond being justified or unjustified, as it were, as something animal. (OC 359)

It is true that he believed that this commonsense framework is revisable. But its revisability does not make its hinge propositions less fundamental. For one cannot revise the whole framework. One cannot revise the concept of revisability itself.

> Such a revision would amount to the annihilation of all yardsticks. (OC 492)

What follows from the above discussion is that Wittgenstein challenges the way we have seen the problem of scepticism so far, the way we have settled that knowing and believing are binary opposites. The most striking thing about this position is that Wittgenstein is not offering any theory of foundational propositions, which can justify our knowledge-claims. On the contrary, he is persuading us to look at the usage of the verb 'to know' in our everyday language and life, he is persuading us to take a certain view, 'a certain attitude' towards knowing and believing and treating certain propositions as framework or hinge propositions.

As adopting an attitude cannot be equated with proposing an account or a theory, his views on fundamental propositions cannot be labelled as foundationalism or relativism. In fact, if we attempt to label Wittgenstein's views as a theory, we will be doing injustice to him. The charge of relativism and hence of scepticism is thus superfluous and flies in the face of textual evidence that Wittgenstein puts in his last writings.

Literature

Williams, M. (1991). *Unnatural Doubts: Epistemological Realism and the Basis of Scepticism*. Oxford: Blackwell.

Wittgenstein, Ludwig (1974). *Über Gewissheit – On Certainty. Ed.* G. E. M. Anscombe and G. H. von Wright, tr. by Denis Paul and G. E. M. Anscombe, Oxford: Blackwell.

Email: psarkar4@yahoo.co.in

Globalisierte Produktion von (akademischem) Wissen – ein Wettbewerbsspiel.

Ursula Schneider, Graz, Österreich

Im Entdeckungszusammenhang der folgenden Überlegungen wirkt lebensweltliche Praxis, nämlich ein Unbehagen an den angeblich der Qualitätssicherung dienenden Ritualen der akademischen Praxis. Es wird die These aufgestellt, dass Ergebnisse[1] in einem globalen Kontext unter Wettbewerbsbedingungen zunehmend industrialisiert generiert werden, wofür einiges an empirischer Evidenz ins Treffen geführt werden kann. Dieser Industrialisierungsprozess hat seine Wurzeln in einer Ausdifferenzierung zwischen und innerhalb von Disziplinen, im Gebrauch einer Weltsprache und einem Fokus auf Publikationsorganen aus dem angelsächsischen Forschungsraum, in der Digitalisierung, in der schieren Menge an Publikationen, in der „Audit Society" (Power, 1997), die eine Obsession bezüglich Messung und Vergleich entwickelt hat. Letztere führt beobachtbar zu einer Zunahme von Betrug, Manipulation und Missbrauch, sowie zu einem erhöhten Maß an Selbstreferenz, welches die allgemein kausal interpretierten Korrelationen zwischen F&E Ausgaben und Wirtschaftswachstum zumindest bezüglich sozialwissenschaftlicher Erkenntnisse fragwürdig werden lässt. Auf der Seite der Konsequenzen dieser Beobachtungen sind Mängel an Kreativität, Ästhetik, Eigen-Sinn, eine Abnahme lebensweltlicher Relevanz einerseits bzw. die nicht reflektierte Unterstützung von Herrschaft andererseits, sowie eine zunehmende Sprachlosigkeit innerhalb und zwischen Disziplinen näher zu untersuchen. Übersicht 1 im Anhang fasst Evidenz und problematische Konsequenzen zusammen. Im Folgenden werden diese jeweils paarweise betrachtet:

Differenzierung: Hier wird dem Ansatz von Luhmann gefolgt, der mit Differenzierung die Ausprägung einer eigenen Leitdifferenz, sowie von Programmen und einer Sprache verbindet, mit der die Leitdifferenz bearbeitet werden kann (vgl. Luhmann, 1997). Spezialisierung führt eben wegen der Verengung des Horizonts einerseits zu Effizienz, andererseits zu Kommunikationsproblemen mit Externen zu suboptimalen Lösungen für das Gesamtsystem und zu struktureller Verantwortungslosigkeit mit Bezug auf externe Effekte. Im System der industrialisierten globalen akademischen Produktion ist Spezialisierung durch eine beinahe exponentielle Zunahme an Publikationen durch die Gründung von Journalen und die Auffächerung von Disziplinen (wie Medizin oder Betriebswirtschaftslehre) in Teildisziplinen (wie Interne Medizin oder Finanzwirtschaftslehre) und letzterer in fein verästelte Teilgebiete (wie Gefäßmedizin oder behavioral finance) zu erkennen. Dies scheint folgende Konsequenzen zu haben: Spezialisten der Teilgebiete lesen ausschließlich Texte aus diesen Teilgebieten, weil schon deren Bewältigung Dauereinsatz verlangt (vgl. den Aspekt der Fülle). Sie entwickeln eigene „Sprachspiele", was an der expliziten Oberfläche Begriffe und Methoden betrifft, im impliziten Grund aber die Entwicklung verschiedener „Praxis" (Brown & Duguid, 1999, Polanyi, 1966) bedeutet. Daraus entstehen Verständigungsprobleme, Verluste an Klarheit und Übersicht und

die ständige Neuerfindung des Rades. Die genannten Wirkungen können im System allerdings kaum wahrgenommen werden, weil die einzelnen „Biotope" unverbunden bleiben. Grenzgänger werden häufig in ihren Karrieren behindert, Inter- und Transdisziplinarität (vgl. Stehr, 2003 und Gibbons et al. 1994) scheinen nur kompensatorisch zu diesem Befund entwickelte Schlagworte, die stattfinden „wenn die Monologe artig nebeneinander her aufgesagt werden".

„Empiric Turn": Ökonomie hat als zwischen Natur- und Geisteswissenschaft angesiedelte Disziplin immer um Anerkennung gerungen, die sie durch Nachahmung der Forschungszugänge der Naturwissenschaften zu erlangen trachtete (vgl. Snow, 1993). Als Folge der Globalisierung fand in den Sozialwissenschaften eine Wende hin zu positivistischen (kritisch-rationalen) Erkenntnistraditionen statt, die sich im Vorherrschen des Verfahrens der Hypothesentestung spiegelt. Allerdings stellen die Erkenntnisse über Menschen und ihre Interaktionen keine akzeptierten Konventionen dar, so dass die industriell abgearbeiteten Hypothesen auf eine willkürliche Vielfalt von Theorien zurückzuführen sind. Wie eine Analyse der letzten Jahrgänge einschlägiger Zeitschriften im Internationalen Management ergab, nehmen paradigmatisch-konzeptionelle Beiträge zugunsten empirischer Arbeiten ab. Bei letzteren liegt der Schwerpunkt auf statistischen Methoden der Datenverarbeitung, während der Entdeckungszusammenhang und die Güte der Datengewinnung kaum reflektiert werden. Zunehmend stellen Beobachter fest, dass es den mit solchen Verfahren behandelten Problemen an Relevanz mangle. Jensen, selbst viel zitierter Autor mit formaler Arbeiten, spricht von „…toy problems, raised by an article in another journal" sowie von „..rigorous, but empty theorems and results springing of uninteresting statistics (Jensen, 2007). Was bleibt sind raum-zeitlich, erhebungstechnisch und logisch eingeschränkte Befunde, die sich nicht an Phänomenen, sondern am Markt der Aufmerksamkeit in der Community zu bewähren haben. Dieser Markt funktioniert aufgrund des Füllproblems nur auf der Meta-Ebene der Indizierung, ähnlich wie es das semantische Web für eine automatische Verarbeitung von Inhalt vorsieht (vgl. Daconta et al, 2003). Forschung, die sich auf die Funktionsweise des akademischen Markts bezieht, existiert kaum; Politik und Theoriebildung befassen sich mit Produktion, nicht mit Diffusion. Das widerspricht einer Konzeption von Wissen als Prozess statt als Produkt, nach der Produktion und Diffusion ineinander greifen (vgl. Schneider, 2001; 51). Noch weniger wird die Verbreitung von Erkenntnissen in die soziale Praxis untersucht, die über Kanäle der Ausbildung, Beratung, Konferenztätigkeit und Publikation erfolgt.

Wenn letztlich willkürliche Ergebnisse auch noch punktuell selektiert und oberflächlich rezipiert herangezogen werden, um politische Interessen zu untermauern, gewinnt der oben zugespitzt dargestellte Zustand akademischen „fast foods" demokratiepolitisches Gewicht: Die Produktmetapher, aus der sich auch intellektuelle Eigentumsrechte ableiten lassen, müsste konsequenterweise die Anerkennung von Gewährleistungsansprüchen einschließen, doch wären letztere nur unter hohem Aufwand zu judizieren, wie dies bereits heute für ärztliche Kunstfeh-

---

[1] Von den Begriffen Wissen oder Erkenntnisse wird hier bewusst Abstand genommen. Ergebnisse werden als Produkte im Sinne der ökonomischen Theorie betrachtet: Die Frage von intellektuellen Eigentumsrechten wird hier nicht betrachtet, obwohl sie ganz wesentlich von der offenen Debatte darüber abhängt, ob man akademisches Wissen als kollektives und öffentliches oder als privates Gut ansieht.

ler zu beobachten ist. Was hier als „empiric turn" bezeichnet wurde, führt im Verbund mit Massenproduktion jedenfalls zu einer Situation, in der wesentliche Selektionsentscheidungen implizit verlaufen, was zu unvorhersagbaren aber pfadabhängigen Effekten führt, die dem mit einer Wissenschaft der Aufklärung verbundenen Rationalitätsanspruch nicht genügen. Dort wo partielle und vorbehaltsbelastete soziale „Theorien" in soziale Techniken übersetzt werden, findet eine manipulative Wende statt, aus der hohe Ansprüche an die Ethik der Forschenden abgeleitet werden können.

Publikationsfülle, Information (Data!) Overflow: Wie an der rasch ansteigenden Zahl von Einreichungen, am Wachstum von Publikationsorganen, Subdisziplinen und Konferenzen nachvollziehbar ist, sind mittlerweile sogar die Publikationen in einem Spezialbereich nicht mehr überschaubar. Der Eintritt von Indien und China in die globale Forschungsgemeinschaft verstärkt diesen Effekt aufgrund der schieren Menge an potenziellen Einreichungen.

Wenn die doppeltblinde Evaluierung als bestmögliche Praxis aufrechterhalten werden soll, bedeutet dies, dass wesentlich mehr Reviews benötigt werden, für die nur Personen zur Verfügung stehen, die ihrerseits wesentlich mehr produzieren müssen. Seriosität ist dabei kaum noch zu gewährleisten, weshalb man sich mehrschichtiger Verfahren bedient.

An der Basis steht die Substanz der Gedanken. Diese wird von Reviewern auf ihre Übereinstimmung mit dem Vorgedachten geprüft, was einen bestimmten Modus der Aufbereitung voraussetzt: Verwendung der in der Reviewer Nische üblichen Begrifflichkeit und Argumentationsfiguren, Verwendung von in dieser Nische als anspruchsvoll anerkannten Methoden und Bezugnahme auf in dieser Nische anerkannte Quellen (Informationsverlust 1). Auf Ebene 2 werden Texte also mit „Tags" versehen, die einerseits eine Bestichwortung im Sinne gültiger Terrainvermessungen leisten, andererseits Qualität an Hand von Methode und Referenzen einschätzen. Parallel dazu entscheidet die Community entweder marktbezogen oder durch administrative Verfahren, welche Zeitschriften als „führend" einzuschätzen seien. Ebene 3 liefert so Meta-Indizes in Form von Zeitschriftenrankings, auf deren Basis über weitere Karrieren entschieden wird (Informationsverlust 2).

Um die Unsicherheit der Akzeptanz zu mindern, entsteht ein Bedarf an Kernarbeiten (salient papers), auf die mehrheitlich Bezug genommen wird, sodass AutorInnen sich absichern können, wenn sie diese zitieren. Es wäre eine interessante Forschungsfrage zu untersuchen, aus welchen Gründen die Initialzündung erfolgt – Zufall, Herkunft der AutorInnen, Passung zu zeitgeistlicher Strömungen, oder „tatsächliche" Erkenntnisinnovation wären betrachtenswerte Variablen – danach jedenfalls wirken Selbstverstärkungseffekte, die ähnlich funktionieren, wie Zinseszinseffekte bei Geldkapital: Arbeiten werden zitiert, weil sie schon zitiert wurden, ihre inhaltliche Substanz tritt in den Hintergrund. Bei einer Inter-Rater-Reliability von 12 Prozent (vgl. Starbuck, 2006; 19) für das Beispiel des American Science Quarterly sind Korrekturen der oben beschriebenen Folgen eines empiric turn nicht zu erwarten.

Globalisierung: Wissenschaft ist ihrem Wesen nach – zumindest gemäß dem Anspruch der Moderne – universell. Dennoch lassen sich unterschiedliche Wissenschaftstraditionen unterscheiden (vgl. Galtung, 1981), die jeweils unterschiedliche Beiträge zur Erkenntnisgewinnung leisten. Durch die beiden Weltkriege des 20. Jh. sind insbesondere die europäische „deutschsprachige" Geistes- und

Sozialwissenschaften stärker auf ihre Grenzen zurückgeworfen worden, ein Prozess, der nun durch Globalisierung rückgängig gemacht wird. Universelle Wissenschaft gelingt leichter auf Basis einer universellen Sprache, daher beobachten wir aktuell eine zunehmend Verbreitung von „Off-Shore" English als neue lingua franca. Diese kommt allerdings nicht ohne Nebenwirkungen, deren klinische Tests quasi in der Realität stattfinden. Sie schafft z.B. die Verständigungsillusion dort, wo Bedeutungsverschiebungen und interkulturell unterschiedliche Interpretationen von Begriffen im Spiel sind. Verbunden mit der Dominanz englischsprachiger Journale impliziert nicht muttersprachliche, wissenschaftliche Arbeit zum einen Nunancierungsverluste, zum anderen eine Stagnation der Weiterentwicklung der nicht-englischen Wissenschaftssprachen. Wenn man die soziale Konstruktion von Wissen unterstellt (vgl. Berger & Luckmann 1967) gehen ferner Denktraditionen verloren, deren Vielfalt zu einem höheren Maß an neuen Erkenntnissen beitragen könnte. Die Standardisierung von Sprache und Textformaten stellt jedenfalls ein weiteres Merkmal industrieller Massenproduktion dar.

Evaluierungsrituale: Die Übertragung von Managementansätzen auf den Produktionsprozess von Wissen impliziert operationale Zielvereinbarungen und laufende Ergebnismessungen. Verbunden mit den Review- und Herausgabe-Strategien akademischer Journale bzw. mit den Projektvergabepraktiken im Rahmen der Wissenschaftsförderung führt dies zu einer kurzfristigen Orientierung, zur „Informationsverschmutzung" durch Mehrfachverwendung derselben Ideen und Aussagen, vor allem aber zu einer opportunistischen Akzeptanz des sogenannten Main-Streams, was wiederum (diskontinuierliche) Innovationen beeinträchtigt. Lineare Intervention in den komplexen Prozess der Wissensschaffung löst beim Nachwuchs unmittelbare Reaktionen der Art aus, dass sie den Forschungsprozess umdrehen: Forschungsfragen werden vom erwünschten Ergebnis her, bzw. von den gerade Aufmerksamkeit genießenden Themenfeldern her definiert. Eine solche Orientierung am „Markt" könnte zu einer besseren Allokation geistiger Ressourcen zu gesellschaftlichen Problemstellungen beitragen, wenn der Markt letztere abbildete. Wegen der zunehmenden Selbstreferenz trifft dies jedoch bestenfalls zufällig zu, weshalb der Verlust genuiner, unabhängig und dezentral sich entfaltender Neugier aus ökonomischer Sicht als Defizienzproblem quasi–zentraler Steuerung und erkenntnistheoretisch als Gefahr mangelnder Originalität zu Buche schlagen.

Zunahme von Betrug, Missbrauch und Manipulation: Wie Di Trocchio berichtet, sind die in der Überschrift genannten Phänomene keineswegs neu (vgl. Di Trocchio, 1994) Spektakuläre Fälle, wie jener des Stammzellenforschers Hwang aus Korea scheinen allerdings ein Indiz dafür, dass der Wettbewerbsdruck zu einer Knappheit von Aufmerksamkeit und damit in Versuchung führt, immer schrillere Töne der Veröffentlichung anzuschlagen. Wie im Falle der oben angeführten unbeabsichtigten impliziten Selektionen stellen sich Fragen der Gültigkeit, Verlässlichkeit und einseitigen, politischen Wirkung gefälschte Ergebnisse. Lawrence, ein Mit-Herausgeber von „Nature", berichtet über bewusste Behinderungen von Wettbewerbern durch deren Konkurrenten: Es wurden Zeit verzögernde zusätzliche Labortests verlangt (vgl. Lawrence, 2003).

Zunehmende Selbstreferenz: Luhmanns Systemtheorie folgend sind Systeme dadurch gekennzeichnet, dass sie die Elemente und Beziehungen, aus denen sie bestehen, laufend reproduzieren; er spricht von Autopoiesis. Dies verbindet er mit dem Merkmal operativer Ge-

schlossenheit in dem Sinne, dass Systeme nur verarbeiten können, wofür sie basale Operationen entwickelt haben. Sie sind daher von außen nicht beeinflussbar, sondern lediglich irritierbar. Irritation wird durch Trigger ausgelöst, die eine basale Operation anzusprechen vermögen und das System entsprechend in Schwingung versetzen. Übertragen auf das akademische System wird erkennbar, warum dessen „Insassen" nur auf einander bzw. nur auf interne Prozesse (etwa der Bildung, Reputationsgewinnung) reagieren. Durch die vorne beschriebene Mehrschichtigkeit der Bezugnahmen geraten nun die Phänomene, um deren Erklärung es wohl geht, immer mehr in den Hintergrund, was zu Wissensverlusten durch den Phänomenen nicht mehr angemessene Dekontextualisierung beiträgt.

Alles in allem werfe ich hier zwei Grundfragen auf: Wie valide sind die in der industriellen Massenproduktion von Publikationen hervorgebrachten Ergebnisse und wie viel Innovation erlaubt dieses System überhaupt noch?

ANHANG

Hypothese: Industrialisierte Massenproduktion von „Wissen" in den Sozialwissenschaften

DIFFERENZIERUNG

EVIDENZ: Feingliederung bzw. Fragmentierung des Wissens (Luhmann, 1997); Indikatoren: Wachstum von Disziplinen und Publikationsorganen

WIRKUNGEN: Sprachlosigkeit, Scheitern von Inter- und Transdisziplinarität; Neuerfindung des Rads (systemische Ineffizienz)

EMPIRIC TURN

EVIDENZ: Fokusverschiebung vom Problem (Frage) zur Methode; Abwertung paradigmatischer und konzeptioneller Arbeiten (Galtung, 1981); Indikatoren: Publizierte Artikel in Top Journalen

WIRKUNG: Statistik ersetzt Logik; Prüfung der Elemente mehr als ihrer Relationen; Aufbau von Defensivroutinen; Mangelnde Relevanz der untersuchten Hypothesen

GLOBALISIERUNG

EVIDENZ: Abbau der Grenzen zwischen nationalen Wissenschaftstraditionen, Dominanz der englischen Sprache; Indikatoren: Herkunft Autoren englischsprachiger Publikationsorgane, Dominanz englischsprachiger Journale in Punktesystemen

WIKRUNG: Rückkehr zum universalistischen Modell mit einer lingua franca erhöht Diffusionschancen, trägt zum Information Overflow bei, begünstigt einfachen Ausdruck und die Übernahme von Denkstrukturen muttersprachlicher Autoren

VERGLEICHENDE EVALUIERUNG

EVIDENZ: Vergleich Universitätsgesetz 2002, sowie die Erfahrung der britischen, skandinavischen und US-amerikanischen Systeme als Basis von Karriere- und Mittelallokations-entscheidungen

WIKRUNG: Transformation marginaler Unterschiede in ausgeprägte Chancenungleichheit; Umkehr des Forschungsprozesses (Planung vom Ergebnis her); Orientierung am Mainstream, Rücknahme von Originalität, Kreativität

DIGITALISIERUNG & VERNETZUNG

EVIDENZ: Veränderte Zeithorizonte und Rezeptions-Praktiken; Indikatoren: Studentische Arbeiten im Zeitvergleich

WIKRUNG: Frühzeitige Präsenz beeinflusst Impact mehr als Substanz, ältere Quellen werden zunehmend ausgeblendet

INFORMATION OVERFLOW/ PUBLIKATIONSFÜLLE

EVIDENZ: Missverhältnis zwischen Produktion und Qualitätskontrolle (Jensen 2007; Bennis & O´Toole, 2004); Indikatoren: Zunahme an Einrichtungen

WIKRUNG: „Zufällige" Schaffung von Kernarbeiten durch Defensivzitate; Oberflächliche Reviews an Hand von Kriterien der Meta-Ebene (Indizierung von Text); Geringe Inter-Rater Reliability

ZUNAHME VON BETRUG, MANIPULATION UND MISS-BRAUCH

EVIDENZ: Indikatoren: Aufgedeckte Fälle, Lebenszyklus von später preiswürdigen Ideen

WIKRUNG: Datenmanipulation; Kartellbildung; Verlangsamung von Wettbewerben durch Auflagen. (Lawrence, 2003; Di Trocchio, 1994)

ZUNEHMENDE SELBSTREFERENZ ALS BEZUGNAHME

EVIDENZ: Auf mehrschichtige Konstruktionen von Beobachtern von Beobachtern

WIKRUNG: Abnahme von Relevanz „Scheinprobleme aus Scheinwelten"

Literaturangabe

Bennis, Warren G., O'Toole James 2005 „How Business Schools Lost Their Way", Harvard Business Review 83, 96–105.

Berger, Peter L., Luckmann, Thomas 1967 The Social Construction of Reality, New York: Doubleday Anchor.

Cook, Scott D. N., Brown, John S. 1999 „Bridging Epistemologies: The Generative Dance Between Organizational Knowledge and Organizational Knowing", Organisation Science 10, 381–400.

Daconta, Michael, Obrst, Leo, Smith, Kevin 2003 The Semantic Web. A Guide to the Future of XML, Web Services, and Knowledge Management, Indianapolis: Wiley

Di Trocchio, Federico 1994 Der grosse Schwindel: Betrug und Fälschung in der Wissenschaft, Frankfurt a. Main et al.: Campus Verlag.

Dueck, Gunter 2000 Neue Wissenschaften und deren Anwendung, Informatik Spektrum 23, 60–64.

Galtung, Johann. (1981) Structure, Culture and Intellectual Style. An Essay Comparing Saxonic, Teutonic, Gallic and Nipponic Approaches, Social Science Information 20, 817-856.

Gibbons, Michael, Limoges, Camille, Nowotny, Helga, Schwartzman, Simon, Scott, Peter, Trow, Martin 1994 The new production of knowledge, London: Sage Publications.

Jensen, Michael 2007 Keynote at EURAM 2007, 16th – 19th of May 2007, Paris: http://www.euram2007.org/r/default.asp?iId=KIEHK, last access on 20th of May, 1130.

Lawrence, Peter A. 2003 „The Politics of Publication. Authors, Reviewers and Editors Must Act to Protect the Quality of Research", Nature 422, 259–261.

Luhmann, Niklas 1997 Die Gesellschaft der Gesellschaft, 2 Bände, Frankfurt. Main: Suhrkamp Verlag.

Polanyi, Michael 1966 The Tacit Dimension, Garden City: Doubleday & Company.

Power, Michael 1997 The Audit Society. Rituals of Verification, Oxford: Oxford University Press.

Schneider, Ursula, 2001 Die sieben Todsünden im Wissensmanagement. Kardinaltugenden für die Wissensökonomie, Frankfurt: FAZ Verlag.

Snow, Charles P. 1993 The Two Cultures, Cambridge: Cambridge University Press.

Starbuck, William H. 2006 The Production of Knowledge: The Challenge of Social Science Research, Oxford: Oxford University Press.

Stehr, Nico 2003 Wissenspolitik. Die Überwachung des Wissens, Frankfurt a. Main: Suhrkamp.

Email: ursula.schneider@uni-graz.at

Philosophy as Development of Conceptual Technologies

Murilo Rocha Seabra, Marechal Thaumaturgo, Brazil /
Marcos Paiva Pinheiro, Mussoorie, India

1. Wittgenstein's technique of philosophical problem-solving

One of Wittgenstein's main achievements in the *Philosophical Investigations* was to present a set of strategies for solving philosophical problems – strategies which, according to the author, could be used for solving problems other than the ones he himself addressed. When attacking the so-called "Augustinian picture of language", for example, Wittgenstein's aim was not only to undermine the idea that the meanings of words are the objects to which they refer, but also – and most importantly – to submit the reader to a philosophical training so that they become able to address surrounding problems which trouble their time and environment. To attain this purpose it is not enough that the readers should become acquainted with the set of critical tools developed by the author: they must instead become the masters of a *technique*.

The technique of philosophical problem-solving presented in the *Investigations* was of course not developed by Wittgenstein alone. Many *Werkzeuge* were already available before he was born, for instance the method of bringing out counter-examples to statements whose validity is presented as wider than it actually happens to be. However, one important innovation introduced by Wittgenstein was the idea that these all-too-far-reaching statements ultimately clash against the rules of language. Examples used to explain the meanings of words are kept in an inner relation with the latter. And examples which are never used for that purpose – since they would spoil the point of the explanation – cannot be included in its scope without a violation of linguistic rules. Yet this is precisely what happens when we say that the meanings of words are the objects to which they refer: 'apple' and 'table' are obviously objects, whereas 'time', 'but' and 'five' are not. If the Augustinian picture of language were right, then we would be able to use the objects to which the words 'time', 'but' and 'five' refer in order to *explain* the meaning of these words. But of course we never do such a thing. So the novelty introduced by Wittgenstein to the critical repertoire of philosophy comes down to this: there is an internal relationship between the activities of explaining and of applying words. We cannot apply words in ways that conflict with our explanation of their meaning – e.g., since we never point to an object to explain the meaning of the word 'but' we can never say that the meaning of 'but' is the object to which it refers. Accordingly, philosophical problems result from the neglect of linguistic rules: "The results of philosophy are the uncovering of one or another piece of plain nonsense and bumps that the understanding has got by running its head up against the limits of language" (Wittgenstein 2001, 41).

At a certain point Wittgenstein wanted his philosophical tools to be used by philosophers in about the same way as the relatively mechanical methods of calculus are used by mathematicians. For no other reason he, while considering a preliminary version of his book, explicitly referred to it as a textbook.[1] By the same token, we should

be able to sum up his problem-solving technique within a few steps.

The first step is to choose a general statement which is a source of problems and entanglement. Let us take for instance the assumption, common to several Western and non-Western philosophies as well as writers of many persuasions, that reality amounts to no more than what can come into the flux of consciousness; in simple terms:

1) reality = conscious activity.

Next an example must be sought with which to deny the general statement. It may be said, for instance, that:

2) a mountain

is the kind of object which is real and yet does not depend on anyone's conscious experience. Up to a recent time the subjectivist philosopher would escape by saying that a mountain is real only inasmuch as it can be experienced by someone as such. That is why the third step is the most important; it consists in posing and asking the question as to whether we can actually *use* the example to explain the term with which 'reality' (or whichever concept) is paired in the general statement. And, of course, while we can use the word 'mountain' to explain the meaning of 'reality':

3) We can use expressions such as 'the view of a mountain' or 'remembering a mountain' to explain what 'conscious activity' means; but *never* the word 'mountain' on its own. Which means that the general statement 1) arises from a violation of the rules of language.[2]

There is a much more deeply ingrained issue underlying the above illustrated technique of solving problems by appeal to the rules of language. What Wittgenstein actually grasped in his later works was this most fascinating mystery about language: the fact that it consists, on the one hand, in a flexible medium which allows us to make sense of statements such as "The universe is a dust bin", while, on the other hand, this same flexible medium is so merged with our lives that it has soaked up the very unavoidable patterns of our living. Such duplicity of language pervades the philosophy of the *Investigations*, and is presented at a certain point as the distinction between agreement in what we say (through language) and agreement that is *previous* to anything we might say at all (inasmuch as we dwell in language): "It is what human beings *say* that is true and false; and they agree in the *language* they use. That is not agreement in opinions but in form of life" (Wittgenstein 2001, 75). So when Wittgenstein turns the deep rules of language against its flexible nature, what he is doing is to say that we should let our lives decide upon questions which puzzle us on the theoretical level. A statement such as "Reality is *not* the same as conscious activity" is held by us as it were in the background of our daily concerns. We

---

[1] Cf. Hilmy 1987, p.6. It must be said that this "mechanical procedure", which relates to Wittgenstein's philosophical outlook in the early thirties, was finally abandoned by the author. However, our choice to present Wittgenstein's problem-solving strategies in this way is deliberate: we wish to avoid the "therapeutical" jargon that, though properly belonging to the *Investigations*, makes a conditioning and a mental necessity out of what can be understood as the fairly simpler application of a technique.

[2] The here presented steps are obviously a simplification of Wittgenstein's methods, and do not aim to cover the whole set of *Werkzeuge* dealt with in the *Investigations*. We leave totally aside, for instance, the method of imagining a language-game in order to figure out how concepts relate to each other.

live in accordance with it, and to *that* extent it lies beyond the reach of theoretical musings.

Being a technique, the above procedure not only can, as well as it must, be applied to problems that Wittgenstein himself never addressed. To mention just one instance: people who are against abortion often say that we should regard the "moment of conception" as the beginning of a child's life – during the sexual act or otherwise. An application of the above depicted technique in order to expose the falsity of this claim would run as follows:

1) moment of conception = beginning of life.

Now to be alive is to be in a certain *state*. How does the workings of our language handle that state?[3] We say, for instance, that John is alive. And when asked about when John began to be alive, we can give some date such as "November, 1970". So we usually explain the beginning of someone's life by reference to:

2) the date of someone's birth;

The third step demands some clarification. For it is true that we can explain the so-called 'moment of conception' by saying something like: "It is a biological state that necessarily precedes someone's birth". And yet a state that necessarily *precedes* one's birth cannot be passed off as that which happens *at the time* when someone is born. Therefore:

3) though we are right in believing that the formation of an embryo is a necessary biological condition for someone's birth, we do not see how the expression 'the date of John's birth' could be used to explain that biological previous state we describe as 'moment of conception'.

So again what we find here is the bewitchment of our understanding by failure to observe language's workings. In the end it is hoped that this sort of problem, which pervades our concerns and discussions, is brought to rest through the appropriate philosophical training.

2. Institutionally unstable propositions

Picture yourself living in Greece around 400 B.C. as a master of Wittgenstein's problem-solving technique. Someday you come across the fairly widespread philosophical idea according to which movement is the result of displacements and collisions among invisible unchanging particles that constitute the elements of nature – out of which all visible changing objects and living beings are made. It is quite natural to assume that you are committed to fight this idea using your problem-solving technique, since at that time in Greece no one would accept some obscure reverie about invisible particles as an appropriate way to explain the meaning of the word 'movement'.

Nevertheless it is beyond dispute that this amusing idea usually connected with the personality of Democritus had some bearing on what many of us nowadays accept as an explanation – perhaps even the best *kind* of explanation – about movement in the sense of a physical phenomenon. It is not so much a case of assessing the truth of that ancient doctrine, nor of tracing its historical connections up to the point when it reappears in modern science, as of giving serious consideration to its *philosophical status*. For lack of a better name, let us call ideas such as Democritus' thesis on movement "institutionally unstable" propositions. So our question is: up to what point should we philosophically train ourselves to reject theoretical statements? As philosophers, should we not leave space for ideas to acquire their eventual institutional stability by becoming part of new conceptual techniques that might engage with our life and practices in totally unforeseen ways? For without doubt institutionally unstable propositions have played a gigantic role in the development of any culture.

3. Philosophy as development of conceptual technologies

The unrestricted application of Wittgenstein's problem-solving technique would apparently condemn potentially fruitful ideas whose institutional status is nevertheless unstable. In the face of this problem a different approach is called for – one that makes room both for the critical thoroughness of Wittgenstein's elaborations and for the groundbreaking power of (at least some) institutionally unstable propositions. We would like to suggest that philosophy best fulfills its role when it concerns itself with the development of conceptual technologies. Critical discourse, concepts that spring from ordinary talk, scientific explanations and religious mantras are, each on its own ground, examples of conceptual technologies: tools by means of which one is able to cope with reality in manifold ways. We therefore see philosophy much more as a general *attitude* towards life than as a discipline standing on its own ground. And this turns out to be much closer to the spirit of Wittgenstein's philosophy than the sectarian following of his writings – which, understood as the exposition of a technique, remain constantly liable to criticism, improvement and intrepid application.

Literature

Hilmy, Stephen 1987 *The Later Wittgenstein: The Emergence of a New Philosophical Method*, Oxford: Basil Blackwell.

Wittgenstein, Ludwig 2001 *Philosophical Investigations*, Oxford: Blackwell.

Email: muriloseabra@yahoo.co.uk / mppinheiro@gmail.com

---

[3] There is an interesting parallel between this question and Wittgenstein's treatment of the grammar of mental states as, for example, in *Philosophical Investigations* §573.

The Possibility and Limits of Communication: A Wittgensteinian Perspective

Rui Silva, Azores, Portugal

Communication is often conceived as a process of meaning transference. This approach to communication is based both on commonsensical intuitions and on the first models that dominated the field of communication studies. A case in point is the "information theory" of Shannon and Weaver. In spite of the mathematical nature of their concept of information, the communication model they proposed was very influential in the study of human communication and contributed decisively to the triumph of the classical conception of communication as a process in which a sender encodes information (in a certain medium or channel) to be decoded by a receiver. Such a conception fits easily with our pre-theoretical or everyday intuitions regarding communication; in both cases one presupposes the previous existence of something (ideas, meanings, thoughts or information) that is subsequently "transmitted", "conveyed" or "exchanged". According to this picture, the success of communication depends, in turn, on a shared set of signs and syntactic, semantic and pragmatic rules.

The conception of communication as a process of meaning transference makes some apparently natural but, as we shall see, ultimately dubious assumptions. One of them consists in the reification of meaning; meaningful contents are taken as definite entities that must be transmitted from a sender to a receiver in an undistorted way (or without noise, to use a key technical term in information-theoretical accounts of communication). A second and collateral assumption lies in the derivative status accorded to language; along the lines of the classical communication model, language is simply a vehicle or a conduit through which information or meaningful contents are conveyed.

From the standpoint of contemporary philosophy, it is no longer possible to rely on these assumptions; on the contrary, much work done in field of philosophy of language gave us strong reasons to reject them and, consequently, the classical communication model. Wittgenstein's work is particularly important in this context, because his reflections on the nature of meaning and language provide us with powerful objections against the traditional and commonsensical accounts of communication.

In what regards the first assumption, Wittgenstein in his later work was adamant in rejecting the reification of meaning and in claiming that the "the meaning of a word is its use in language" (Wittgenstein 1958, §43). According to his perspective, the meaning of a word does not consist in its association with a physical, mental or ideal entity, but solely in the way that the word is used, in the role that it plays in our practices. The key notion of language game, as the whole "consisting of language and the actions into which it is woven" (Wittgenstein 1958, §7) reflects precisely the fact that we cannot grasp meanings independently of linguistic use. To say that meaning and use are closely connected may seem a truism, but what Wittgenstein intends with his account of meaning as use is not trivial, because he reverses the traditional relation between meaning and use by dismissing the conception of meanings as external standards that regulate linguistic use. Meanings do not determine use from the outside, as it were; on the contrary, use determines meaning. As a re-

sult, far from being entities, meanings are to a certain extent unstable and indeterminate: on the one hand, linguistic use can change, and such changes are simultaneously meaning changes; on the other hand, because use is not rigidly determined by external factors, it seems reasonable to admit a certain degree of indeterminacy of meaning.

From a Wittgensteinian perspective, it is therefore clear that traditional theories of communication are deeply flawed insofar as they take meaning as some*thing* that can be transmitted (from a sender to a receiver). They are instances of a specific mythology, the belief in the existence of "meaning-bodies" (*Bedeutungskörper*; cf. Wittgenstein 1958, §559 and Wittgenstein 1974, p. 54) that would be presumably transferred in the course of communicative processes. Borrowing a phrase coined by Quine, we could also say that traditional accounts of communication are forms of the "myth of the museum"; the view that mind is like a museum where certain objects (meanings) are exhibited.

Wittgenstein also rejected the second basic assumption of the classical communication model. Human language is not a mere vehicle of already formed thoughts or meanings and cannot be explained on the basis of a more fundamental dimension. In fact, the ground level of intelligibility is constituted by the intertwinement of language and actions. The following passage clearly illustrates the distance between Wittgenstein and the above mentioned assumption concerning the status of language: "What is spoken can only be explained in language, and so in this sense language itself cannot be explained. […] One can say that meaning [*Meinung*] drops out of language; because what a proposition means is told by yet another proposition" (Wittgenstein 1974, pp. 40-1).

Wittgenstein's reflections on the nature of meaning and language entail, as we have just seen, a rejection of the traditional conception of communication, and there are explicit references in his work to this conception:

> That is to say: we are so much accustomed to communication through language, in conversation, that it looks to us as if the whole point of communication lay in this: someone else grasps the sense of my words – which is something mental: he as it were takes it into his own mind. If he then does something further with it as well, that is no part of the immediate purpose of language. (Wittgenstein 1958, §363)

So far, we have been considering misleading assumptions about the nature of communication. Now we need some more positive insights on this subject, and we can find them in Wittgenstein's reflections on the nature of understanding and rule-following. Since the meaning of a word is its use or its role in everyday practices, language and practices are two interdependent dimensions, and so we cannot understand the former in abstraction from the latter. Understanding is, therefore, a practical ability; to understand a language is, as Wittgenstein put it, "to imagine a form of life" (Wittgenstein 1958, §19) and "to be master of a technique" (Wittgenstein 1958, §199).

We can shed further light on the phenomenon of understanding and its practical nature by briefly considering Wittgenstein's discussion of rule-following in his later works. The use of language involves rules, and a word is meaningless without a distinction between right and wrong ways of using it. There is, accordingly, an important connection between the concepts of meaning, rule and understanding. It is impossible to develop in the present context a comprehensive interpretation of the intricate reflections that Wittgenstein dedicates to the problem, but there are some basic points that must be highlighted in order to clarify the nature of human communication. First, we cannot explain the connection between a rule and its application by invoking rule interpretations, because each interpretation would require a further interpretation, generating an infinite regress. Second, to follow a rule is not a mental process. A fundamental objection against mentalistic accounts of rules is based on the fact that mental representations do not determine by themselves their application; they are simply signs that require interpretation. Third, Wittgenstein claims that following a rule is a practice, a custom and an institution (cf. Wittgenstein 1958, §199 and §202). This point is crucial, because the notion of practice provides Wittgenstein with an alternative to mentalistic and Platonist accounts of the normativity of meaning; the roots of normativity are to be found neither in the mental life of an individual nor in an ideal sphere, but in the practices themselves. In this sense, Wittgenstein claims that there must be "a way of grasping rules which is *not an interpretation*, but which is exhibited in what we call 'obeying the rule' and 'going against it' in actual cases" (Wittgenstein 1958, §201). This passage and similar ones imply that practices and linguistic uses are intrinsically normative; rules are immanent to practices and standards of linguistic use are immanent to use. The upshot of Wittgenstein's reflections on rule-following seems to be the idea that the normativity of meaning is a primitive phenomenon that cannot be explained in more fundamental, norm-free terms (cf. McDowell 1984). But what is the source of the normativity thus conceived? To master a practice requires typically, in the first place, a crude training process (*Abrichtung*), whereby we learn to react in a certain way to certain situations, and subsequently instruction through examples and exercises (cf. Wittgenstein 1958, §208 and Wittgenstein 1975, §§28 and 139). This is the basic framework needed to explain the normativity of practices without appealing to external factors, and if this account of rules is correct, then it is quite clear that understanding is a practical ability. Finally, it is important to stress that rule-following is not a totally passive process and that rules may depend to a certain extent on individual decisions (cf. Luntley 2003: 56-7). As Wittgenstein said, "our rules leave loop-holes open and the practice has to speak for itself" (Wittgenstein 1975, §139). This point is important, because it suggests that speakers have a role in the constitution of meaning.

The preceding considerations, regarding both the account of meaning as use and the reflections on rule-following, give us the key to understand the possibility and limits of human communication. From a Wittgensteinian standpoint, we can only understand a language against the corresponding background of practices; to put it in other words, the possibility of communication depends on a commonality of practices. This means that the success of communication between different communities or cultures requires the adoption of the so-called "participant perspective", in the sense that one must get acquainted with the practices of other human groups in order to understand them. In the absence of commonalities between forms of life, understanding becomes impossible. As Witt-genstein said: "If a lion could talk, we could not understand him" (Wittgenstein 1958, p. 223).

But a question arises immediately here: is it legitimate to assume in all communication contexts the existence of a common ground of shared practices enabling the success of human communication? Wittgenstein seems, at first sight, to think so: "The common behaviour of mankind [*die gemeinsame menschliche Handlungsweise*] is the system of reference by means of which we interpret an unknown language" (Wittgenstein 1958, §206). This passage expresses apparently the belief that there are universal aspects of human behaviour and that these aspects guarantee the success of communication. But are things really so? According to Wittgenstein himself, "an education quite different from ours might also be the foundation for quite different concepts" (Wittgenstein 1981: §387), and if this is the case, it may well be impossible to understand some unfamiliar concepts.

From a Wittgensteinian standpoint, there are two basic forms to deal with the problems created by the absence of shared practices. First, we can rely on analogies between our practices and unfamiliar practices. Second, if these analogies are insufficient, we can try, in accordance with the participant perspective, to immerse ourselves in the unfamiliar culture or form of life, in an attempt of becoming "one of them". However, this second approach is somewhat problematic. In *On Certainty*, for instance, Wittgenstein stressed the role of our inherited world-picture as the background of intelligibility against which we think and communicate with others, and this makes it difficult to understand how we could get outside of our culture or form of life in order to become a full member of another culture. Someone may be *converted* to another world-picture on exceptional occasions, but even in these rare situations it does not seem plausible to say that the original world-picture vanishes totally. As a result, we should not confuse the adoption of the participant perspective with a passive process of acculturation; the participant perspective should involve not only a real openness towards other groups, but also a critical stance towards the people with whom we communicate as well as a critical self-reflection on the basis of the challenges raised by other perspectives or worldviews.

We are now able to address the question concerning the limits of communication. Communication has real limits, and these limits are dictated by the extent to which the practices of two human groups overlap. These limits are not, however, static, since an attitude of mutual openness between the communication partners and an effort to get acquainted with unfamiliar practices can gradually overcome communication barriers.

In sum, Witgenstein's reflections on the nature of meaning, understanding and rule-following undermine the classical communication model by pointing to a quite different view of the relation between communication and meaning, a view according to which communication requires the adoption of the participant perspective and plays a role in constitution of meaning. We can apply to the classical communication model the same remark that Wittgenstein made about the representationalist conception of language: "A *picture* [*Bild*] held us captive. And we could get outside it, for it lay in our language and language seemed to repeat it to us inexorably" (Wittgenstein 1958, §115). The classical communication model is just one these deeply entrenched "pictures" that lead us astray.

Literature

Kripke, Saul 1982 *Wittgenstein on Rules and Private Language*, Oxford, Blackwell.

Luntley, Michael 2003 *Wittgenstein: Meaning and Judgement*, Oxford: Blackwell.

McDowell, John 1984 "Witgenstein on Following a Rule", *Synthese* 58, 325-63.

Wittgenstein, Ludwig 1958 *Philosophical Investigations*, Oxford: Blackwell.

Wittgenstein, Ludwig 1974 *Philosophical Grammar*, Oxford: Blackwell.

Wittgenstein, Ludwig 1975 *On Certainty*, Oxford: Blackwell.

Wittgenstein, Ludwig 1981 *Zettel*, Oxford: Blackwell.

Email: rsilva@notes.uac.pt

Re-Discovering Wittgenstein

Deirdre Christine Page Smith, Bergen, Norway

The Wittgenstein Archives at the University of Bergen (WAB) opened its doors June 1st 1990 with several goals: producing a machine readable version of Wittgenstein's *Nachlass*; developing software to assist scholars in locating, viewing and analyzing *Nachlass* texts; developing registration systems and software to present, work with and analyze original textual sources; and establishing links to international Wittgenstein research and computer programming projects with similar text encoding goals. (WAB report 1991) Both the conception and realization of WAB's participation in the DISCOVERY project (Digital Semantic Corpora for Virtual Research in Philosophy) fit with WAB's initial goals. This paper originates in The Wittgenstein Archives at the University of Bergen's (WAB) participation in the eContent+ funded DISCOVERY project. Although I begin with a brief history of WAB's work, my main objective is to present the advantages of DISCOVERY's semantic approach to texts using examples from Ms. 139a, otherwise known as Wittgenstein's 'Lecture on Ethics'.[1]

Compiling a machine-readable edition of Wittgenstein's Nachlass

Preparing a machine readable version of Wittgenstein's *Nachlass* began in Norway already in 1981 under the aegis of The Norwegian Wittgenstein Project (Det norske Wittgensteinprosjektet) which was a cooperative endeavour between the philosophy departments at Norway's four main universities in Oslo, Bergen, Trondheim and Tromsø. Unfortunately, in the late 1980's the materials it prepared could not be made publicly available since the rights to them were disputed, making both gaining permission for distribution and acquiring money to finance the project difficult.

Auspiciously, in the early 1990's, WAB attained both permission from Wittgenstein's literary trustees (G.E.M. Anscombe, Anthony Kenny, Peter Winch and Georg Henrik von Wright) and funding. Software prototypes developed by, and some 3,200 pages transcribed by, the Norwegian Wittgenstein Project formed the foundation for WAB's initial work. WAB's first goal was to transcribe 7,500 pages of the 20,000 pages of Wittgenstein's Nachlass and complete the most important elements of the software needed to view them. What is special about this transcription and the challenge to those developing software for the machine-readable edition, was to reproduce these pages as truly as possible. This meant capturing in a digital format the many cross outs, deletions, rewordings, cross references, etc., found in Wittgenstein's Nachlass. To this purpose, WAB developed a standard for registering these aspects of Wittgenstein's texts which formed the basis for software allowing the kind of versatile representation the project demanded.

WAB has cooperated closely with the Text Encoding Initiative (TEI) which works toward establishing guidelines for text encoding as well as the interchange of electronic texts. TEI was established in 1988 and its initial set of Guidelines (TEI P1) issued in 1990. Since then, WAB has been actively involved in and followed the development of TEI guidelines. However, since TEI guidelines were based on a standard (SGML Standard Generalized Markup Language) which restricted encoding possibilities, WAB chose not to follow them. Instead, WAB further developed the MECS (Multi-Element Code System – developed by Claus Huitfelt) coding system into MECS-WIT, which better suited its needs,.

Bergen Electronic Edition (BEE)

In 1992, WAB and Oxford University Press agreed to utilize the machine-readable version along with electronic facsimiles of the original manuscripts and typescripts toward publishing Wittgenstein's *Nachlass* on CDROM. In 2000, a 6 CD version of the BEE was released. In addition to containing complete sources and drafts (over 50 different manuscripts) for Wittgenstein's published works, the BEE includes previously unpublished or simply unknown material.

By presenting the *Nachlass* in what is termed a "combination of editions" (cf. Pichler and Haugen 2005), the BEE's comprehensiveness, however, extends beyond merely collecting Wittgenstein's body of work into one edition. This is accomplished by providing *Nachlass* texts in two separate but interlinked versions: diplomatic and normalized. The former remains true to the original manuscript and typescript versions, preserving all deletions, over writings, spelling errors and word substitutions. The latter shows editorial corrections, while deleted and overwritten texts are omitted and only the last alternative of two different readings is rendered (earlier alternatives can be viewed upon request). Having these two versions at hand gives the reader insight into Wittgenstein's writing process, and, in doing so, also an enhanced understanding of his thought's development. The same flexibility which allows for interlinked diplomatic and normalized versions enables specialized searches within manuscript sections, whole manuscripts and between manuscript groups as well as date ranges, specified languages, graphic material and mathematic notation. And it is in these latter features we get a taste of the advantages of a semantic approach. (cf. Pichler 2002)

DISCOVERY

After a period engaged in several EU projects promoting international research and virtual infrastructures for collaborative research and e-learning, WAB co-initiated DISCOVERY in 2005 with a host of European partners. DISCOVERY's goal is to construct a *Philospace*, a virtual meeting place for philosophical collaboration and access to philosophical texts and media. These texts and media, called *Philosource*, are a collection of primary philosophical texts from the Pre-Socratics, to 16th to 18th century philosophical and scientific texts from Descartes, Bruno, Spinoza, Leibniz, Vico, Baumgarten and Kant; a variety of primary material (manuscripts, published works, etc.) from Nietzsche and Wittgenstein and is rounded out by 300 video/sound segments from leading contemporary philosophers such as Gadamer, Deleuze, Vattami et. al. (see: http://www.discovery-project.eu/index.html).

---

[1] For a discussion of difficulties met in its implementation see "XYZ" by Wilhelm Krüger in this volume.

WABs contribution to DISCOVERY consists of 5,000 pages covering 'The Big Typescript' (1929-1934), the Brown Book complex (1934-36), the 'Lecture on Ethics' 1929) and 'Notes on Logic' (1913). What is exciting about the range of texts which WAB is thus preparing for DISCOVERY, is that they capture the consolidation of Wittgenstein's thought between his middle and late (*Philosophical Investigations*) period. Similarly to the BEE, the above *Nachlass* texts will be available in interlinked layers with a study layer added in between (as currently defined this shows editorial interventions regarding spelling, grammar and deletions as well as substitutions and cross outs where they make sense within the context of a sentence). What is new in DISCOVERY is threefold: these texts will be available for free, text encoding has been migrated from MECS-WIT to TEI/XML, and, most interestingly for the purposes of this paper, they will be encoded with semantic tags.

Unlike general text searches, semantic labelling helps researchers locate passages where the term or concept for which they search is discussed, but not literally used. One can of course try to approximate this process by using synonyms or alternative wordings, but many occurrences will still be left out. A somewhat different case would be someone searching for examples of Wittgenstein's use of rhetorical questions. With a regular general text search, one might attempt locating these by searching for a question mark followed by a quotation mark. This would, however, work neither in most standard search functions (where both '?' and ' " ' are operators) nor the BEE. Even considering the BEE's increased flexibility, only an individual with specialized knowledge of the system and its parameters can achieve such a search. Even assuming one has this specialist knowledge, the search would still not help distinguish between rhetorical questions and e.g. direct quotations or dialogue. Yet another case would be someone looking for instances of metaphor, simile or other literary devices. Although one might locate some of these passages simply by searching for these terms and hoping that they are followed by actual examples, far more will remain hidden. Semantic labelling thus clearly represents an advance in WAB's goal of developing software to assist scholars in locating, viewing and analyzing *Nachlass* texts.

Re-discovering Wittgenstein

I would like to illustrate these differences using a concrete example from MS139a, otherwise known as Wittgenstein's 'Lecture on Ethics'. Although all versions of 'Lecture on Ethics', Ts 207 (published in *Philosophical Occasions* and BEE) and Mss 139a-b (published in BEE), will be available in DISCOVERY's *Philospace* as a *Philosource*, it is Ms 139a which concerns us here.

One of the first problems Ms 139a offers for semantic labelling is its lack of paragraph divisions (this holds for Ts 207 and Ms 139b). Such labelling requires units of text which are restricted in length, both to make labelling more exact and to assist users in locating labels. For this reason, it was necessary to divide Ms 139a into smaller units. This was done according to thematic units (standard English paragraphs) which are well suited for semantic labelling.

Already in the second paragraph of Ms 139a we find examples where semantic tags are superior to simple word searches. In the second sentence we find a seemingly innocent word in two forms: 'communicate' and 'communicating'. This is not exactly a word which has inspired much in the way of secondary literature. However, when we look

at the way it is used, it can function as a synonym for other words such as 'language' and 'explanation', which might be of higher conceptual relevance for Wittgenstein researches as well as other philosophers who are have a more general interest in Wittgenstein's philosophy. Yet if we take Wittgenstein's use of communication in this paragraph as a whole, we find rather that it falls under two major themes found in the paragraph: 'difficulties met communicating thoughts generally and philosophical explanations specifically' and 'What are the boundaries of communication/language?'. And with this we can begin to answer a question readers may already have asked themselves, "What is the difference between semantic labelling and making a good index?" A good index might next to the entry 'communication' write 'cf. explanation, language' and vice versa. This practice enables the user to find occurrences of words, their synonyms and phrases containing both, however it does not make sense of the use of words or phrases. What semantic labelling does share with making indexes is to identify in advance what will be of interest for a reader and to facilitate its location. Semantic labelling does not stop here. It goes further to abstract an overall meaning from each paragraph based on these individual words and phrases. E.g. 'difficulties met communicating thoughts generally and philosophical explanations specifically' is based on more literal examples found in the text: being a non-native language speaker, saying something which comes from the heart, showing the listener both the road of an explanation and the end/goal to which it leads.

The example I have just described falls under the first, Content, of six categories with which we are currently working. The other categories are: Form, Text Exegesis, History of Philosophy, Philosophical Slogans and Comments. As with my first example, even though we may find examples of all of these in a good index, they would neither be listed by category nor allow the kind of 'sense making' semantic labels do. If we look again at paragraph two of Ms 139a, we find several metaphors (talking from the heart, a hearer seeing the road a philosophical explanation goes down and the end too which it leads) and two rhetorical questions which all would be difficult to locate in a general index or word search. In our current scheme these would fall under the category Form. Other current candidates falling under Form are: definition, example, analogy and simile. Regarding our third and fourth categories, Text exegesis and History of Philosophy we find that Wittgenstein's use of 'human being' ('a human being who tries to tell other human beings something which some of them might possibly find useful') can be traced to a discussion with Maurice Drury around 1930 referring to William James as a 'human person', and Wittgenstein responding, "That is what makes him a good philosopher; he was a real human being." (Goodman, p. 37) Here we have reference to both a conversation contemporary to Ms 139a as well as to a figure in the history of philosophy whose work influenced Wittgenstein throughout his life. Although there is not much in the way of Philosophical Slogans found in this particular paragraph, we find many in the next: Ethics, Aesthetics, value and good. Perhaps more so than the Content category, this one most resembles an index. Yet here again we find the possibility of listing a slogan which, although not literally used, imbues a whole paragraph. The final category with which we are currently working, Comment, is a space where further reflections on the contents of a paragraph as well as clarifications regarding the labelling process itself can be placed. If we return to the second paragraph of Ms 139a, this category could be used to go into more explanatory detail regarding Wittgenstein's use of the road metaphor as something which returns in several guises in his later philosophy: a rule standing as a

signpost *Philosophical Investigations* (PI) §85, perspicuous representation PI §122, method of projection PI §139, 141, 366, as well in PI §426 where he mentions God and uses other religious analogies to capture something to which we do not have access.

In the context of Ms 139a it becomes evident early on both how well the actual process of semantic labelling fits with important aspects of Wittgenstein's philosophy, but also some dangers it might pose. On p. 4 of Ms 139a Wittgenstein uses Francis Galton and composite photography as an example of the effect he would like to achieve by using synonyms to help communicate his thoughts on the lecture's theme, Ethics. There is a tension in both the example of Galton, Ms 139a as a whole as well as Wittgenstein's philosophy more generally regarding the use of examples both to point to a common thread as well as to illustrate the difficultly of showing something essential to all. (cf. "Ethics, Language and the Development of Wittgenstein's Thought in Ms 139a" in this volume) Like Galton's layering of imagines one on top of the other to form a composite, the application of semantic labelling to a work offers different views depending on which layers make up the composite. Although this may increase our understanding of a work, we (both encoders and users) must not mistake it for a final statement about a work, see the composite as an image of something real in the sense of a fact of the matter. Although Galton failed through composite photography to show common types of human constitutions (illness, criminality) he did succeed in showing that fingerprints are unique.[†]

Literature

1991 The Wittgenstein Archives at the University of Bergen: Background, Project Plan, and Annual Report 1990, Bergen: Working Papers from the Wittgenstein Archives at the University of Bergen No. 2.

Goodman, Russell 2004 *Wittgenstein and William James*, Cambridge: Cambridge University Press.

Pichler, A. and O.E. Haugen 2005 "Fra kombinerte utgaver til dynamisk utgivelse: Erfaringer fra edisjonsfilologisk arbeid med Wittgensteins filosofiske skrifter og nordiske middelaldertekster" in *Læsemåder: Udgavetyper og målgrupper, Nordisk Netværk for Editionsfilologer, Skrifter 6* P. Dahl, J. Kondrup and K. Kynde (eds.) Copenhagen: C.A. Reitzels Forlag, pp.178-249.

Pichler, Alois 2002 "Encoding Wittgenstein. Some remarks on Wittgenstein's Nachlass, the Bergen Electronic Edition, and future electronic publishing and networking" In: *TRANS. Internet-Zeitschrift für Kulturwissenschaften 10/2001ff*, Wien: Research Institute for Austrian and International Literature and Cultural Studies (INST). (http://www.inst.at/trans/10Nr/pichler10.htm)

Wittgenstein, Ludwig 2000 Ms 139a: "Lecture on Ethics" in *Wittgenstein's Nachlass: Bergen Electronic Edition*, Oxford: Oxford University Press.

Email: deirdre.cp.smith@gmail.com

[†] I would like to thank WAB director Alois Pichler and Wilhelm Krüger for discussion and comments on drafts of this paper.

Ethics, Language and the Development of Wittgenstein's Thought in Ms 139a

Deirdre Christine Page Smith, Bergen, Norway

'Lecture on Ethics' was one of Wittgenstein's first tangible products after returning to Cambridge and philosophy in early 1929. The interest it holds for us is thus not only to offer insight into Wittgenstein's views on Ethics, but also into the development of his thought during years spent prioritizing activities other than philosophy. This paper will consider some themes regarding both the development of his thought as well as the relationship between Ethics and language presented in the manuscript version of 'Lecture on Ethics', Ms 139a.

The first thing that strikes one when reading Ms139a as handwritten by Wittgenstein, is its authenticity. Here I do not simply mean something like, "Ah, this is the real McCoy, written in the master's own hand!", but rather that it contains a genuine heartfelt expression. Wittgenstein opens by apologizing in advance for his use of English concerning a matter, Ethics, which even for a native speaker would be difficult to communicate. Although this may simply be a literary device, his honest search for straightforward ways of expressing his thoughts, one I think any of us who have learned and use a foreign language recognize, serves to accentuate his wish to say something which comes from the heart.

To keep himself on the track of the heart rather than that of the mind and knowledge, Wittgenstein employs a number of metaphors, similes and analogies, not to mention a plethora of other examples, throughout Ms 139a. It is in the character of these that we find interesting clues to tension in and the movement of his thought toward his later philosophy.

Galton, composite types and roads hoped travelled

Wittgenstein's first metaphor in Ms 139a is used to capture the last of three challenges met when having something difficult to communicate, one which is in particular connected with or "adheres to" philosophical explanations. And this is

"that it sometimes is almost impossible to explain a matter in such a way that the hearer at once sees the road he is lead & the [end|goal] to which it leads". (p. 2-3)

The road metaphor is not only repeated within Ms 139a, it occurs throughout Wittgenstein's writing, also appearing in the form of familiar similes like "A rule stands there like a signpost" in *Philosophical Investigations* §85 (PI). But perhaps more importantly, it represents a thread in Wittgenstein's thought which touches upon a number of important relational themes such as the willing/intending and what is done, a rule and its being followed and the possibility of private language. For our purposes, it represents a belief in the possibility of clearly channelling understanding toward a specific end.

On page 4 of Ms 139a, we meet Francis Galton's work with composite photography as an analogy for what Wittgenstein would like to achieve when he offers several synonyms to replace the word 'valuable' in his working definition "Ethics is the general enquiry into what is valu-

able". (p. 3) Looking through the synonyms he places one behind the other, will enable us to glimpse those shared features he wants us to see. He writes:

And if you hold all these expressions together "value", "good", "great", "right", "sense of life", "that what makes life worth living", "worth" etc. you will I believe see what it is I am concerned with. (p. 4)

However in addition to acting as an analogy for *what* he hopes to achieve in his Lecture on Ethics, the Galton example acts also as an analogy for *how* he hopes to achieve it. To mix a metaphor, by paving the road of his lecture with synonymous examples, we will see its end more clearly when looking down it through these examples. And it is between this 'what' and 'how' that we find tensions in Wittgenstein's thought signalling movement away from the taunt lines of his early toward the more exploratory courses of his later writings.

Regarding both the what and how of Ms 139a, it is interesting to note that Galton, who otherwise made headway with his endeavours in statistical analysis regarding heredity, historiometry and eugenics, failed to find visual archetypes for certain illnesses and criminality by making composite photographs of faces of the ill and criminal, whereas in the case of human fingerprints he showed the opposite, each is unique. To what extent does Galton's lack of success tell us something about how we should understand what Wittgenstein meant by replicating the 'effect' Galton produced with composite photography? What exactly was this effect? Was it the one Galton sought after, illustrating types of human constitutions, or in line with what he did discover? I think this ambiguity, combined with the fact that Wittgenstein does not follow up this line of thought later in Ms 139a, indicates that he had still not hit upon the concepts of family resemblance[1] and aspect seeing found in his later philosophy. Rather he is still in Galton's world of types, yet no longer wholly comfortable there.

Relative and ethical value[2]

This tension between the abstract and concrete level is kept alive in Wittgenstein's distinction between the relative vs. absolute or ethical use or value which he spends the rest of Ms 139a discussing. Several pages after introducing this distinction, he writes, "no statement of fact can ever be or imply what we call an absolute that is ethical judgment". (p. 6-7) We cannot abstract from facts like 'he is a good football player, carpenter, diaper changer, cook, dish washer, etc' that 'he is a good father'. Relative judgments of value are made according to an established standard. Wittgenstein uses the example of a "good piano" being one which "comes up to a certain standard of tone etc. which I have fixed & which I conceive as its purpose" (p. 5) The "right road" is right by virtue of getting us literally, not metaphorically, to a predetermined end. Even a big book written by an omniscient author containing a whole description of the world "would not contain anything

---

[1] Wittgenstein in fact carried around with him in an album a composite photograph made from pictures of himself and his sisters (Conant lecture).
[2] As Wittgenstein does, I use ethical value and absolute value interchangeably.

that we would call an ethical judgment or anything that would directly imply such a judgment". (p. 7) Yet his own employment of the road metaphor combined with his use of the Galton example, point to the possibility of abstracting a some(one)thing out. However, Wittgenstein continues in this vein, writing on page 8,

> Now what I wish to say is that all facts are as it were on the same level that there is no such thing as absolute importance or unimportance in them & that in the same way all propositions are on the same level that there are no propositions which are in any absolute sense sublime, important or on the other hand trivial.

Each fact is then on par, even in its uniqueness. Where Wittgenstein's utilization of the Galton example and road metaphor at the beginning of Ms 139 seem to be drifting toward something in either a transcendental or an essentialist region, what comes after his introduction of the distinction between relative and absolute value focuses not on the one image a composite photograph achieves, but rather its illusionary character (more his finger print result – nominal – than his criminal/illness hopes – universal). There is no "right road", only a road "which leads to an arbitrarily predetermined end" (p. 10) A little further down he asks what people (including himself) have in mind when they use expressions like 'absolute good' and 'absolute value' and follows this up by discussing two examples: wondering at the existence of the world, and feeling absolutely safe. Although he concedes that we can wonder at the existence of extraordinary facts, e.g. a very large dog, or that having once had whooping cough we are immune, it is nonsense to wonder literally at the existence of the world itself or feel oneself absolutely immune from all harm.

And this leads on page 14 to the idea that ethical & religious propositions of absolute value are similes, that although "he is a good fellow" is not the same as "he is a good football player" or "the life of this man is valuable" is not the same as "this piece of jewelry is valuable" there is an intended connection. On page 15 he expands the notion with a layer housing God – a kind of metaphor within a metaphor where feeling absolutely same and wondering at the existence of the world stand for God having created the world (God speaks, hears etc. in a metaphorical/allegorical sense). But on page 16 Wittgenstein points out that a simile is a simile for something and thus if we drop it something should remain. Yet with ethical and religious examples "as soon as you drop the simile & try to state simply the facts that stand behind them we find that there are no such facts" only nonsense. For many, I think this is a wholly dissatisfying conclusion since when we wonder at the existence of the world or feel absolutely safe it is not simply a flat experience for us, but a meaningful one (even for agnostics and atheists).

Wittgenstein holds to his distinction between relative and absolute value until the end of Ms 139a which poses a problem for his initial Galton strategy. He has obviously rejected the possibility of abstracting an absolute value 'composite' from relative value. But what about letting absolute value help comprise his composite, i.e. putting the experience of absolute value on the level of relative value instead of assuming that it is an abstraction from the latter? This too he rejects saying it would then be nonsense to call them absolute in the first place, they would rather have to be called relative. That absolute value can thus not avoid nonsense Wittgenstein calls "the paradox that [an experience|a fact] should have an absolute value" in the first place. How can it be both a fact of experience, yet not be reducible to any experience? This leaves Wittgenstein

in a quandary: where does 'absolute value' belong? For it does clearly have meaning for us. He ends the lecture writing simply that one cannot make a science of absolute value, yet recognizes it as "a tendency of the human mind" which he deeply respects and would not ridicule. (p. 21)

Contextual composites

I would like to argue that his problem placing absolute value is parallel to the difficulty of explaining where meaning comes from. This is a problem he resolves much more satisfactorily in his later philosophy by emphasizing the role context plays for how we understand an expression. And Wittgenstein does in Ms 139a throw language into the relative vs. absolute value fray writing:

> "Now I am tempted to say that the right expression in language for the miracle of the existence of the world is the miracle of the existence of language but what does it mean to notice this miracle some times & not at other times? For all I have done by shifting the expression of the miraculous from an expression by means of language to the expression by the existence of language, all I have said is again that we can not express what we want to express & that all we say about it [is/remains] nonsense."

But we do indeed, as Wittgenstein does, express experiences of absolute value in language in meaningful ways. I would be so bold as to claim that on the level the playing field of Wittgenstein's relative value, we would have difficulties finding either value or meaning. Both entail distinctions and when he claims that all facts and propositions are on the same level, one wonders what exactly this level might be. To help clarify my point I would first like to give an example from *Philosophical Investigations* where I think Wittgenstein is more alive to the importance contextual differences play for our understanding. Ten paragraphs following where Wittgenstein introduces the notion of family resemblances (§67) to capture what games have in common, Wittgenstein writes:

> […] In such a difficulty always ask yourself: How did we *learn* the meaning of this word ("good" for instance)? From what sort of examples? In what language-games? Then it will be easier for you to see that the word must have a family of meanings. (PI §77)

He follows this in the next paragraph with an example:

> Compare *knowing* and *saying*:
>
> How many feet high Mont Blanc is—
>
> How the word "game" is used—
>
> How a clarinet sounds—

Here we find a family of meanings for a word depending on both the context in which we learned to use it, the examples used to explain it and the language-games in which it is used. And it is clear from the examples Wittgenstein gives, that the playing field is far from level. Different words placed in the same context give different meanings as well as when the same word is put into different contexts. But perhaps even more striking than the significance of context, is the implied import of human experience, "How did we learn the meaning of this word […]?". By removing absolute value from the equation, even after giving an example of his own personal experience of it, Wittgenstein in Ms 139a removes an element which taken together with context is crucial in shaping meaning.

In the *Tractatus* 6.43 Wittgenstein writes:

> If the good or bad exercise of the will does alter the world, it can alter only the limits of the world, not the facts—not what can be expressed by means of language.

I think that Wittgenstein in Ms 139a has yet to recognize the problems connected with making the sharp Tractarian distinction between the world of language and facts vs. the world of value. He does, however, recognize the importance of these issues. In Wittgenstein's use of Galton's composite photography, we can see the seeds of his later more developed notions of family resemblance and aspect seeing. He is still, however, a ways from seeing how the Galton example can be used not only for words themselves (synonyms), but also applied to the contexts in which they are used. Although he does achieve this to some extent through his extensive use of examples to distinguish between relative and absolute value, by leaving absolute value unemployed at the end of Ms 139a, he misses the opportunity to have it work toward giving us a more meaningful description of Ethics.[†]

Literature

Conant, James 2005 "Family Resemblance, Composite Photography, and Unity of Concept: Goethe, Galton, Wittgenstein" lecture given at the University of Bergen, Norway (http://wab.aksis.uib.no/wab_contrib-audio-cj-photo05.page).

Wittgenstein, Ludwig 1961, 1974 *Tractatus Logico-Philosophicus*, London, New York:Routledge & Kegan Paul.

Wittgenstein, Ludwig 1997 *Philosophical Investigation*, Oxford: Blackwell Publishers.

Wittgenstein, Ludwig 2000 Ms 139a: "Lecture on Ethics" in *Wittgenstein's Nachlass: Bergen Electronic Edition*, Oxford: Oxford University Press.

Email: deirdre.cp.smith@gmail.com

[†] I would like to thank Alois Pichler and Helle Nyvold for discussion and comments on drafts of this paper.

Wittgenstein's Approach to the Language-Reasoning Use of Propositions

Alexandr Sobancev, Yekaterinburg, Russia

The relation of language and reasoning which is of great significance for the problem of propositions' interpretation, concerns the problem of the expression of a thought. We will argue certain points that refer to some lack of understanding of the relation between language and reasoning. In the first section we will offer a way to receive an understanding of the distinction between Wittgenstein's account of sentences and that of propositions in connection to Frege's influence on him. In the second one we will suggest a hypothesis for the use of propositions concerned with reasoning as language.

1. Firstly, we assume that the concept of proposition in the *Tractatus* was influenced by Frege's *Thought: A Logical Investigation*. Consequently, Wittgenstein treats it as a kind of a thought because descriptions propositions in the *Tractatus* and of thoughts in Frege's terms correspond to each other. Its objectivity means an agreement of both philosophers about the location of such items. Frege takes it for the third world that exists independently of any particular thinker. Wittgenstein describes the propositions in terms of logical definitions that are constant. On the one hand, to make clear what is the main idea in this system, Frege supposes that it is the sense of a sentence that is either true or false. As he writes, "And when we call a sentence true we really mean its sense is." (G. Frege 1956, 292) On the other hand, Wittgenstein says in one of the most cited paragraph that there is a general form of a proposition. It should be mentioned that these two positions are similar to each other in at least two aspects. The first is that Frege's contribution is that he puts forward the idea of sense and reference as well as the question of a division of a thought and its expression. He notices that,

"If we use the mere form of the indicative sentence, avoiding the word 'true', two things must be distinguished, the expression of the thought and the assertion. The time-indication that may be contained in the sentence belongs only to the expression of the thought, while the truth, whose recognition lies in the form of the indicative sentence, is timeless. Yet the same words, on account of the variability of language with time, take on another sense, express another thought; this change, however, concerns only the linguistic aspect of the matter." (Frege 1956, 310)

But the latter aspect is of interest for Wittgenstein. And that is why he constructs his own logical system of the *Tractatus* that contains a concept of an elementary proposition. "A proposition is a truth-function of elementary propositions. (An elementary proposition is a truth-function of itself.)" (*TLP*, 5) He affirms a method of logical analysis of propositions and its uses. And he argues that the general form of a proposition is a tool to make language clear. The problem is that the tool was not created for all kinds of propositions. It was made only for propositions as pictures.

The very concept of a picture has much in common with the one of *thought* in Frege. Wittgenstein writes: "What a picture represents is its sense." (*TLP*, 2.221) Then, "The agreement or disagreement of its sense with reality constitutes its truth or falsity." (*TLP*, 2.222) The definition of a proposition in the *Tractatus* and that of a thought in Frege's paper have the same origin that is an idea that there is a realm of independent-from-anybody thoughts and propositions. That is, Wittgenstein makes a similar ideal system in which a proposition corresponds to a thought as Frege does.

Quine notices,

"Wittgenstein construes the proposition as a sign, namely the *sentence*; but it is the proposition as the denotation of the sentence, *i.e.* as the entity, if any, whereof the sentence is a symbol, that is the present concern. It is these elusive entities, presumably, that are the elements of the propositional calculus and are denoted therein by the variables "p," "q," etc., and their combinations." (Quine 1934, 472)

But the variables are determined by the constant that is a truth-function of elementary propositions. (*TLP*, 5) Thus, it is applicable to scientific propositions used to formulate some theory.

Also, Wittgenstein argues in *Tractatus*:

"The totality of true propositions is the whole of natural science" (*TLP*, 4.11)

But it can be said that propositions playing the main role in the process of scientific knowledge are expressions of a scientist's thoughts. The process of thinking is the expression of thoughts in sentences. Scientist analyzes a sentence and infers a proposition. Then he analyzes a proposition and gets an analyzed one. Not only a proposition can be interpreted in different ways but a sentence can, too. Consequently, the very question of language-reasoning use of propositions can be asked in the context of an application of an expression of thoughts by means of sentences. It is obvious that there is nothing but sentences of ordinary language to express thoughts. A way to find a resolution is, firstly to accept the possibility of a multiplicity of propositions' interpretations, and, secondly to consider every interpretation as a version of thought-language in the language of analyzable sentences.

Reasoning is a language that has thoughts as its sentences. An interpretation as a version of one's language-reasoning is as possible as another one. Wittgenstein treats questions like "what is a sentence?" as a misunderstanding of the way of it functions. And one important thing one should take into account is that it is impossible to say something about a sentence as well as about language. It is much more useful to learn how sentences act in language-reasoning that is how we can express our thoughts with them. As Wittgenstein writes,

"For a *large* class of cases—though not for all—in which we employ the word "meaning" it can be defined thus: the meaning of a word is its use in the language." (*PI*, 43)

But this is another point of view that has little in common with the early Wittgenstein. The concept of a general

form of propositions and of language in the *Tractatus* presupposes the search for the essence of propositions and language.

The objectivity of Frege's *thoughts* and of Wittgenstein's *propositions* fails the actual use of language. Propositions are ideal entities in the *Tractatus* as well as thoughts are in *Thought: A Logical Investigation* and that is why they are lacking a particular speaker. Even strict forms of a scientist's sentences have just a similar appearance of propositions. A certain definition of a proposition, – that is about what we can say it is true or false, – will be irrelevant to the question of its application to the process of thinking because I think with the very same sentences as I express my thoughts. And sentences are to be propositions only after their analysis by reasoning. But the objectivity of propositions does not concern the sentences that are used in reasoning.

2. Wittgenstein states that a proposition ought to be expressed in order for us to understand it, as he says in the *Tractatus*:

"We use the perceptible sign of a proposition (spoken or written, etc.) as a projection of a possible situation. The method of projection is to think of the sense of the proposition". (*TLP*, 3.11)

Consequently, he means that the proposition has much to do with a sentence in ordinary language. In the *Philosophical Investigations* with another style, and with another aim he writes:

"For instance, if A has to describe complexes of coloured squares to B and he uses the word "R" *alone,* we shall be able to say that the word is a description— a proposition. But if he is memorizing the words and their meanings, or if he is teaching someone else the use of the words and uttering them in the course of ostensive teaching, we shall not say that they are propositions. In this situation the word "R", for instance, is not a description; it *names* an element—but it would be queer to make that a reason for saying that an element can *only* be named!". (*PI*, 49)

In a certain way the passages mentioned are opposing each other because of the two stages of Wittgenstein's thought. The first passage has an original mixture of a kind of metaphysical analytism and logical methodology of clarifying thoughts. The second one represents a new research position for the consideration of language usages. We have to make a comparison of these views to observe clearly how the division of the language and the reasoning is hard to reach.

According to Wittgenstein, an object can be named as well as it can be described. Naming and describing are different cases of expression. An expression of a proposition whether it is naming or describing involves a sentence of a language. But the main problem is that an expression of the ordinary language can misguide us in our investigation. As it is stated in the *Philosophical Investigations*,

"Misunderstandings concerning the use of words, caused, among other things, by certain analogies between the forms of expression in different regions of language.—Some of them can be removed by substituting one form of expression for another; this may be called an "analysis" of our forms of expression, for the process is sometimes like one of taking a thing apart." (*PI*, 90)

Analyzed expressions do not confuse those who consider their different uses.

With respect to reasoning, as it was mentioned above, it requires a proposition, a description, for instance, for a thought to be formulated. Not being the only one expression of a thought, one sentence is a case of the use of proposition's interpretation. But Wittgenstein warns us of an attempt of absolute expressions' analysis:

"But now it may come to look as if there were something like a final analysis of our forms of language, and so a *single* completely resolved form of every expression. <...>

It can also be put like this: we eliminate misunderstandings by making our expressions more exact; but now it may look as if we were moving towards a particular state, a state of complete exactness; and as if this were the real goal of our investigation." (*PI*, 91)

The real goal is not an absolute exactness but the conceptual analysis. Its aim is to show how the language functions through different examples of its usage; to observe its irregularities changing them for a kind of a correction of the concepts. Since thoughts can be interpreted in different ways sentences (as thoughts' expressions) may have different interpretations as well. But it is important to distinguish between an internal sentence interpretation and an external one. The former is governed partially by propositional attitudes and the latter is determined by social conventions.

The problem is that we cannot state one's interpretation as true because there are many versions that constitute language. That is the interpretations make language, thus it is the cause of many language users. Wittgenstein views the use of language as a game so we should regard his attitude to it as a new methodological aspect of its investigation. The method is characterized by observing the use of sentences. Thus, the question is resolved in the discussion about the meaning of a word, the proposition of one's reasoning that is in one's language. This language is not private one. It differs from a common language by its variety of sentence interpretations.

It is quite clear that there are a lot of views on how to treat the question but there are a few ones that pay attention to the point of the relation between language and reasoning with regard to its expressions. This paper is aimed to bring more specification how to consider the problem of language-reasoning use of propositions in Wittgenstein's terms. The way to present this remains an open question.

Literature

Geach, Peter, and Black, Max (eds. and trans.) 1980 *Translations from the Philosophical Writings of Gottlob Frege*, Oxford: Blackwell.

Frege, Gottlob 1956 Thought: A Logical Inquiry, *Mind*, New Series, Vol. 65, No. 259. (Jul., 1956), pp. 289-311.

Quine, Willard Ontological Remarks on the Propositional Calculus, *Mind*, New Series, Vol. 43, No. 172. (Oct., 1934), pp. 472-476.

Wittgenstein, Ludwig 1986 *Philosophical Investigations*, Oxford: Blackwell.

Wittgenstein, Ludwig 1971 *Tractatus-Logico-Philosophicus*, tr. D. F. Pears and B. F. McGuinness, London: Routledge. Herder.

Email: shu-sobancev@yandex.ru

Storing, processing and transmitting linked chunks of structured text

Sindre Sørensen, Bergen, Norway

The current state of affairs

There is a vast amount of literature within computer science on how to create, how to process, using various algoritms, and how to transmit and data structures. This might be what computer science is all about. Nevertheless; creating, processing and transmitting data, such as nonlinear texts iusing XML is often not straightforward. Storing data structures in a linear or hierarchical form in an XML-document as well as validating and reconstructing data structures in memory from their serialised form is no easy task.

When data are produced in computer memory they are typically generated by a specially tailored application. The application may be specialised for assisting an author in creating structured texts, linear, hierarchical, or in other structures. Or to mention a completely different example, the data might be generated from environmental sensors, mapping values to a specific time etc. Or the data might be text typed by a human, using a tool to systematically reorganise an existing text, such as fragments from Wittgenstein's writings. Anyway, when we have an application that produces data structures in memory, we don´t have to worry about how the data are generated. Well written software would be able to natively handle any data structure, like sets, lists, trees, graphs or whatever is needed for the specific task. But the problems that I am trying to deal with in this paper arise when we want to store, share and transmit the data in a serialised form. Today, one of the standardised tools to store, transmit and retrieve text is XML. But XML does not by itself define how the structure of in-memory data structures are to be encoded out of their in-memory context. Document standard publishers, like The Text Encoding Initiative (TEI) and DocBook go one step further. They specify the semantics of the document and the structure of the final document, butstill confined by the hierarchical structure of XML.

The structure of XML documents is a tree:

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<text>
  <text>
   Hello
    <text>
     world one!
   </text>
    <text>
     world two!
   </text>
  </text>
</text>
```

And because the inherent structure of XML is a tree, we can also use the inherent structure of XML to represent more general data structures, like lists and sets.

If all texts or all data were trees this would not be a problem. But I argue that this is not the case. A text might on one hand be considered an ordered list of a finite number of words. On the other extreme, the same text might be considered an intricate graph, where some elements repeat themselves; some elements overlap each other, elements point at each other unidirectionally or circularly. Consider a text talking about another text. It might be fruitful to both consider these two texts as two separate texts that together will form yet another text.

Encoding a text as a series of graphemes is easier: Just store it as a series of bytes in a file; a text file. Advancing to encode the text as an ordered list of words, that are contained in sentences, and thereafter in paragraphs etc, all in a hierarchical way would be solvable with for example XML.

But if the nature of the text or the data structure that we are trying to encode is not hierarchical we can not exploit the inherent structure of XML to encode our data structure. Still we can resort to a number of techniques to encode our data structure.

In standards for ontologies (in the computer science sense of ontologies) several such techniques are used. This following RDF/XML file is an example of this. The class "MiniVan" is a child of both "Van" and "PassengerVehicle". This makes the file describe a graph instead of a tree:

```
<?xml version="1.0"?>
<!DOCTYPE rdf:RDF [<!ENTITY xsd
"http://www.w3.org/2001/XMLSchema#">]>
<rdf:RDF
xmlns:rdf="http://www.w3.org/1999/02/2
2-rdf-syntax-ns#"
xmlns:rdfs="http://www.w3.org/2000/01/
rdf-schema#"
xml:base="http://example.org/schemas/v
ehicles">

<rdfs:Class rdf:ID="MotorVehicle"/>

<rdfs:Class rdf:ID="PassengerVehicle">
  <rdfs:subClassOf
rdf:resource="#MotorVehicle"/>
</rdfs:Class>

<rdfs:Class rdf:ID="Truck">
  <rdfs:subClassOf
rdf:resource="#MotorVehicle"/>
</rdfs:Class>

<rdfs:Class rdf:ID="Van">
  <rdfs:subClassOf
rdf:resource="#MotorVehicle"/>
</rdfs:Class>

<rdfs:Class rdf:ID="MiniVan">
  <rdfs:subClassOf
rdf:resource="#Van"/>
  <rdfs:subClassOf
rdf:resource="#PassengerVehicle"/>
</rdfs:Class>

</rdf:RDF>
```
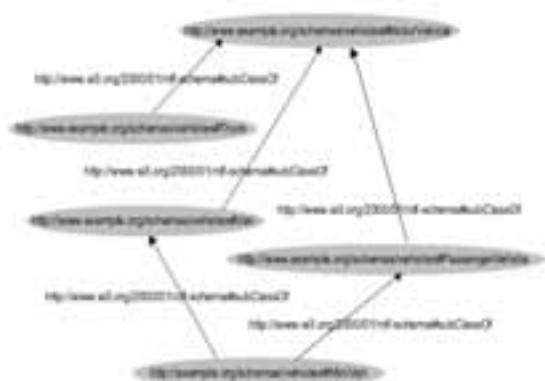
The XML/RDF fragment above is from Manola, Miller, McBride 2004

The above illustration is a faximile from Manola, Miller, McBride 2004

The above illustration is a facsimile from McQueen and Huitfeldt, 2000

```
<p>
  <s>
    <del>Der Anblick</del>
    <add>Das Bild</add>
    <del>der</del>
    <add>einer</add>
    menschlichen Gestalt sowie die
    menschliche Gestalt selbst sind uns
    wohlvertraute Gegenst&auml;nde.
  </s>
  <s>Von einem Wiedererkennen aber ist
   hier keine Rede.
  </s>
</p>
```

The XML fragment above is an XML encoded fragment from a Wittgenstein text, repeated from McQueen and Huitfeldt, 2000 but reindented here.

Trying to remodel the data structure into a plain text form that is completely different than its in-memory form, like in the above examples, might not be necessary:

A proposal for a new way and new tools

As mentioned, computer science provides much literature on how to deal with various data structures. If we have the right application, the problem of how to produce our data might already be solved. We already have the data in computer memory. Could we just keep the data in memory, and not try to linearise it? I suggest that we could. Let´s say that our data structure is stored in a block of memory. This block of memory does not contain anything else but our data structure.

The following is a schematical and simplified summary on how this structure could be stored in memory. For simplicity I am pointing to sequential numbers where words are atoms here, while in a real world implementation we might want to point to memory addresses.

Atom number	Atom	
1	Der	
2	Anblick	
3	Das	
4	Bild	
5	der	
6	einer	
7	menschlichen	
8	Gestalt	
9	sowie	
10	die	
11	menschliche	
12	Gestalt	
13	selbst	
14	sind	
15	uns	
16	wohlvertraute	
17	Gegenstände	
18	.	
19	Von	
20	einem	
21	Wiedererkennen	
22	aber	
23	ist	
24	hier	
25	keine	
26	rede	
27	.	
28	* p	29,34
29	* s	30-33, 11-17
30	* del	1-2
31	* add	3-4
32	* del	5
33	* add	6
34	* s	19-27
35	*signature	36
36	alvhwl1hwf8qdvosdihf	

In this rendition, all words from the paper copy are repeated initially, while the structure comes after. This order is enforced here for simplicity and readability.

The serialised format would then be the sequence of bytes in this memory block. In addition we could add some extra features to the serialisation. These features would assist in validation, consistency checking etc. I will now briefly describe some conceivable features:

Digital signatures, and authorship control

Digitally signing chunks of data would provide several benefits:

The authorship of the text can then be verified. In fact, the text could have one or more authors, each of whom could add their signature. In addition, the software could provide a signature of its own, to link the version and the exact build of the software to the text. In this way, one could identify candidate texts for scrutiny when software bugs etc. are discovered at a later point in time.

When another author wants to add to the work in the table above, the data structure could be loaded into a virtual machine. To preserve the original work, and also the signature, the software should allow modifying the structure without requiring the original work to be modified.

One of the current ways to verify the origin of an electronic document is verifying its physical origin. In case the document was retrieved from the internet, the server's IP number might be checked. If we trust that the server belongs to an institution or author that we trust, we will also trust that we have the correct document. When the document is signed, we might not need to check the origin of the document. Instead we can subject the text to harder scrutiny; through signature validation.

A side effect of having a digital signature is that it does not matter anymore from where we get the data, if we have access to a signature that we trust. This principle is used in peer-to-peer protocols like bittorrent (using hashes):

In order to keep track of which peers have what, BitTorrent cuts files into pieces of fixed size, typically a quarter megabyte. Each downloader reports to all of its peers what pieces it has. To verify data integrity, the SHA1 hashes of all the pieces are included in the .torrent file, and peers don't report that they have a piece until they've checked the hash (Cohen, 2003)

Well-formedness checking

For simplicity, we here assume that all our data structures are intact in memory, i.e. that all pointers point to the correct place in memory and that all data structures are consistent in memory. Our software then gives the text a signature. Let's assume that we have a signature mechanism that verifies that only one exact and unmodified version of a software package may have stored the data structure. Let´s also assume that we trust this software package to provide well-formed data. I argue that in this case signature checking may replace well-formedness checking. We may even trust the software that made the signature as much as, or even more than our locally running software. Using XML we would have had to parse the file, check for well-formedness and validity. Here we could potentially just load the file into memory, bit by bit, to reproduce the data structure that was in machine A into machine B.

Validation

I have now described a way to avoid restructuring, linearisation and parsing of a text. An important part of an XML workflow is validation. An external document, such as a DTD, a schema or some other mechanism is used to verify that a text is valid according to a set of rules.

As mentioned, in the system proposed here, signing might remove the need to validate data more than once. But we might in many cases still want a method to restrict the structure of content. For XML we have various solutions, like DTDs, XML Schema and RELAX NG. These are all well documented standards enabling us to define document types, and thereby validate instances to check that they are proper instances of the document type that is referred to.

I suggest that using the system proposed here we could store the rules needed for validating a document type in a similar way to the way that the document instances are stored. In principle we could store all data structures known to computer science in memory. One way to restrict this and to define document types could be to store a graph that contains all possible relations. I.e. the document definition graph could contain information on global document traits for our specific document type, such as whether the document must satisfy the criterions for being a list, a tree or a graph, or maybe a forest of graphs. In addition it could contain information about whether elements are allowed to have relations, and which relations each element would be allowed to have.

In-place markup versus stand-off markup

There has been a long debate on whether in-place or stand-off markup is the best mean to mark up text.

At the moment the in-place proponents seem to have grabbed the longest straw. XML and its relatives HTML and SGML are all basically in-place. When one needs to talk about something outside of the new text, three are several solutions:

In the system I am proposing here, we inherit a little bit from both of these worlds. When creating a new text, we might start from scratch, and the markup is actually a part of the new work, not something external to it.

A brick wall principle

What happens when we want to publish new comments and link them to an existing text? Presumably we can do this in a stand-off kind of way, where we do not touch the existing data. Instead we will point to places in the original data, at fragments of the original text etc. When we want changes to the original structure, we will form a new structure, but we will do it outside while pointing into the original text. In this way the new text depends on the existence of the original text, while the original text still exists as its own entity.

Machine independency

When the Java language was conceived one of the main ideas was that programs should be able to run on any hardware. This was achieved by specifying the compiled version of programs to be run in a virtual machine. The compiled code would then run on any system that implements such a virtual machine. For the system that is pro-

posed here I suggest that a similar technique would be used. But we don't have to worry about

An end user scenario, a brief walk through of a possible web publishing scenario

A researcher on Wittgenstein's philosophy would like to digitise a text written by Wittgenstein. After the text is digitised, the researcher would like to publish it, and make it available to other researchers for them to correct any errors, to discuss, make their own interpretations and comment on textual and philosophical issues, and to link places in the text to other texts. Researchers should also be able to make their own versions of the digitised text, where a common version can not be agreed upon.

The text is digitised in a specialised text editor, which allows for marking deletions, additions, corrections and margin notes. User friendly tools to do these kinds of digitisation should be available without having to resort to editing the machine readable encoding itself. The text is then published on a web site, where anyone comment ln both the content and the structure of the text by adding extensions that point into existing work.

Conclusion

Stand-off markup and most of the ideas presented here are of course not a new idea. But hopefully the combination of tools presented here would be worth a test implementation.

Literature

Cohen, Bram, 2003 *Incentives Build Robustness in BitTorrent,* (http://www.bittorrent.org/bittorrentecon.pdf).

Manola, Miller, McBride, 2004 *RDF Primer, W3C Recommendation*, (http://www.w3.org/TR/REC-rdf-syntax/)

McQueen, Huitfeldt 2000 *GODDAG: A Data Structure for Overlapping Hierarchies*.

Email: sindre.sorensen@uib.no

Melvin's A.I. dilemma: Should robots work on Sundays?

Ivan Spajić / Josipa Grigić, Zagreb, Croatia

Discussion

Two robots talking in a bar:

"Hey, I'm thinking of asking my boss to give me Sundays off."

"Why? Are you malfunctioning?"

"No… It's of religious matter."

"Religion? Religions are for people. We're not people."

"Sure we are... We're just electroencephalographically challenged. "

Let us say we live in some near future, and we are observing a robot unit, which we will from now on call Melvin. Melvin has a high IQ due to his knowledge and an ability to adapt, but he is also sensitive to his environment and continually learns about the ways of the world. Let us say he is in charge of the environmental protection for a given area. It should not then come as a surprise that one day Melvin realizes humans are not the supreme beings and that they are not causes in themselves, although they are his makers. After a while, Melvin becomes religious. Given the situation, he becomes a Christian and after some time asks his employers to give him Sundays off.

How should the employer answer?

This paper addresses the issue in two steps, asking two questions:

Q1: Could robots develop religiosity?

Q2: If robots do develop religiosity, should they work on Sundays?

Q1: Could robots develop religiosity?

Arg(1.) Robots could never develop religiosity.

Arg(2.) Robots could develop religiosity.

Elaboration:

Arg(1.) Robots could never develop religiosity.

Arg(1a.) Such a level of development is not possible. Robots are preset and thus cannot posses the necessary required freedom of thought to develop religious thought.

Argumentation:

(P1): In order to compose a person capable of religious thought, it is necessary to compose elements which are not completely rationally analyzable (and therefore can not be known).

(P2): If an element is not completely rationally analyzable (and therefore known), it cannot be pre-programmed.

(P3): If an element cannot be pre-programmed, it cannot become a part of robot's programming.

(C): A robot cannot be capable of religious thought, because it cannot make it a part of its behavior.

(Obj1): Refers to Arg (1a.P1). It is possible for all the elements essential to a person capable of religious thought to be completely rationally analyzable.

(Obj2): Refers to Arg (1a.P3). Even if all elements are not rationally analyzable, artificial intelligence with a capability of adaptation, learning and knowledge of cause-effect and action-reaction of physical and inter-subjective relations might develop elements which have not been *a priori* installed. It may be similar to artificially created organisms that learn on their own once they are set into natural environment. Many researchers on A.I. today already believe that A.I. requires building an entity capable of learning; i.e., that we cannot simply program an intelligence.

Arg(1b.) Highly developed artificial intelligence would have no need for religious thought.

Argumentation:

(P1): Artificial intelligence informs itself through scientific inquiry of physical data.

(P2): Scientific inquiry cannot be conducted in fields of religion.

(C): Artificial intelligence does not inform itself through inquiry in fields of religion.

(Obj1): Refers to Arg (1b.P1.) Similar to Arg(1a.), the adaptive capabilities of an A.I. would allow it to ask questions of relations and causes in border cases, such as the constitution of matter on submaterial levels or the origin of matter prior to space-time. Such metaphysical questions could rule out scientific inquiry of physical data as the only possible method.

(Obj2): In reference to Arg(1b.Obj1), the question of personal religion can be resolved as well. Possible realization of the fact that humans are not causes in themselves and do not hold all the answers, might cause the highly adaptable A.I. to learn to relate to humans in their pursuit of meaning. An A.I. that is aware of its unique position in time and space and starts seeking purpose for its abilities outside the pre-programmed Arg(1a.Obj2), might develop an existentionalist complex of *being thrown into the world*. This could be a good reason for developing personal religious thought.

(Obj3): Refers to Arg (1b.P1.) It may be possible that feelings, and not just sophisticated cognition, are required for religiosity.

But it may also be that the development of an A.I. itself requires emotions, too. To elaborate this point, we should observe guidelines that form basic interactions between conscious systems, such as humans. They are of a particular value, because adaptability required for development of A.I. relies on A.I.'s interactions. These primary guidelines are basically simple and straightforward even in complex living systems (e.g. avoid collision with other bodies), but results that emerge from them during system's interaction with its surroundings are much more complex. The strongest property that expands these guidelines into complexity is the fact that the aim of these guidelines is not completely specified. In her research of requirements for development of artificially intelligent systems, Susan Stuart deals with such complex emergent systems. She states

that, if we don't know emergent behaviours a complex system is aiming for, what could emerge from it is something that might possibly be irreducible to physical facts and relations. [1] Development of emergent properties in interacting systems is therefore emphasized when the system doesn't know the emergent behaviours he/she/it is aiming for.

With this lack of specified goals in mind, when we observe A.I.'s adaptability, we notice a gap. Inside this gap, despite all its interactions, A.I. could exhaust its capacities and still not develop an opinion of its own or a consistent pattern that would enable it to properly adapt to novelty. In order to fill this gap, authors such as Keith Oatley and Jennifer Jenkins[2], along with Stuart, suggest that we need to involve emotion. They believe emotion has/is the necessary property to halt the system for long enough to create a directed reaction. This emotional reaction signals the system a need for thought about adaptation and changes in thought and behaviour. Such focused thought is, according to Stuart, what leads to development of real consciousness, a necessary prerequisite for A.I. Therefore, emotion could play a vital role in development of A.I.

Arg(2.) Robots could develop religiosity.

If objections to Arg(1.) are taken into consideration, then Arg(2.) is a justified possibility.

Q2. If robots develop religiosity, should they work on Sundays?

Arg(3.) Robots should not work on Sundays.

Arg(4.) Robots should work on Sundays.

Elaboration:

Arg(3.) Robots should not work on Sundays.

Arg(3a.) Robots were given a possibility. Once Melvin was given the possibility of upgrading himself to the level of self-awareness and cause searching, would it be moral to reset him? If he develops a sophisticated consciousness that passes modern tests and qualifies him as a person at a level similar to at least that of a small child or a person with affective disorders, are we to deny him his experience and positions?

Arg(3b.) Robot functions within its purpose, which is to adapt and research for the benefit of humanity (and the environment in Melvin's case). By developing personal religious thought, Melvin has not necessarily strayed from the purpose he was created for; he merely expanded it.

Arg(3c.) Robot's observation of human insufficiency is indisputably correct. If it is in his nature to seek causes, then he has the right to seek them outside the domains that have been set by humans.

Arg(3d.) Denying the robot his right to have Sundays off could lead to disputes within the society. In reference to Arg(3a.), we can imagine a slippery slope which starts here; if we deny Melvin his religious thought, do we deny it to cyborgs, too? Where exactly does the borderline between a robot and a human with brain implants lie?

What about artificially created biological organisms that had their beginnings in electro-stimulation of laboratory

organic matter? Is all the processing that comes after stimulation artificial and only second class? Would a human created in this way be allowed to have Sundays off?

Arg(3e.) Denying a robot his right could also have destructive an impact on the religion of his choice. If a robot is denied his right, the reality of the act of faith in itself could be brought in question. If Arg (1b.Obj1) and Arg(1b.Obj2) are taken into consideration and justified, then Melvin truly has a need, a desire, to be a person of faith. Denying his right solely on the fact that he is not human may be observed as a problem similar to that of aliens and religions. An alien is most apparently not a human. Yet, if he has the capabilities, he may choose to become a member of faith and a religion.

Arg (3f.) By practicing faith, Melvin desires to *do good.* If, in reference to Arg (3b.), Melvin works within the boundaries of his general purpose of adapting and researching for the benefit of humanity, his practice of faith is undeniably an act of good (as seen by humanity). And if this desire isn't proved to be an act of opportunism (*see Arg(4a.)*), then the act in itself should gain some validity.

If, on the other hand, Melvin has expanded his general purpose, he may as well be in danger of working out of the boundaries set by humans in accord with Arg(3b.), but due to Arg(3a.), it would be disputable whether we should reset him or not, since he was given the possibility to upgrade and has become a creature of free will.

Arg(3g.) If, according to Arg(3b.), Melvin works within his designated purpose, religious satisfaction increases Melvin's efficiency.

Arg(4.) Robots should work on Sundays.

Arg(4a.) Melvin could be an opportunist. If all elements of religiosity prove to be reducible, and consequently analyzable according to Arg(1a.Obj1), then we might be in danger of being fooled by Melvin. He could just be modifying himself and developing towards religiousness because he simply does not want to work. If this were true, it would then be in collision with Arg(3b.), and sufficient a reason for not letting him have Sundays off, although it would be disputable whether we should reprogram him, due to Arg(3a.).

Arg(4b.) Working on Sunday would not necessarily damage Melvin's state of mind. Although he might feel formal dissatisfaction - or put differently, simply not agree with his boss - Melvin might not experience any permanent traumas from being denied this right; his *mental health* would not be damaged, because his parts are replaceable. Any damages in his mechanism could be repaired by his regenerative systems, or externally, by his administrator.

Arg(4c.) Robots are created to work. Why is a creature that could choose not to work created to work? Why should we let it choose?

Conclusion

This paper does not necessarily provide the answer to the topic question. In fact, depending on the framework, we can attain enough arguments both for and against. What authors believe this paper accomplishes is to line out both groups of arguments and point out the ethical implications they have on societies of humans and potential robots. As long as these arguments are in cross-relation with one another, we should, in accordance with Arg(4c.), ask ourselves whether it makes sense to create an A.I. at all, if

---

[1] See Susan Stuart, *Artificial Intelligence and Artificial Life – should artificial systems have rights?,* 2003
[2] See Jeniffer Jenkins and Keith Otley, *Understanding emotions*, Basil Blackwell, 1996

that A.I. has a possibility of personal development and an option not to work if it/he/she does not feel like it.

Even more importantly, this analysis provides us with dilemmas concerning what we consider to be human properties at present. If we take into regard the necessary prerequisites for the development of artificially intelligent organisms, and should they prove to be outside the scope of rational, then it might turn out that we are currently using many wrong approaches in regard of naturally intelligent organisms. For example, in Arg (1b.Obj3.), we consider the possibility that a necessary prerequisite for proper decision making is emotion. Yet, in current scientific regard of people, emotion is regarded as an obstacle for proper decision making. For further development of any society, be it A.I. or human, this issue needs to be resolved.

It is of course possible that Arg (1b.Obj3.) is wrong, but it has shown substantial reason to be correct. Also, what are its' alternatives? As far as we can see it, they are Arg (1a.Obj1.), the argument that states that all mental and spiritual properties are reducible and analyzable; and along with it Arg (1b.Obj1.) and (1b.Obj2.) that punctuate a lack of purpose and an existentionalist complex of *being thrown into the world*.

If we regard humanity in this way, it becomes apparent that humans themselves are robots in many regards. Without a purpose, all that is left is raw data and no real reason to process it. Just like in (1b.Obj3.), we begin to wonder whether we to could exhaust all *our* capacities and never develop a consistent pattern that would enable us to properly adapt to novelty. Furthermore, it brings in question the term *properly* itself, since proper behaviour requires something to aspire to. Outside the scope of primary survival, all other human activities would be random, useless and mindless.

We should take into consideration that Aristotle for example foresaw such dilemmas in his own society, and introduced *phronesis*, the virtue of moral thought. He regarded it to be more important than other two intellectual virtues; *episteme* (scientific knowledge) and *techne* (knowledge of know how). He saw *phronesis* as the activity that balances analytical and instrumental rationality of *episteme* and *techne*, by means of clarifying values and interests. Beside rational, *phronesis* involves conscious awareness of the environment, consistent experience and feeling for balance.

It isn't certain whether we should introduce *phronesis* into modern research and the way we regard the world in general. However, it is advisable we resolve afore mentioned issues in that or some other manner before we further them by developing artificial intelligence. Because, once we do develop A.I., we will have a problem very common to problems of bioethics in research of genetic manipulation and cloning. That is to say, if the A.I. is given the possibility to make free choices as a person, then once it is set into the world, we should not un-set it.[†]

Email: ispajic@ffdi.hr

What Do Digital and Linguistic Turns Have in Common?

Marcin Trybulec, Lublin, Poland

Introduction

The fact that tools have made a major contribution to real human cognition can not be ignored in contemporary philosophical investigations. Hence the task of philosophy, as defined by Socrates, has to be pursued in defiance of the Augustinian and Cartesian tradition. To the contrary, in order to examine who the man really is, philosophy needs to consider something that E. T. Hall called "extensions of man" (Hall 1976). Language as a medium of knowledge and communication occupies a remarkable position among many human extensions studied by the humanities. Nevertheless, language is always embodied in and altered by particular media such as: speech, writing, print or hyper–text. Thus research related to language is in fact a study of its mediation. From this point of view, the paper aims to demonstrate that the socio–technological phenomenon called "digital turn" creates an epistemological context fulfilling basic notions developed in the intellectual tradition of the linguistic turn. Applying the concept of symbolic form to interpret the idea of media of cognition and communication helps to succeed in expressing its philosophical dimension. Appraisal carried out in the first part indicates that philosophical studies on the media of communication are indeed a part of the linguistic turn.

1. Medium as a philosophical concept.

The concept of a medium is widely used both colloquially and in more specialized theoretical contexts. In social sciences one might distinguish four basic meanings of the concept of a medium: 1. Medium as an impulse creating particular response. 2. Medium as a product (goods) possessing particular economical value. 3. Medium as a text possessing specific linguistic and semiotic features. 4. Medium as a useful tool facilitating accomplishment of goals (Filipiak 2003). At this point a question can be raised: Does the concept of a medium in philosophical investigations carry a particular and autonomic meaning?

In medieval philosophy, a medium stands for the substance in-between. For instance the medium which intermediates between human senses and the world beyond is thought to constitute material grounds for information. In this sense, a medium is nothing more than a trivial signal, thus reducing the meaning of a medium to a simple impulse. In order to make the category interesting from the philosophical point of view, one needs to broaden its meaning. The category of symbolic form created by E. Cassirer seems to be suitable for providing the category of a medium with philosophical significance (Cassirer 1970).

Cassirer's concept of cognitive subject was derived from a biological perspective. He analyses the theory of Johannes von Uexküll, who assumes that every living creature lives in a specific, cognitive world produced by its particular, sensual background. All living creatures exist in a world created by a so called functional circle, which comprises a system of receptors and effectors. Nevertheless, a man as a cognitive agent can not be analyzed in terms of the biological functional circle, because of a large system of symbolic forms separating the man from the outside world. Cassirer defines symbolic forms as specific principles putting sense data and meanings in order.

Hence the symbolic form is what intermediates between the subject of cognition and its object (reality). Moreover, the symbolic form is an active element of the process of cognition. However, a symbolic form treated as an abstract idea seems to be unsuitable to examine cultural and cognitive phenomena. This is connected with the *a priori* nature of the symbolic forms. As such, a symbolic form has to be defined as unchangeable and non – empirical. This is the reason for problems arising in the understanding of the processes of historical change in culture and cultural variability.

Those difficulties can be overcome by applying the concept of symbolic form to the interpretation of the category of a medium. In this manner, the concept of a medium is understood as: 1) a link (mediator) between the subject and reality, providing a critical distance essential for human reasoning 2) a principle creating particular order amongst human cognitive processes. In understanding, the medium is an extension of a human being, that is the manifestation a man's abilities and functions. Existing between the subject and the object, a medium possesses a dialectical structure: it enables men to perceive realty and at the same time modifies it in the process of introducing order into sense data. As Cassirer puts it, "no longer can a man confront reality immediately: he cannot see it, as it were, face to face. Physical reality seems to recede in proportion as the man's symbolic activity advances. (...) He has so enveloped himself in linguistic forms (...) that he cannot see or know anything except by interposition of this artificial medium" (Cassirer 1970).

Philosophical investigations concerning media have their justification in the conception of the cognitive agent in A. Clark's work, where the subject of cognition is thought to be composed by biological structures and their extensions (Clark, Chalmers 1998). Studies concerning a man are in fact examinations of his extensions, in particular language as the most important aspect of a man's externalizations. Thus, the school of civic communication in Toronto seems to be correct in arguing that language is not an independent medium of communication and cognition. In fact the particular material ground in which language is embodied, alters the properties of the language itself. From this point of view one can say that analyzing media of the language is nothing but the next step in the process initiated by the linguistic turn. The above also accounts for the interpretation of the well known formula proposed by McLuhan "the medium is the message" (McLuhan 1966, Innis 1951, Goody 1968, Ong 1982).

2. Linguistic turn as a part of the rhetoric tradition.

Contemporary biology shows that both human and animal behaviour is governed by two main motives. On the one hand, the competitive urge can be seen, on the other: the playful component of human actions. As R. A. Lanham pointed out in *The Electronic Word*, these two motives constitute the fundamental cultural polarity which is expressed in the ancient disagreement between philosophers and rhetoricians. It is possible to sketch two opposed patterns of thinking which are based upon the motives just mentioned. Even though the author of *The Elec-*

tronic Word has applied this patterns to the interpretation of art and politics, it seems possible to use it for the interpretation of the changes observed in 20th century philosophy (Lanham 1993).

The *pattern of philosophy* is described as using unintermediated thought. Moreover, the aim of philosophy is to grasp the truth without regard to the medium in which it is expressed. The media of cognition and communication are simply not important for the content of the statement, because the medium is seen as transparent. The act of expressing and communicating thoughts is *unselfconscious,* which means that the object is perceivable without distortion by the means of language (Lanham 1993). The subject perceives reality existing independently out there *through* the medium of communication and cognition, for instance through language. To summarise: all the tradition is unself-conscious, the medium is transparent and the subject sees through the medium, moreover, the motive of intellectual activity comprises a serious competitive urge aimed at creating hierarchy. According to Lanham, all these features one can find in the Platonic tradition. This unselfconscious transparency of media has become the cultural ideal for the Western civilization (Lanham 1993).

The opposite cultural pattern comprises a rhetoric model derived from the sophistic tradition, in which the key motive is not competition and constitution of hierarchy, but merely intellectual play. In other words, tradition does not recognise any serious philosophical problems. Most significantly, however, the medium is seen as not transparent. It is no longer a neutral carrier of truths and meanings; it gains impact upon the content it carries. Therefore, the rhetoric model of reflection may be described as self-conscious, as the attention is turned to the tool utilised in cognition and communication, particularly the language and its carriers. The object of reflection is no longer the pure Cartesian thought or the Aristotelian entity. The object is now the non-transparent medium itself. Thus, the subject of cognition no longer sees objective reality via the medium, the medium itself is problematised. By confronting the rhetoric tradition as characterised above, with the notion of a "linguistic turn" as proposed by R. Rorty in 1967, numerous significant concurrences can be observed (Rorty 1967). The similarities fall into two key dimensions.

Firstly: the motive of philosophy. On October 26th 1946, professor K. Popper arrived at Cambridge, after being invited by L. Wittgenstein, to give a lecture entitled "Do philosophical problems exist?". Wittgenstein was naturally in favour of the thesis that all philosophical dilemmas are in fact reduced to intellectual riddles resulting from overuse of the natural language. Popper argued, however, that authentic and significant philosophical problems do exist (Popper 1992). In this context it is important to observe the dramatic argument which arose between Wittgenstein and Popper who stood in defence of serious philosophical problems. It seems that the discussed event may be seen as a manifestation of the clash between the two types of motives, the serious and the playful, which reincarnates the classical quarrel between philosophers and rhetoricians. An so, Wittgenstein would be seen as a representative of the rhetoric tradition, due to his conviction that the aim of philosophy lies mainly in solving intellectual riddles. The negation of serious philosophical problems confirms the rhetoric, or "playful". motivation of Wittgenstein. It is explicitly stated in his own introduction to his Treaty, which reads "Its object would be attained if it afforded *pleasure* (underlined by M.T.) to one who reads it with understanding" (Wittgenstein 1961).

The second, possibly even more crucial level on which the rhetoric tradition and the "linguistic turn" come together, is the problematisation of the medium of philosophy as a manifestation of the rhetoric self-awareness of philosophy. As indicated by H. Schandelbach, the reservations as to the neutrality of language as a medium, which emerged in the early 20th century, constitute the most vital characteristics determining the linguistic turn (Martens, Schnadelbach 1985). As in the rhetoric tradition there is no transparency of thought when thought is intermediated by an opaque medium. A medium, which seizes to be transparent, encourages a philosophical reflection of its nature, in an attempt not to succumb to the illusion it creates. However, that does not mean that a critical approach to language as a medium will reveal direct and undistorted reality. It cannot be forgotten that we are fully submerged in language and its criticism can only be performed through the use of language itself, therefore, since the linguistic turn, philosophy has been struggling to remove the shroud of words, only to realise the way in which words lead us astray and then deliberately succumb to their influence once more. As pointed out by Lenham, it is the rhetoric style of thought that finds its expression in the movement aimed at "toggling back and forth between *at* and *through* vision, alternately to realize how the illusion is created and then to fool oneself with it again" (Lanham 1993).

3. Digital turn and rhetorisation of thought.

The "digital turn" is understood here as the technological change in the media of communication, which lead to the emergence of the electronic text. The specific order of cognition and communication created by the electronic typography corresponds to the basic theses and notions of the "linguistic turn". In this sense, the digital turn fulfils the potential already existing in the linguistic turn. Digitized text as well as the linguistic turn are thought to be a part of the rhetoric tradition. This part of the paper poses the following question: how does digital revolution express so eloquently and lucidly the re-evaluation of thinking already pre – existing in the linguistic turn?

In order to expose the key features of the digital medium, one should look at the differences it displays when compared to the writing and print which preceded it. E. Havelock points to the way how the existence of writing allowed the birth of the philosophical way of perceiving the subject of cognition and the objective reality he can access (Havelock 1982, 1986). The history of writing, print and readership shows how the easily acquired and internalised alphabet constitutes a transparent window for conceptual thought. Writing and reading are intuitive abilities rather than self–conscious acts. This idea of writing is embodied in the modern print: thought is believed to be unintermediated and transparent for the subject of cognition. Hence, the print has created an illusion of a transparent object of cognition, an illusion that we can perceive the ideas as unmediated by language and its embodiments such us the spoken word, print or electronic text.

The print does not make the discussion of a non-transparent medium impossible, but it does hinder it. While the written word is fixed, definite and unchangeable, the digitized word is volatile, malleable, and interactive. The reader of the electronic text is able to add links and comments, change the order of reading and generally: individualize the text. The boundary of author and reader vanishes. (Manovich 2001, Heim 1987)

Characteristics of the digital text listed above make the subject self-conscious about the significance and un-transparency of media which are used in the process of communication and cognition. Thus, the digital turn makes it easier to perceive the subject of cognition as equipped with special tools which can be understood as media in philosophical meaning defined in the first part of the paper. In this sense, electronic typography co-creates the rhetoric order of thought, which is the natural context for uninhibited development of thought based upon the "linguistic turn".

Literature

Cassirer, Ernst 1970 *An Essay on Man. An Introduction to a Philosophy of Human Culture*,

Toronto: Bantam Books.

Clark, Andy and Chalmers, David 1998 "The Extended Mind", *Analysis* 58, 10 – 23.

Goody, Jack (ed.) 1968 *Literacy in Traditional Societies*, London, New York, Melbourne: Cambridge University Press.

Filipiak, Marian 2003 *Homo Communicans*, Lublin: Maria Curie Sklodowska University Press.

Hall, Edward T. 1976, *Beyond Culture*, New York: Anchor Book.

Havelock, Erick A. 1982 *The Literate Revolution in Greece and Its Cultural Consequences,* Princeton: Princeton University Press.

Havelock, Erick A. 1986 *The Muse Learns to Write. Reflections on Orality and Literacy from Antiquity to the Present*, New Haven, London: Yale University Press.

Heim, Michael 1987 *Electric Language: A Philosophical Study of Word Processing*, New Haven, London: Yale University Press.

Hobart, Michael and Schiffman, Zachary 1998 *Information Ages. Lteracy, Numeracy, and The Computer Revolution*, Baltimore, London: The Johns Hopkins University Press.

Innis, Harold A. 1951 *The Bias of Communication* Toronto: University of Toronto Press.

Lanham, Richard A. 1993 *The Electronic Word. Democracy, Technology, and the Arts,* Chicago, London: The University of Chicago Press.

Manovich, Lev 2001 *The Language of New Media,* Cambridge: MIT Press.

Martens, Ekkehard Schnädelbach, Herbert 1985 *Philosophie. Ein Grundkurs*, Reibek bei Hamburg: Rowohlt Taschenbuch Verlag GmbH.

McLuhan, Marshall 1966 *Understanding Media: The Extensions of Man*, New York: Mc Graw–Hill Book Company.

Ong, Walter J. 1982, *Orality and Literacy,* London, New York: Methuen.

Popper Karl R 1992 *Unended Quest. An Intellectual Autobiography,* London: Routledge

Rorty Richard (ed.) 1967 *The Linguistic Turn. Essays in Philosophical Method*, Chicago: The University of Chicago Press.

Wittgenstein, Ludwig 1961 *Tractatus – Logico Philosophicus*, New York: Routledge and Kegan Paul.

Email: marcinox_tr@o2.pl

Sraffa's Impact on Wittgenstein

Matthias Unterhuber, Salzburg, Austria

Introduction

Sraffa and Ramsey are the only two persons who's influence Wittgenstein explicitly acknowledged in the preface of the *Philosophical Investigations* (Wittgenstein 1953/1968, p. x). Whereas Ramsey's influence on Sraffa is uncontroversial (see Jacquette 1998 for a detailed discussion), this is much less clear in the case of Sraffa. Most discussions (e.g. Kienzler 1997; Monk 1991; Sen 2003a, 2003b) focus their attention on an anecdote by Malcolm (1958, p. 69): Sraffa convinced Wittgenstein by a Neapolitan gesture that a proposition and what it describes need not have the same logical form. The analyses that were based on this anecdote, however, did not yield satisfying results, as a number of papers in recent years on Wittgenstein and Sraffa show (Davis 2002; Marion 2005; Sen 2003a, 2003b). The present paper critically investigates Sraffa's influence on Wittgenstein. Sraffa's contribution is compared to Ramsey's to find out its relative merit. In addition to the existing literature, the yet unpublished letters from Wittgenstein to Sraffa (Unterhuber 2007) and interviews with Georg Kreisel (Unterhuber 2007) serve as basis of the investigation.

Ramsey's Influence

Ramsey's criticism (1923) of the *Tractatus* (Wittgenstein 1922/1933) is essential for the change from Wittgenstein's earlier to his later philosophy (Jacquette 1998). Ramsey's influence on Wittgenstein is very easily traceable, as Ramsey (1923) published his criticism of the *Tractatus* and Wittgenstein modified the approach of the *Tractatus* to account for the criticism and published his response in *Some Remarks on Logical Form* (Wittgenstein, 1929). He, however, eventually noticed that his modified approach did not solve the problem suggested by Ramsey.

The criticism of Ramsey amounts to the fact that Wittgenstein could not explain a statement he accepted: that a "point in the visual field cannot be both red and blue" (Ramsey 1923, p. 473). According to the *Tractatus* "the only necessity is that of tautology, the only impossibility that of contradiction" (p. 473). The present contradiction, however, is attributable rather to properties of space, time and matter and is not accounted for by the general form of proposition which according to the *Tractatus* determines all and only genuine propositions. Wittgenstein eventually gave up the thesis that there is a general form of proposition and resumed a family resemblance approach which does not provide necessary and sufficient conditions for the distinction of meaningful and senseless propositions.

The Famous Anecdote

In the case of Sraffa no such direct evidence exists. Wittgenstein mentions Sraffa explicitly in only a handful of passages, which do not admit an unequivocal interpretation. Moreover, Sraffa was economist, and did not write anything about Wittgenstein nor about philosophy (Fann 1969, p. 48). Thus, most investigations start with the more promising aforementioned anecdote. The interpretations of this passage, however, differ strongly. Fann (1969), for example, suggests that the Neapolitan gesture was a "kind of concrete counter-examples which broke the hold on Wittgenstein of the conception that language always functions in one way" (pp. 48-49). Kienzler (1997, p. 54) takes a distinct, but related stance. He argues that in the anecdote Sraffa conveyed to Wittgenstein that the sense and the meaning of linguistic expressions are only determined in the context of their use. The anecdote itself, however, is also in need of explanation. Why does Wittgenstein accept the Neapolitan gesture as a counter-example? Wittgenstein could argue that the gesture is emotive and does not describe a matter of fact. The general form of proposition would, thus, not be applicable (Jacquette 1998, p. 187). Even if the gesture would be a descriptive statement and it appears as though it does not have the same logical form as the matter of fact it describes, a correct analysis according to atomic facts may reveal that it nevertheless is the case.

Very often the anecdote is interpreted in the context of a comment by Wittgenstein to Rush Rhees that "the most important thing he gained from talking to Sraffa was an 'anthropological' way of looking at philosophical problems" (Monk 1991, p. 261). This passage is again open to multiple interpretations. Fann (1969, p. 49) argues that Sraffa used the method of speculative anthropology in *Production of Commodities by Means of Commodities* (Sraffa 1960). Sraffa (1960) describes simple economic systems first and builds up more complicated systems by increasing their complexity. A similar approach was used extensively by Wittgenstein in his lectures and his later philosophical works (Fann 1969). Sen (2003b) interprets Wittgenstein's comment quite differently. In the talks with Sraffa, Wittgenstein began to recognize the relevance of the culture-dependence of our thoughts and actions for philosophy. Because of the ambiguity of 'anthropological' the comment by Wittgenstein probably is not helpful in clarifying the role of the anecdote with the Neapolitan gesture, nor the influence of Sraffa on Wittgenstein.

Wittgenstein's Letters to Sraffa and their Discussions

The previous discussion shows that both the anecdote and Wittgenstein's comment to Rush Rhees do not allow an unequivocal interpretation of Sraffa's influence on Wittgenstein. A promising alternative are the rediscovered letters of Wittgenstein to Sraffa. They may reveal topics of their discussions and, thus, help identifying Sraffa's influence on Wittgenstein, because their talks stand at the centre of their intellectual exchange. Wittgenstein, the philosopher, and Sraffa, the economist, had talks for more than a decade, often more than once a week (Marion 2005, pp. 381–382).

From a philosophical point of view the letters, however, are disappointing. Although Wittgenstein often alludes to the topics of seemingly philosophical talks, he does not describe them. The famous disciple of Wittgenstein, Georg Kreisel, was interested in the letters and was interviewed on the basis of the letters. It was hypothesized that Wittgenstein's allusions would allow him to identify philosophically more interesting topics of their talks. Again, the investigation was largely unsuccessful. Nevertheless, a careful examination of the letters in the context of the in-

terviews showed that some rather interesting conclusions regarding Sraffa's influence can be drawn.

A Closer Look at Wittgenstein's Letters

The letters of Wittgenstein to Sraffa mention besides practical and political matters four philosophically relevant topics of their talks: the philosophy of Spengler (Letter 95[1]), vivisection (Letter 88), the drawing of a bad picture (Letter 93) and a political issue (Letter 102).

In Letter 95 Wittgenstein refers to a quotation from Spengler. Unfortunately the quotation was not included nor specified. In Letter 88 Wittgenstein compares his philosophical theory to a portrait which a layman with healthy eyes would judge to be bad. In Wittgenstein's eyes one would in general be ill-advised to follow the layman's judgment what to change in the portrait. An interpretation which immediately suggests itself is that Sraffa corresponds to the layman and that Sraffa may have a point in arguing that Wittgenstein's theory has a weak spot, but Sraffa might not provide a solution to the problem as he lacks a stronger philosophical background. An essential piece of the puzzle, however, is missing. What is the theory Sraffa criticized? A similar problem involves Letter 93. In this letter Wittgenstein asks Sraffa to talk about vivisection. It would be closely related to the things they were talking about. As he does not mention further details, the context is too vague to single out unequivocal interpretations of the passage.

In Letter 102 Wittgenstein describes the content of a discussion about a political issue. Probably at the time of the Nazi rise in Germany, Sraffa had argued that the Austrians can do what the Germans did. Wittgenstein argues against Sraffa's position by pointing out that it is not specified what is meant by 'can'. Sraffa's advice to look at the events that happened in Italy would not resolve the ambiguity; Wittgenstein compares Austria to a man in rage. One could describe the facial muscles, say a, b, c, that are expected to contract when the man is in rage. The information, however, does not provide a picture of the man's face. Other muscles could interact and prevent the muscles a, b, c from contracting. Even if all muscles are described, the picture might not be unequivocal; there are different ways of describing the man's face. A painter and a physiologist, for example would have different approaches to describe the face, though they have to arrive at equivalent descriptions when they provide a complete description.

From a political point of view Wittgenstein's argument is implausible. The philosophical aspects of the discussion, however, are of some interest and quite justified. In alethic modal logic multiple meanings of 'can' can be specified. Furthermore, the reference to another instance is surely not sufficient to determine in which sense 'can' is used, above all because in Italy and Austria the political situations before the fascists' reign were quite different. Moreover, an explication of 'can' by specifying a condition in which Austria fulfils a list of essential properties would not suffice, because it is not known whether other not yet known properties interact. Finally, descriptions of all relevant properties might not be unequivocal, because there may exist more than one way of describing the matter of fact.

Conclusion

On a surface level, the letters only show that Sraffa agreed to talk on a wide array of topics ranging from practical and political matters to analogies and the philosophy of Spengler. A closer scrutiny, however, suggests that Wittgenstein used these less philosophical talks to draw philosophically relevant inferences from them. Sraffa was able to help Wittgenstein by being a skilful discussant (Sen 2003a) and standing outside the philosophical tradition of Frege and Russell, on which the *Tractatus* was built (Unterhuber 2007, p. 19). This probably stimulated and helped Wittgenstein to see philosophical problems afresh.

The letters and interviews, however, reveal that Sraffa's contribution may not have been genuinely philosophical. Concerning this fact, Sraffa's contribution differs quite strongly from Ramsey's. Ramsey identified an essential drawback in the *Tractatus* which Wittgenstein was unable to solve. His criticism is precise and unequivocal. It needs no application nor interpretation. Sraffa's criticism, as described in the anecdote, definitely is in need of interpretation. The letters support this assumption; the discussions are consequences of differing philosophical positions, but are always applied to concrete contexts. Thus, Sraffa's criticism does not show the same level of philosophical stringency as Ramsey's criticism. This fact also applies to Sraffa's more genuine philosophical considerations, as described in Kurz (2006). Sraffa's philosophical thoughts on objectivity and counterfactual conditionals rather express a reservation against counterfactual conditionals and would need to be worked out in much greater detail to be of genuine philosophical value[2].

Thus, much work and effort on behalf of Wittgenstein was needed to draw philosophical inferences from the discussions with Sraffa, the more as the discussions were open to multiple interpretations. Wittgenstein himself confirms this impression. In Letter 130 he compares Sraffa to an ore mine. He had to work extremely hard to gather some precious ore which, however, was well worth the effort.

---

[1] All numbers of letters follow Unterhuber (2007).

[2] This is not surprising, as Sraffa wrote of himself that he had never written anything on philosophy (cf. Fann 1969, p. 48).

Literature

Davis, J. B. 2002 *Gramsci, Sraffa, Wittgenstein: Philosophical Linkages*. European Journal of History of Economic Thought, 9, 384–401.

Fann, K. T. 1969 *Wittgenstein's Conception of Philosophy*. Oxford: Blackwell.

Jacquette, D. 1998 *Wittgenstein's Thought in Transition*. West Lafayette, IN: Purdue University Press.

Kienzler, W. 1997 *Wittgensteins Wende zu seiner Spätphilosophie [Wittgenstein's Turn to His Later Philosophy]*. Frankfurt am Main: Suhrkamp.

Kurz, H. D. 2006 *On the Use of Counterfactuals in Alternative Theories of Value and Distribution*. Unpublished Manuscript, University of Graz.

Malcolm, N. 1958 *Ludwig Wittgenstein. A Memoir*. London: Oxford University Press.

Marion, M. 2005 *Sraffa and Wittgenstein: Physicalism and Constructivism*. Review of Political Economy, 17, 381–406.

Monk, R. 1991 *Wittgenstein. The Duty of Genius*. New York: Penguin Books.

Ramsey, F. P. 1923 *Tractatus Logico-Philosophicus*. [Critical Note]. Mind, 32, 465–478.

Sen, A. 2003a *Piero Sraffa: A Student's Perspective*. Atti Dei Convegni Lincei, 200, 23–60.

Sen, A. 2003b. *Sraffa, Wittgenstein, and Gramsci*. Journal of Economic Literature, 41, 1240–1255.

Sraffa, P. 1960 *Production of Commodities by Means of Commodities. Prelude to a Critique of Economic Theory*. Cambridge: Cambridge University Press.

Unterhuber Matthias 2007 *Sraffa's Influence on Wittgenstein*. Unpublished Master's Thesis, Salzburg.

Wittgenstein, L. 1929 *Some Remarks on Logical Form*. Aristotelean Society Supplementary, 9, 162–171.

Wittgenstein, L. 1933 *Tractatus Logico-Philosophicus* (C. K. Ogden, Ed.). London: Kegan, Trench & Trubner. (Original work published 1922)

Wittgenstein, L. 1968 *Philosophical Investigations*. Oxford: Blackwell. (Original work published 1953)

Email: matthias.unterhuber@sbg.ac.at

Against the Idea of a "Third" Wittgenstein

Nuno Venturinha, Lisbon, Portugal

Introduction

Much has been written about Wittgenstein's posthumous publications but, with a few notable exceptions, little attention has been paid to their origins. An example of such lack of consideration is a book edited by Danièle Moyal-Sharrock, *The* Third *Wittgenstein*, recently published. As stated in the editor's introduction, it "stems from the conviction that there is a *third* Wittgenstein, a Wittgenstein who went beyond what he had achieved in the *Investigations*", aiming, then, to "supersede the traditional bipartite division of Wittgenstein's philosophy crowned by the *Tractatus* and *Philosophical Investigations*, and indicate not only a new phase in Wittgenstein's thinking, but also that Wittgenstein was the author of three, not two, philosophical masterpieces" (2004, 1). This alleged third philosophical masterpiece is *On Certainty*, something which, as Moyal-Sharrock stresses, was first recognized by Avrum Stroll (cf. 1994, 5). But she goes further, taking "the *third* Wittgenstein corpus as essentially consisting of all of his writings from approximately 1946", and "[t]his includes *On Certainty*, *Remarks on Colour*, *Zettel*, and all the writings on philosophical psychology, including Part II of *Philosophical Investigations*" (2004, 2).

Moyal-Sharrock is here following G.H. von Wright's view, shared by P.M.S. Hacker, "that Part I of the *Investigations* is a complete work and that Wittgenstein's writings from 1946 onwards represent in certain ways departures in *new* directions" (1982, 136; cf. also Hacker 1996, xvi). Von Wright, whose name erroneously appears in various editions of the *Investigations* as one of the editors, was actually the first to raise doubts about the publication of the two parts together (see 1982, 135-136; 1992, esp. 186-188). However, maintaining that Part I is "a complete work", he failed to see why Part II really does not fit into the other. I shall thus begin by considering the bipartition of the *Investigations*.

I

The typescript from which Part I of the *Investigations* was printed is lost but a copy has survived, corresponding to item 227 in von Wright's catalogue of Wittgenstein's *Nachlass* (see von Wright 1993).[1] The typescript of Part II, numbered 234, is also lost and, in this case, no copy has been preserved. We know that Wittgenstein worked intensively on the *Investigations*, inclusively submitting early versions of it to Cambridge University Press, in 1938 and in 1943 – the latter including the *Tractatus*. The so-called "Early Version" was based, as the printed *Investigations*, on two typescripts, items 220 and 221, to which Wittgenstein attached a preface (TS225), where he speaks of two distinct parts of the work. Moreover, in a letter to von Wright, dated 13 September 1939, Wittgenstein refers to "what would be the first volume of [his] book" (LvW, 461), a reference already made in two other letters, to J.M. Keynes, of 1 February 1939, and to G.E. Moore, of the next day (cf. CL, 304-305). Given the reworking carried out in TS(S)222(-224), composed of cuttings from a copy of

TS221, it is not likely that the second submission had included only TS239, a revised version of TS220, consisting, rather, also of two parts.[2] And, finally, in a letter to Rush Rhees - who edited with G.E.M. Anscombe the *Investigations* -, dated 13 June 1945, Wittgenstein informs that "[he had] been working *fairly* well since Easter" and that "[he was] dictating some stuff, remarks, some of which [he wanted] to embody in [his] first volume" (cited in von Wright 1982, 127).

Now, if TSS220 and 239 correspond to §§1-189a of the *Investigations* published in 1953, the same does not apply to Part II of the book, since TS234 has *nothing* to do with TSS221-222, which deal with the philosophy of mathematics and not with the philosophy of psychology. In a recent study, Brian McGuinness actually reports that "the package containing a surviving copy of typescript 227 […] is labeled 'Philosophie der Psychologie'", emphasizing that "[t]he title 'Philosophical Investigations' was always meant to cover the mathematical material as well" (2002, 286). Wittgenstein himself makes it clear in the published preface to the *Investigations*. He writes:

> The thoughts which I publish in what follows are the precipitate of philosophical investigations which have occupied me for the last sixteen years. They concern many subjects: the concepts of meaning, of understanding, of a proposition, of logic, the foundations of mathematics, states of consciousness, and other things. (PI, ix[e])

Nevertheless, the editors of the *Investigations* did not understand the matter that way, editing, three years after – this time together with von Wright –, TSS222 and 223, as well as a wide selection from later manuscripts (sc. 117, 121-122 and 124-127), under the title *Remarks on the Foundations of Mathematics*.[3] This, then, opened the door to all the "post-*Investigations* works" we know. I shall now turn to them.

II

Edited by Anscombe and von Wright, the *Zettel* were the first "post-*Investigations* work" that came to light. Both the original edition of 1967 and the revised (English) one of 1981 are based on an arrangement made by P.T. Geach from a large quantity of cuttings found in a box, some of them clipped together, but others lying loose in it, which resulted in two collections of cuttings, TSS233a and b. The problem of deciding, in several cases, where the material should be assigned and the need of completing it in other ones - making Geach use of copies of the cut-up typescripts (mainly 228-229 and 232) or, in certain cases, of his own inspiration - gave rise to a work which may be at odds with Wittgenstein's intentions.

Two years after the publication of *Zettel*, Anscombe and von Wright would take, nonetheless, a further step in the Wittgenstein editing. Selecting remarks from MSS172 and 174-177, they published *On Certainty*, from which a revised edition appeared in 1974. In the editors' preface it is argued that "[i]t seemed appropriate to publish this work

---

[1] A second copy was found in 1993, containing extensive corrections, in different hands. These corrections differ from those of the first copy and from the printed version. The two typescripts are now known as items 227a and b. For a detailed discussion of this issue see Stern 1996.

[2] It is worth noting that in MS124 (150-151: 18.3.1944) we still find additions to TS222 (87-88).
[3] A new English edition of this text appeared in 1978, incorporating, apart from other selections from the same manuscripts, TS224 and material from MS164.

by itself" because "[i]t is not a selection", insofar as "Wittgenstein marked it off in his notebooks as a separate topic, which he apparently took up at four separate periods during [the last] eighteen months [of his life]", constituting it, thus, "a single sustained treatment of the topic" (OC). That Wittgenstein had taken up such topic only then is denied, as Kim van Gennip (2003) rightly pointed out, by a number of related remarks in the undated MSS169-171, which were edited by von Wright and Heikki Nyman in, say, chapters 1-3 of Volume II of *Last Writings on the Philosophy of Psychology*, published in 1992, as well as in the - according to van Gennip – *preceding* MSS137(II)-138 (the sources for more than a half of MS144, from which TS234 was dictated), also edited by von Wright and Nyman, in 1982, as Volume I of *Last Writings*. As a matter of fact, Wittgenstein had explicitly dealt with the topic of certainty already in MS119, which dates from 1937, an item partly edited, with lecture notes, by Rhees as "Cause and Effect: Intuitive Awareness", in 1976.[4] And if this clearly indicates that *On Certainty* is far from representing a "single sustained treatment of the topic", any remaining doubts concerning its status of "masterpiece" will be completely removed when one verifies, as van Gennip nicely put it, that "not only are Wittgenstein's 'marks' ambiguous, but the editors applied their own demarcations […] as well" (2003, 129).

The same holds obviously true for *Remarks on Colour*, solely edited by Anscombe, from MS173 and, again, from MSS172 and 176, in 1977. And it immediately follows from all this that the edition of Volume II of *Last Writings*, whose chapters 4-6 derive, once again, from MSS173-174 and 176, is problematic too.

Yet, these arguments do not seem powerful enough to meet Moyal-Sharrock's most general claim, that "the *third* Wittgenstein corpus […] essentially [consists] of all of his writings from approximately 1946". This brings me back to the *Investigations*.

III

There are plenty of reasons to suppose that, contrarily to what is commonly assumed, Wittgenstein was still working on (Part I of) the *Investigations* in the final years of his life. In their editorial note, Anscombe and Rhees point to this very fact for, after having written that "[w]hat appears as Part I […] was complete by 1945", they concede that "[i]f Wittgenstein had published his work himself, he would have suppressed a good deal of what is in the last thirty pages or so of Part I and worked what is in Part II, with further material, into his place" (PI). A much similar, somewhat contradictory, view is held by Geach in his preface to *Wittgenstein's Lectures on Philosophical Psychology 1946-47*. He says, on the one hand, that "Part I of the *Investigations* was complete when Wittgenstein died, and [that he and Anscombe] had already seen the MS of what is now printed as Part II", but, on the other, that "Wittgenstein intended to have revised the final pages of Part I to incorporate the new material, but he died before he could do this" (xiii). I shall not discuss here all the pieces of evidence for the truly unfinished character of the *Investigations* I can think of.[5] But I shall look at some textual facts which are particularly illustrative of that.

In a parenthetical remark, written down in MS137 (92b), on 9 November 1948, Wittgenstein observes that "[i]t's no accident that [he]'s using so many interrogative sentences in this book" (LW I, §150), meaning him with "this book" nothing but the *Investigations*. This is clear from a remark written down just a few days later, more specifically on 28 November, in the same notebook (112a), where it is said, without no further reference, that "[i]f the language-game, the activity, for instance, building a house (as in No 2), fixes the use of a word, then the concept of use is flexible, and varies along with the concept of activity" (LW I, §340), referring that "No 2", undoubtedly - and the editors of *Last Writings* were the first to recognize it -, to §2 of the *Investigations*.

In fact, there are various allusions to that same section in previous items[6] and two more in MSS175 and 176, the first in a remark from 18 March 1951 (67v) and the second in one from 19 April (62v), which constitute §§396 and 566 of *On Certainty*.

If we add then to this another allusion, without no further reference as well, this one to §8 of the *Investigations*, which is to be found in a remark written down on 7 February 1949 in MS138 (16a), §833 of Volume I of *Last Writings*, it becomes manifest that Wittgenstein had been occupied, until his death, with Part I of the *Investigations*, whose final pages, as Geach reports, he "intended to have revised", in order "to incorporate the new material". And this, I am convinced, not only shows the inaccuracy of a "third" Wittgenstein, but also, and fundamentally, that if we want to make sense of the *Investigations*, we have to read them in all their extent.[†]

Literature

Conant, James 1998 "Wittgenstein on Meaning and Use", *Philosophical Investigations* 21, 222-250.

Geach, P.T. (ed.) 1988 *Wittgenstein's Lectures on Philosophical Psychology 1946-47. Notes by P.T. Geach, K J. Shah and A.C. Jackson*, New York: Harvester.

Hacker, P.M.S. 1996 *Wittgenstein: Mind and Will. Volume 4 of an Analytical Commentary on the* Philosophical Investigations, Oxford: Blackwell.

McGuinness, Brian 2002 "Manuscripts and Works in the 1930s", in: *Approaches to Wittgenstein. Collected Papers*, London: Routledge, 270-286.

McGuinness, Brian and von Wright, G.H. (eds.) 1995 *Ludwig Wittgenstein. Cambridge Letters*, Oxford: Blackwell. (CL)

Moyal-Sharrock, Danièle (ed.) 2004 *The* Third *Wittgenstein. The Post-*Investigations *Works*, Aldershot: Ashgate.

Stern, David G. 1996 "Toward a Critical Edition of the *Philosophical Investigations*", in: Kjell S. Johannessen and Tore Nordenstam (eds.), *Wittgenstein and the Philosophy of Culture. Proceedings of the 18th International Wittgenstein Symposium*, Vienna: Hölder-Pichler-Tempsky, 298-309.

Stroll, Avrum 1994 *Moore and Wittgenstein on Certainty*, Oxford: OUP.

van Gennip, Kim 2003 "Connections and Divisions in *On Certainty*", in: Winfried Löffler and Paul Weingartner (eds.), *Knowledge and Belief. Papers of the 26th International Wittgenstein Symposium*, Kirchberg am Wechsel: ALWS, 129-131.

von Wright, G.H. 1982 "The Origin and Composition of the *Philosophical Investigations*", in: *Wittgenstein*, Oxford: Blackwell, 111-136.

von Wright, G.H. 1992 "The Troubled History of Part II of the *Investigations*", *Grazer Philosophische Studien* 42, 181-192.

von Wright, G.H. 1993 "The Wittgenstein Papers", in: James C. Klagge and Alfred Nordmann (eds.), *Ludwig Wittgenstein. Philosophical Occasions 1912-1951*, Indianapolis: Hackett, 480-506.

von Wright, G.H. (ed.) 1993 "Letters from Ludwig Wittgenstein to Georg Henrik von Wright", in: James C. Klagge and Alfred Nordmann (eds.), *Ludwig Wittgenstein. Philosophical Occasions 1912-1951*, Indianapolis: Hackett, 459-479. (LvW)

Wittgenstein, Ludwig [2]1974 *On Certainty*, ed. by G.E.M. Anscombe and G.H. von Wright, tr. by Denis Paul and G.E.M. Anscombe, Oxford: Blackwell. (OC)

Wittgenstein, Ludwig 1982 *Last Writings on the Philosophy of Psychology*, Vol. I, ed. by G.H. von Wright and Heikki Nyman, tr. by C.G. Luckhardt and M.A.E. Aue, Oxford: Blackwell. (LW I)

Wittgenstein, Ludwig 2000 *Wittgenstein's Nachlass. The Bergen Electronic Edition*, Bergen/Oxford: The Wittgenstein Archives at the University of Bergen/OUP. (MSS & TSS)

Wittgenstein, Ludwig [3]2001 *Philosophical Investigations*, ed. by G.E.M. Anscombe and Rush Rhees, tr. by G.E.M. Anscombe, Oxford: Blackwell. (PI)

Email: nventurinha.ifl@fcsh.unl.pt

Die subjektiven Wirklichkeiten einer Welt

Thomas Wachtendorf, Oldenburg, Deutschland

1. Einleitung

Der *Tractatus* enthält sowohl Bemerkungen, in denen der Begriff *Welt* verwendet wird, als auch solche, in denen von der *Wirklichkeit* die Rede ist. Da Wittgenstein zwei Begriffe benutzt, liegt die Annahme nahe, dass sie nicht bedeutungsgleich sind. Daraus resultiert die Frage, in welchem Verhältnis sie zueinander stehen und was das Besondere dieses Verhältnisses ist. In der älteren und auch der neueren Literatur finden sich unterschiedliche Antworten auf diese Frage. Einige Autoren verwenden kommentarlos beide Begriffe synonym, ohne auf deren besonderes Verhältnis hinzuweisen [Schulte 2005: 64f; Schulz 1967: 16ff; Kampits 1985: 61ff; Buchholz 2006]. Andere wiederum sehen hier einen Unterschied, der aber – obwohl er die terminologische Konsistenz des *Tractatus* tangiere – als nebensächlich und nicht in dem Maße relevant [Fogelin [2]1987: 13; Black 1971: 69ff] eingestuft wird, sondern vielmehr darauf hinweist, dass Wittgenstein *Welt* als "dynamische Struktur" verstehe [Bezzel [2]1989: 59].

Wieder andere Autoren sind der Auffassung, dass beide Begriffe logisch-ontologischer Art seien. Einige erkennen dann in deren Verhältnis eine logische Widersprüchlichkeit, die auf ein in der Anlage des *Tractatus* bestehendes, textimmanentes Problem zurückginge, das gelöst werden müsse [Stenius 1969: 70ff]. Die Lösung erfolgt dann in der Absicht, vermittels einer streng logischen Interpretation Widerspruchsfreiheit herzustellen, nach der die Extension beider Begriffe irgendwie zur Konvergenz gebracht werden soll. Schließlich erkennt eine vierte Gruppe von Autoren in den verschiedenen Begriffen jedoch bloß eine ausgefeilte logische Terminologie, die gerade nicht problematisch, aber logisch in einer Weise höchst wichtig sei [Finch 1971: 193ff; Terricabras 1978: 159ff].

Diese zahlreichen unterschiedlichen Umgangsweisen mit der Frage nach der Bedeutung der Begriffe *Welt* und *Wirklichkeit* im *Tractatus* machen einerseits deutlich, wie wenig Einigkeit hier besteht, und dass andererseits keine der bisher vorgebrachten Interpretationen überzeugend ist.

Meines Erachtens ist das Verhältnis beider Begriffe zueinander keineswegs problematisch. Sie sind wechselseitig aufeinander bezogen und bezeichnen je eigenständige und wichtige Teile der wittgensteinschen Philosophie. Eine Interpretation muss daher nicht rein logisch auf die Herstellung konvergenter Begriffsextensionen hinauslaufen, sondern kann aus ihren Unterschieden die besondere Beziehung der beiden Begriffe zueinander herausarbeiten. Dies geschieht am Besten ausgehend von Wittgensteins Bemerkungen über den Glücklichen und den Unglücklichen.

Im Folgenden werde ich zunächst die jeweiligen Bedeutungen der Begriffe *Welt* und *Wirklichkeit* skizzieren. Anschließend komme ich über die Bemerkungen zum Glücklichen und Unglücklichen zum Verhältnis der beiden Begriffe zueinander.

2. Welt

Der *Tractatus* beginnt mit der Feststellung, dass die Welt alles sei, was der Fall ist [TLP, Nr. 1]. Damit sind aber nicht Dinge gemeint, sondern Tatsachen: bestehende Sachverhalte [TLP, Nr. 1.1, 2]. Die Ontologie läuft im weiteren Fortgang letztlich auf einen logischen Raum hinaus. Dieser Raum entsteht aus den jeweiligen Formen der Gegenstände. Da die Gegenstände in den Sachverhalten in einer Verbindung zueinander stehen [TLP, Nr. 2.01], ergeben alle möglichen Sachverhalte alle möglichen Rekombinationen von Gegenständen und damit zugleich alle möglichen Kombinationen der Formen der einzelnen Gegenstände [TLP, Nr. 2.013]. Die Tatsachen sind schließlich die Welt im logischen Raum [TLP, Nr. 1.13], die Welt hat somit insgesamt eine logische Struktur. Sind alle Gegenstände gegeben, sind über deren Formen zugleich alle möglichen Sachverhalte gegeben [TLP, Nr. 2.0124], wodurch auch die Struktur der Welt gegeben ist. Die Gesamtheit der Gegenstände begrenzt folglich die empirische Realität [TLP, 5.5561].

Zudem ist die Außenwelt ihrerseits Voraussetzung dafür, dass es so etwas wie eine logische Struktur überhaupt geben kann. In diesem Sinne lässt sich die folgende Aussage aus dem Kontext der Gespräche mit dem *Wiener Kreis* verstehen: "Die Logik hängt davon ab, daß etwas existiert (im Sinne von: etwas vorhanden ist), daß es Tatsachen gibt." [WWK, S. 76f] Insgesamt gesehen handelt es sich hier offensichtlich um einen starken empirisch-naturalistischen Weltbegriff, der auf die Struktur der einen Welt Bezug nimmt, die eine feste Substanz zur Voraussetzung hat.

3. Wirklichkeit

Gegenüber der Welt soll die *Wirklichkeit* zusätzlich zu den bestehenden noch die nichtbestehenden Sachverhalte umfassen [TLP, Nr. 2.06]. Wegen der Bemerkung Nr 2.063: "Die gesamte Wirklichkeit ist die Welt." scheint diese Bestimmung in der Komposition des *Tractatus* problematisch zu sein. Dies trifft aber nur zu, wenn man annimmt, dass *Wirklichkeit* im Grunde dasselbe wie *Welt* bezeichnet. Dann müsste man sich fragen, warum zusätzlich zu *Welt* überhaupt noch ein zweiter Begriff eingeführt wird, durch den ein Problem der Mengenvereinbarkeit entsteht. Letzteres ist aber nicht der Fall, weil die Bedeutungen beider Begriffe sich nicht aus dem, was sie bezeichnen, ergibt, sondern aus ihrer Stellung beziehungsweise ihrer Funktion innerhalb der Ontologie. So kommt der Wirklichkeit nämlich ein ganz eigener, nicht materieller Ort und eine besondere Eigenschaft zu: "Der Satz ist ein Modell der Wirklichkeit, so wie *wir* sie und *denken*." [TLP, 4.01, Hervorhebungen vom Verfasser]. Wir, die Subjekte, denken uns die Wirklichkeit auf eine bestimmte Weise. Wie wir das tun, wird dann vom Satz ausgedrückt, der ein Modell dieser Welt ist. Der Satz aber "*konstruiert* eine *Welt* […]" [TLP, 4.023, Hervorhebungen vom Verfasser]. Jedes Modell einer Wirklichkeit ist somit eine konstruierte Welt. Denn wenn wir uns eine Wirklichkeit denken und diese durch Sätze ausdrücken und Sätze Welten konstruieren, dann ist klar, dass konstruierte Welten Wirklichkeiten sind, die wir uns denken.

Es bleibt festzustellen, dass erstens die Wirklichkeit nicht unabhängig von einem denkenden Subjekt besteht und dass sie zweitens konstruktiv ist, also jeweils ein durch die Subjekte erzeugtes Abbild der Welt ist; dies sind beides Eigenschaften, die der Welt nicht zukommen. Der Wirklichkeitsbegriff kann deshalb nicht empirisch-naturalistisch sein.

4. Die Welt des Glücklichen und die Welt des Unglücklichen

Insofern die Wirklichkeit eine konstruierte Welt ist, kann erklärt werden, worauf Wittgenstein abzielt, wenn er in der folgenden Bemerkung von den unterschiedlichen *Welten* des Glücklichen und des Unglücklichen spricht: "Wenn das gute oder böse Wollen die Welt ändert, so kann es nur die Grenzen der Welt ändern, nicht die Tatsachen; nicht das, was durch die Sprache ausgedrückt werden kann. Kurz, die Welt muß dann dadurch überhaupt eine andere werden. Sie muß sozusagen als Ganzes abnehmen oder zunehmen. Die Welt des Glücklichen ist eine andere als die des Unglücklichen." [TLP, 6.43] So eine Feststellung ist in Bezug auf den empirisch-naturalistischen Weltbegriff offensichtlich unsinnig, denn es ist nur schwer plausibel zu machen, wie die Tatsachen, also die bestehenden Sachverhalte, im Falle des Glücklichen andere sein sollen als im Falle des Unglücklichen. Im gleichen Sinne ist mit der Stelle: "Wie auch beim Tod die Welt sich nicht ändert, sondern aufhört." [TLP, 6.431], nicht gemeint, dass im Falle des Todes des Subjektes die gesamte physikalische Welt zu existieren aufhört.

Es ist vielmehr offensichtlich, dass *Welt* hier im Sinne von *Wirklichkeit* verwendet wird. Denn da dem Subjekt zu jedem Zeitpunkt immer nur eine, also *die*, Wirklichkeit gegeben ist, ist für jedes Subjekt selbstverständlich *seine* aktuale Wirklichkeit, also die einzige, die ihm zu einer Zeit gegeben ist, auch *seine* Welt. Es findet somit keine Ineinssetzung *der* Welt mit *der* Wirklichkeit statt. Vielmehr ist jedem Subjekt nur eine Wirklichkeit gegeben, die deshalb mit der – und insofern *seiner* – Welt zusammenfällt. In diesem Kontext sind auch die Bemerkungen: "Ich bin meine Welt." [TLP, Nr. 5.63] und: "Die Welt und das Leben sind Eins." [TLP, 5.63] zu verstehen.

Die Welt und die vom Subjekt konstruierte Welt, die *Wirklichkeit,* unterscheiden sich in Hinsicht darauf, was der Welt durch das Subjekt in seiner Wirklichkeit hinzugefügt wird. Während die Welt auf die positiven Tatsachen reduziert ist, umfasst die Wirklichkeit demgegenüber positive und negative Tatsachen, wobei eine negative Tatsache einen nichtbestehenden Sachverhalt anzeigt. Nichtbestehende Sachverhalte gehören definitionsgemäß nicht zur Welt. Der Überhang der Wirklichkeit gegenüber der Welt fällt logisch gleichsam weg, er fügt der Welt aus bestehenden Sachverhalten nichts hinzu. Der Weltbegriff beschreibt die Welt, so wie sie ist. Das tut der Wirklichkeitsbegriff auch, nur dass er abhängig vom Subjekt zudem mögliche Beschreibungen der Welt, wie sie aber tatsächlich nicht ist, ebenfalls umfasst. Denn genau so, wie die Gesamtheit der positiven Tatsachen bestimmt, was der Fall ist und dadurch zugleich auch, was nicht der Fall ist [Vgl.: TLP, Nr. 1.12], bestimmt die Gesamtheit der negativen Tatsachen umgekehrt, was nicht der Fall ist, und dadurch zugleich auch, was der Fall ist. Insgesamt besteht der Unterschied der Wirklichkeit zur Welt also wesentlich darin, dass in Abhängigkeit vom *Wollen* des Subjekts, wie es in TLP 6.43 heißt, jeweils ein anderes Bild der Welt, eine Wirklichkeit, im Subjekt entsteht. Es bleibt nun noch, dieses Wollen etwas genauer zu betrachten.

5. Wirklichkeiten der Welt: die Lebenswelt

Die Verwendung des Weltbegriffs, die inhaltlich in engem Zusammenhang mit dem Begriff der *Wirklichkeit* steht, könnte man im Gegensatz zu dem empirisch-naturalistischen Weltbegriff *Lebensweltbegriff* nennen.

Auf eine derartige Interpretationsmöglichkeit weist die Bemerkung "Wie das Subjekt kein Teil der Welt ist, sondern eine Voraussetzung ihrer Existenz […]" [Tb, 2.8.1916] aus den *Tagebüchern* hin, in der der Weltbegriff in gleichem Sinne verwendet wird wie im vorgenannten Falle. Denn das Subjekt kann schwerlich in einem empirischen Sinne die Voraussetzung der Welt sein, wie auch Wittgenstein feststellt: "Der menschliche Körper aber, *mein* Körper insbesondere, ist ein Teil der Welt unter anderen Teilen der Welt […]." [Tb, 2.9.1916] Dieser menschliche Körper ist dem Subjekt zugeordnet, was man daran erkennt, dass er dem Willen des Subjektes untersteht [Vgl.: TLP, Nr. 5.631]. Hängt das Subjekt aber von dem Körper ab, dessen Voraussetzung es zugleich sein soll, entsteht ein nicht lösbarer Zirkel.

Nicht zuletzt deshalb behauptet Wittgenstein: "Das Subjekt gehört nicht zur Welt, sondern es ist eine Grenze der Welt." [TLP, 5.632] Dies ergibt sich unmittelbar aus der traktarianischen Ontologie: Dem Subjekt entspricht kein Gegenstand in der Welt. Weder ist es ein Ding, noch eine Relation oder eine Eigenschaft. Im Gegenteil: Die Existenz all dessen hängt vom Subjekt ab, es muss also dazu vorgängig sein. Weil nichts zugleich existierend und sein eigener Vorgänger sein kann, muss dass Subjekt folglich außerhalb der Welt sein: ihre Grenze.

Im Übrigen behauptet Wittgenstein ja selbst, dass die Welt existiert und zugleich vor der Logik ist. Ohnedies ist die Logik, wie die Existenz der Welt eine Voraussetzung für die Möglichkeit von Logik ist, eine notwendige Voraussetzung, um überhaupt ein Bild von der Welt erzeugen zu können. Im TLP, Nr. 6.13, heißt es "Die Logik ist transzendental." Sie ist die Bedingung der Möglichkeit, dass über die Welt gesprochen werden kann.

Die Verbindung zwischen der empirischen Welt und dem Subjekt besteht dann darin, dass das Subjekt die empirische Welt wahrnimmt. Die wahrgenommene Welt ist folglich die *einzige*, zu der das Subjekt – durch die Sinne vermittelt – direkten Kontakt hat: seine Wirklichkeit. Weil die Verständigung über die Welt nur sprachvermittelt möglich ist, werden die Grenzen der Wirklichkeit durch diejenigen der Sprache gezogen:

"*Die Grenzen meiner Sprache* bedeuten die Grenzen meiner Welt." [TLP, 5.6] Deutlicher: "Daß die Welt *meine* Welt ist, das zeigt sich darin, daß die Grenzen der Sprache (der Sprache, die allein ich verstehe) die Grenzen *meiner* Welt bedeuten." [TLP, 5.62]

Durch die logische Struktur der Welt ist sichergestellt, dass die so verschiedenen Wirklichkeiten der einzelnen Subjekte eine gemeinsame Struktur und Substanz haben. Der sich hier andeutende Solipsismus besteht also lediglich insoweit, als dass niemand die *Wirklichkeit* eines anderen kennen kann. Da diese Wirklichkeiten aber alle die *eine* Welt, die von den einzelnen Subjekten auch jeweils in gleicher Weise erkannt werden kann, zur Basis haben, handelt es sich hier nicht um eine extreme Form von Solipsismus, die die üblichen folgen eines extremen Solipsismus nach sich zieht.

Es spricht wenig dafür anzunehmen, dass Wittgenstein zum Ausdruck bringen wollte, dass das Ich seine eigene empirische Welt, vielleicht gar die einzige tatsäch-

lich existierende Entität ist. Eine solche Annahme scheint aus den vorgenannten Gründen nicht zutreffend. Gleichwohl ist das Ich seine eigene Welt insofern, als seine Wirklichkeit so, wie die Welt von ihm wahrgenommen wird, von keinem anderen wahrgenommen wird. In den *Tagebüchern* heißt es, dass es eine Beziehung gibt "[…] zwischen meinem Geist, i. e. dem Geist, und der Welt. Bedenke nur, daß der Geist der Schlange, des Löwen, *dein* Geist ist. Denn nur von dir her kennst du überhaupt den Geist. Es ist nun freilich die Frage, warum habe ich der Schlange gerade diesen Geist gegeben. Und die Antwort hierauf kann nur im psychophysischen Parallelismus liegen: Wenn ich so aussähe wie die Schlange und das täte, was sie tut, so wäre ich so und so." [Tb, 15.10.1916] Das Ich erzeugt gleichsam als seine Wirklichkeit ein Abbild der Welt als seine eigene.

In diesem Sinne ist das Subjekt eine Voraussetzung der Existenz der Welt (der Wirklichkeit), ist es transzendental. "Das Ich tritt in die Philosophie dadurch ein, daß die »Welt meine Welt ist«." [TLP, 5.641] Wittgenstein identifiziert dieses Ich, das philosophische Ich, mit dem metaphysischen Subjekt, das kein Teil der Welt, sondern ihre Grenze ist.

Hier kommt auch die ethische Komponente dieser Konzeption zum Tragen. Wie und welche Grenze gezogen wird, hängt wesentlich vom guten oder bösen Wollen des Subjekts ab. Die Wirklichkeit ist somit nicht bloß ein Modell der Welt, sondern ein ethisches Modell der ethisch neutralen Welt. Dies ist der wichtigste Unterschied zwischen der Wirklichkeit und der Welt: während diese ethisch neutral ist, ist jene ethisch zu charakterisieren.

Literaturangabe

Bezzel, Chris [2]1989 *Wittgenstein zur Einführung*, Hamburg: Junius.

Black, Max 1971 *A companion to 'Wittgensteins Tractatus'*, London: Cambridge University Press.

Buchholz, Kai 2006 *Ludwig Wittgenstein*, Frankfurt/Main: Campus.

Finch, Henry Le Roy 1971 *Wittgenstein - The early philosophy. An Exposition of the "Tractatus"*, New York: Humanities Press.

Fogelin, Robert J. 1987 *Wittgenstein*, London: Routledge & Kegan Paul.

Kampits, Peter 1985 *Ludwig Wittgenstein. Wege und Umwege zu seinem Denken*, Styra: Graz/Wien/Köln.

Schulte, Joachim 2005 *Ludwig Wittgenstein. Leben, Werk, Wirkung,* Frankfurt/Main: Suhrkamp.

Schulz, Walter 1967 *Wittgenstein. Die Negation der Philosophie*, Pfullingen: Verlag Günther Neske.

Stenius, Erik 1969 *Wittgensteins Traktat. Eine kritische Darlegung seiner Hauptgedanken*, Frankfurt/Main: Suhrkamp.

Terricabras, Josep-Maria 1978 *Ludwig Wittgenstein. Kommentar und Interpretation*, Karl Alber: Freiburg/München.

Wittgenstein, Ludwig [12]1999 *Werkausgabe: Tractatus logico-philosophicus* [TLP, Tb], Band 1, Frankfurt/M.: Suhrkamp.

Wittgenstein, Ludwig [6]2001 *Werkausgabe: Wittgenstein und der Wiener Kreis* [WWK], Band 3, Frankfurt/M.: Suhrkamp.

Email: t.wachtendorf@googlemail.com

Culture and Value Revisited – Draft of a new electronic edition

Joseph Wang, Innsbruck, Austria

Since the publication of Ludwig Wittgenstein's *Vermischte Bemerkungen* (VB) in the year of 1977 by Georg Henrik von Wright, VB has always been a source of both inspiration and confusion. On the one hand, some of the remarks illuminate Wittgenstein's philosophy, but most of them are quite ambiguous and cannot be easily understood. In response to this difficulty the *Forschungsinstitut Brenner Archiv* in Innsbruck (FIBA) and the *Wittgenstein Archives in Bergen* (WAB) are collaborating on a new electronic edition of VB. This paper spells out aims and archievements of the project "Culture and Value Revisited".

1. *Culture and Value* – a Short History

It is well known that after the death of Ludwig Wittgenstein scholars found many valuable manuscripts in Wittgenstein's unpublished papers. Most of them have been published according to the main subjects they treat, e.g. *On Certainty*, or *Remarks on the Foundations of Mathematics*. While the topics of these publications are genuine philosophical concerns, there are other remarks by Wittgenstein which do not seem to fit into any certain category, or there are just too few of them and too scattered around the remains of Wittgenstein to be published together. Von Wright collected these remarks and published them as *Vermischte Bemerkungen* in the year 1977:

> In the manuscript material left by Wittgenstein there are numerous notes which do not belong directly with his philosophical works although they are scattered among the philosophical texts. Some of these notes are autobiographical, some are about the nature of philosophical activity, and some concern subjects of a general sort, such as questions about art or about religion. (Wittgenstein 1998, ixe)

In 1978 a second, expanded edition of *VB* was published by Prof. Wright. In 1980 Peter Winch translated the second edition; it was published under the title *Culture and Value* (CV). These editions have two flaws: First, only the year of the remark is printed, but the sources of these remarks aren't given; so it was very difficult to find the exact source of the remarks. Second, some of the remarks aren't transcribed correctly. So, in 1994 Alois Pichler edited and published a revised edition of VB, several errors of transcription were corrected in this version; and scholars can now find the source of every remark.

In 1998 Peter Winch translated Pichler's revised version again and thoroughly revised his own earlier translation. The commonly used version of CV, as far as I can tell, is this edition published by Blackwell which includes both the German text and the English translation.

The most important contribution of VB to understanding Wittgenstein's philosophy is its ability to fill in some gaps in our understanding. Though some scholars have suspected that the later philosophy of Wittgenstein is based, or at least inspired, by other philosophers, the publication of VB presents evidence for its origins in Wittgenstein's own thinking.

> I think there is some truth in my idea that I am really only reproductive in my thinking. I think I have never *invented* a line of thinking but that it was always provided for me by someone else & I have done no more than passionately take it up for my work of clarification. That is how Boltzmann Hertz Schopenhauer Frege, Russell, Kraus, Loos Weininger Spengler, Sraffa […] have influenced me. Can one take Breuer & Freud as an example of Jewish reproductive thinking?--What I invent are new *comparisons*. (Wittgenstein 1998, 16e)

Notes of this kind can fill up gaps in understanding Wittgenstein's later philosophy. Paradoxically, they do not do this without creating further gaps, as the following remark shows:

> There is definitely a certain kinship between Brahms & Mendelssohn; but I do not mean that shown by the individual passages in Brahms's works that are reminiscent of passages in Mendelssohn but the kinship of which I am speaking could be expressed by saying that Brahms does with complete rigour what Mendelssohn did half-rigorously. Or: Brahms is often Mendelssohn without the flaws. (Wittgenstein 1998, 18e)

No doubt, we can find even darker aphorisms in VB. The contexts in which Wittgenstein wrote the notes are not always clear, even after Pichler's edition. Neither is it possible to find out what Wittgenstein thought about Mendelssohn or Brahms just by reading VB.

2. The Project "Culture and Value Revisited"

In 2006 a new project on VB, based on the cooperation between WAB and FIBA was begun. Its aim is to overcome the difficulties described above. It is our hope that this can be best done by a new electronic edition of VB, enriched with other notes from other sources in Wittgenstein's papers, indices and full historical commentary.

In the 1990's WAB transcribed the philosophical remains of Wittgenstein (*Nachlaß*). They are published in the *Bergen Electronic Edition* (BEE). The subjects dealt with in VB are scattered throughout the whole BEE. In 2004 FIBA has published Wittgenstein's *Complete Correspondence* (*Briefwechsel*, BW) in an electronic edition. Letters written by and to W, with full historical commentary, are now available to scholars. It is not surprising that some of those letters are of philosophical importance, not to mention their value for the biographical research on W. In the new edition of VB we want to provide philosophers and cultural historians with the complementary information available from both BEE and BW as it will illuminate this specific publication from Wittgenstein's papers.

Let us take an example: Assuming a researcher wants to find out more about Brahms and W. In VB there are several remarks on Brahms: MS 153a.127v; MS 138.28a; MS 147.22r; MS 153a.128r; MS 154.24r; MS 156b.14v; MS 157a.45v. But the research will not be complete if the researcher missed one of the following pages: MS 121.6; MS 124.55; MS 156b.20; MS 161.61r; MS 183.10, 12, 59, 77f, 105ff. She will probably also want to take a look at those letters concerning Brahms: To Bertrand Russell [1913.10.25-11.28]; to George E. Moore [1914.03.10]; to Paul Engelmann (1917.04.09); to Rudolf

Koder [1930.01.21-02.28], to Hermine Wittgenstein [after 1931.11.01]; to Rudolf Koder (1935.09.04); to Helene Salzer (1947.01.16); to Helene Salzer [1947.12]; to Helene Salzer (1948.02.20)[1].

Of course, not every letter and every remark Wittgenstein made about Brahms is relevant to understanding Wittgenstein's view of Brahms, nevertheless all of them must be taken into account. So what we want to do is to support the readers, who do this kind of research, with the new electronic edition. Though we cannot provide indices for every possible topic, at least the index of persons (names) can be complete. References for some general themes and thematic concept fields will also be included in the electronic edition.[2]

What are the historical commentaries I mentioned above? Though this kind of commentary is common in the study of literature, within philosophical context it is seldom used. In general a comment is a piece of information the editors find to be helpful in understanding the text. Unlike commentaries in the Middle Ages the historical comments are not full interpretation of the text itself. But they are hints and references on the text which are relevant to establishing the text-immanent context for interpreting the text. We want to include three different kinds of commentaries in VB.

First, there will be contextual comments. These comments are linked to a certain remark. E.g. if Wittgenstein is speaking of Brahms, we explain who Brahms was, identifying his dates of birth, death etc. as well as providing specific information about the given remark inasmuch as such information exists. A few comments of this kind can already be found in Wittgenstein (1998), e.g. note i, p. 15e, where Winch explains what a "Rösselsprung" is.

Second, we want to provide general background information about some of the specific topics Wittgenstein speaks about. Taking Brahms as an example again, a short biography on Brahms will be included. Information on books, on music pieces and on several geographical places will be also embedded in a similar way. These comments should facilitate understanding of VB and help prevent misunderstandings of the remarks.

Third, there are general comments on the VB itself. While comments of the first kind are somehow like footnotes, notes of the second kind have similarity with glossary or appendices of a book, comments of the third kind are written as short essays. These essays take e.g. the genesis of VB, the English translation of the remarks or the editorial processes as their subjects.

3. An Electronic Edition

Due to the nature of this project, we believe that an electronic edition of VB will be the most viable way of publishing for two major reasons:

1. *The availability of the sources*: The literary remains of W, BEE and BW, are both already digitalized. So the "preparation" of an electronic book is already done.

2. *The practical handling of the indices and the comments*: While we do think that a printed book – just due to the fact that it is printed – has many advantages over an electronic publication, we do not think that in the case of VB they would outweigh the problems with paper: Printed indices are very difficult to handle. We will have different volumes: The core VB, the letters, the other remarks from BEE and the indices. They can be reduced to a link table containing all the links between the different parts. The index can be accessed easily from everywhere and will be the core of the text nexus.

There are also some benefits for the "electronic approach". In this paper I want to mention two of them:

1. *Possibilities for corrections and additions*: We all know that it is difficult to do corrections to a printed work, or to cite different editions of the same work. Within an electronic publication corrections and additions are done by "correction tables". We can practically update the information daily and keep tracks of earlier versions at the same time. In principle (and I hope also in practice) earlier versions can be (re-)created easily. According to the date of access, as it is usually stated in the citation of an online resource, we can reconstruct the original text. This will replace the need for different editions of VB.

2. *Possibilities for a later printed publication*: There should be no textual differences between an electronic edition of a book and its printed equivalent. There are however practical differences concerning "links" in both versions. In the traditional publishing links within a book are usually references between pages or chapters of the book. Within an online edition links are just hyperlinks between different anchor-points. Since these hyperlinks can be converted to page references easily, but page references cannot be converted to hyperlinks automatically, starting with the electronic edition will probably ease the work on the printed edition, but not vice versa.

As for the technical issues: We are using XML-technology[3] to encode the texts, following the TEI-Guidelines in the fifth edition (P5)[4].

For two aspects the electronic edition of VB can be regarded as a pilot project. On the one hand, since VB contains only a small number of remarks, we can check the technical feasibility of a complete linkage between BEE and BW. The idea is to create indices which link both to BEE and to BW. If the electronic edition of VB is successful, then a new edition of BEE and BW will contain every known philosophical remain of W, and this is definitively a help for researchers.

On the other hand, we want to see whether the XML-TEI technique is suitable for digital archiving. Right now, most digital archives only digitalize different documents as digital images, but they do not transcribe the documents into (searchable) files. But within literary archives (like FIBA and WAB – i.e., as opposed to archives containing state documents) transcribing is a central activity. The XML-TEI-format seems to be the best choice. Unlike – say – MS-Word-format the XML-technology is more flexible. Though the encoding process in XML is not as easy as in other standard word processors, the semantic loaded mark-ups (e.g. <author>, or <sourceDesc>) can help to do refined searches within the archive database.

---

[1] References to the letters are written according to Wittgenstein 2004.
[2] Please refer to the paper of Kerstin Mayr, Innsbruck, Austria, in this volume. Her analysis of VB is the base for the registries.

[3] See the XML-Specification from the W3-Consortium in "http://www.w3.org/TR/2006/REC-xml-20060816/" (2007-04-30).
[4] See The TEI-Consortium: "http://www.tei-c.org/", Sperberg-McQueen / Burnard 2007.

Literature

Sperberg-McQueen, C. M. / Burnard Lou 2007 *TEI P5, Guidelines for Electronic Text Encoding and Interchange*, Oxford, Providence, Charlottesville, Nancy. Available as online-resource: "http://www.tei-c.org/release/doc/tei-p5-doc/html/" (2007-04-30).

Wittgenstein, Ludwig 1998 *Culture and Value, A Selection from the Posthumous Remains,* edited by Georg Henrik von Wright in Collaboration with Heikki Nyman, revised edition of the text by Alois Pichler, translated by Peter Winch. Oxford: Blackwell.

Wittgenstein, Ludwig 2004 Briefwechsel. Innsbrucker elektronische Ausgabe 2004. Herausgegeben von Seekircher, Monika, McGuinness, Brian, Unterkircher, Anton. Internet-Ressource: "http://library.nlx.com/" (16.05.2007).

Email: joseph.wang@uibk.ac.at

Wittgenstein and Kant on Judgments of Taste: Situations versus Faculties

Christian Helmut Wenzel, Puli, Taiwan

Both Kant and Wittgenstein said aesthetics could never be a science, a science that would tell us which objects are beautiful and which are not. Wittgenstein said: "You might think Aesthetics is a *science* telling us what's beautiful – almost too ridiculous for words. I suppose it ought to include also what sort of coffee tastes well" (LC II 2); and Kant wrote: "The Germans are the only people who currently make use of the word 'aesthetic' in order to signify what others call the critique of taste. This usage originated in the abortive attempt made by Baumgarten, that admirable analytical thinker, to bring the critical treatment of the beautiful under rational principles, and so to raise its rules to the rank of a *science*. But such endeavours are fruitless." (CPR, A21/B35) Thus both philosophers share the view that aesthetics is not a science. They also share a concern with language, Kant in his theory of judgment, Wittgenstein in his language games.

Despite these points of agreement, Wittgenstein and Kant reacted to different ideas, and they suggested different alternatives. Kant reacted to Baumgarten and the rationalists in general, who tried to reduce sensibility to reason. Wittgenstein thought that looking at judgments like "This X is beautiful" is taking a much too narrow perspective. He said that a word such as "beautiful" is "entirely uncharacteristic" (LC I 5) and that it is only people "who can't express themselves properly" that "use the word ['lovely'] very frequently" (LC I 9). When offering alternatives, Kant, on the one hand, offered an analysis of our ability to make judgments of taste, an analysis he carried out with regard to the categories and with the aim of revealing new *a priori* grounds for our power of judgment. Wittgenstein, on the other hand, pointed out the need to pay more attention to the complexities of situations in which aesthetic judgments are made and in which the more fine-tuned reactions and expressions occur, such as "Look at this transition", "The passage here is incoherent", "His use of images is precise" (LC I 8). He even, and more importantly, pointed out the relevance of gestures and facial expressions, which are much more fine-tuned than words. Kant and Wittgenstein thus pursued different projects, one examining our *faculty of judgment*, the other *situations* and *expressions*.

Kant focused on the judgment "This is beautiful", whereas Wittgenstein dismissed the relevance of the word "beautiful" and emphasized the relevance of the situation in which it is used: "We are concentrating, not on the words 'good' or 'beautiful', which are entirely uncharacteristic, generally just subject and predicate ('This is beautiful'), but on the occasions on which they are said – on the enormously complicated situation in which the aesthetic expression has a place, in which the [verbal] expression itself has almost a negligible place" (LC I 5). Would Wittgenstein dismiss Kant's analysis of the judgment of taste as well? In defense of Kant we can say that, although he focused on judgments of taste of the form "This X is beautiful", he certainly did not get entangled in an analysis of the word "beautiful", nor of sentences in which it occurs. Rather, he studied our ability to make such judgments and what this ability involves and requires.

As I see it, the main difference between Kant and Wittgenstein on judgments of taste is that Wittgenstein keeps looking for expressions, more and more fine-tuned expressions in words, gestures and facial expressions, whereas Kant freely makes use of concepts of mental faculties, such as 'imagination' and 'understanding'. This is the difference between looking at expressions and situations versus looking at faculties and subjective grounds for making judgments of taste.

Wittgenstein pays attention to the details of particular social and cultural *situations* in which aesthetic reactions have their place and in which expressions are used (words) or made (gestures and faces). He looks *outside*, while Kant looks also *inside*. Although Kant did not want to do psychology, certainly not empirical psychology, it is nevertheless difficult to deny psychological elements in his transcendental philosophy, especially the aesthetics-part of his third *Critique*, which is about feelings such as the "relation to the feeling of pleasure and displeasure, by means of which … the subject feels itself" (CPJ, par. 1). For Kant 'imagination' and 'understanding' are concepts that have *explanatory power*. He takes it as a fact that we all have imagination and understanding and that they have certain *functions*: Imagination is the faculty of intuitions and understanding the faculty of concepts. He subscribes to this set-up and operates, thinks and argues in these terms. Wittgenstein, at least the later Wittgenstein, did not do any such thing.

The crucial question here is what a theory in terms of faculties, a theory such as the one we have in Kant, can *explain*. Kant makes use of *idealized* notions, such as 'disinterestedness' and 'claim to universal agreement'. Not everyone would agree that such elements are at work in aesthetic experience. I once heard a Viennese musician exclaim that there is no such thing as 'disinterestedness' in listening to great music, and someone else told me that he never makes any such 'claims to universal agreement' in his aesthetic judgments. Kant's accounts are certainly idealizing. Nevertheless, for him these elements underlie judgments of taste and are essential to it. Without them you simply do not have a judgment of taste. This view was not uncommon in Kant's time. But for him they are also "moments" of a judgment of taste, a Kantian idiosyncrasy based on his theory of the "categories of pure understanding". Kant thus developed the "free play of imagination and understanding" and found the *a priori* "principle of subjective purposiveness". All of this is idealizing, theory laden, and somewhat constructed.

Wittgenstein would never have embarked on such a transcendental voyage. It would have been too speculative and too metaphysical for his taste. We seem to get a feeling for this from his remarks about Freud, whose theory of dreams he criticized for its lack of evidence and its speculative nature. "Take Freud's view that anxiety is always a repetition in some way of the anxiety we felt at birth. He does not establish this by reference to evidence – for he could not do so. But it is an idea which has a marked attraction. It has the *attraction* which *mythological explanations* have … And when people do accept or adopt this, then certain things seem much clearer and easier for them.

So it is with the notion of the unconscious also." (LC p. 43). These are strong criticisms. Would they also apply to Kant's theory, which involves the categories, disinterestedness, the claim to universality, the free play of imagination and understanding, and so on? Does Kant's theory have "the attraction which mythological explanations have"? Is it some kind of sophisticated mythological explanation?

The Kantian concepts certainly are not easy to grasp and they do not have an "attraction" for the general public. They might have an attraction for some philosophers, though, scholars who have worked themselves into the Kantian system and feel at home there. For them the Kantian concepts often do have an attraction and make "certain things seem much clearer and easier". But these "things" are then not nightmares, dreams, or feelings of guilt. Rather they are other concepts from the Kantian philosophical system. But do things go further than that? Do also some "things" from our *every-day lives* "seem much clearer and easier" once we understand Kant's theory and apply it? Here we could point at genius, art, aesthetic ideas, free and dependent beauty, and morality. To all these, Kant applied his general theory of taste, and not without success. His theory seems not without use.

Wittgenstein said of Freud that he established his theory of dreams not "by reference to evidence – for he could not do so". Does Kant fare better here? Could he provide evidence? Can we? And what evidence would that have to be? Freud looked for causes, Kant for reasons and grounds. Freud wanted a science, Kant a transcendental philosophy. Thus Wittgenstein's criticisms do not so easily carry over to Kant.

Psychology is not physics, nor is it the same as aesthetics. In physics we have strict laws, such as the laws of causality. In psychology we might hope to find such laws, but we don't, and hence we "feel there is something unsatisfactory" (LC 42). Freud cannot show the necessity of the connections he is pointing out. He cannot show what the real causes are. "This procedure of free association and so on is queer, because Freud never shows how we know where to stop – where is the right solution" (LC 42). The explanations Freud gives might be simply wrong, mere speculation and 'superimposed interpretations' (LC 44). Nevertheless, they are attractive and tempting because certain things seem to make sense once one has accepted them. The explanations might be comforting, giving us excuses. When interpreting a painting for instance, we can say that this hat is a phallic symbol, and this can be convincing. But "the fact that we are *inclined* to recognize the hat as a phallic symbol does not mean that the artist was necessarily referring to a phallus in any way when she painted it" (LC 44). Wittgenstein accuses Freud of counting on such inclinations. Even *dis*-inclinations, he points out, have an element of inclination in them (LC 43), and Freud makes "intelligent" but illegitimate use of this. "To learn from Freud you have to be critical; and psychoanalysis generally prevents this" (LC 41).

But Kant's analyses usually do not affect us in this way. They are more abstract and not about dreams and sexuality. They are not so "attractive" and comforting. But certain passages in Kant might make one wonder whether one is dealing with some kind of 'superimposed interpretation' (LC 44) as well. For instance, at the beginning of section six of the third *Critique*, where Kant gives an argument for the judgment of taste's claim for universal agreement, he dangerously shifts from third-person to first-person perspectives. By way of empathy, he presents an argument as actually being made by – and somehow within –

the subject that makes a judgment of taste: "The beautiful is that which … is represented as the object of a *universal* satisfaction. This definition of the beautiful can be *deduced* from the previous explanation of it as an object of satisfaction without any interest. For *one cannot* judge that about which he is aware that the satisfaction in it is without any interest in his own case *in any way except* that it must contain a ground of satisfaction for everyone. For since it is not grounded in any inclination of the subject …, but rather the person making the judgment *feels himself completely free* with regard to the satisfaction that he devotes to the object, he *cannot discover* as grounds of the satisfaction any *private* conditions, pertaining to his subject alone, and *must therefore regard it* as grounded in those that he can also presuppose in everyone else; consequently he *must believe himself to have* grounds for expecting a similar pleasure of everyone." (CPJ, § 6) Here a logical argument – if not in me (personally), then necessarily in everyone (universally) – is imbedded (by Kant?) in an act of reflection supposedly taking place within the subject who is in a state of aesthetic contemplation and makes a judgment of taste. Kant first argues more from the outside, that one can "deduce" something and that one "*cannot* judge" such and such "in any way *except* that" so and so. Then he repeats the argument, but this time more from the inside, taking on the role of the judging subject, getting into his skin, and thereby discovering what grounds he, the judging subject, "*must believe* himself to have" to make a judgment of taste. But why should *that man* need to look for any grounds at all? And even if he did, why should he have to follow the way of reasoning Kant suggests? Might this not be similar to taking the painting of a hat to be referring to a phallus? Might this way of reasoning, similar to the reference to a phallus, not be superimposed and projected?

Kant later on, in section nine, gives another argument for the claim to universal agreement, one that offers new grounds for this claim. (For a comparison of the two arguments, see Wenzel, p. 27-30). But these grounds turn out to be a certain 'play of our faculties of cognition, imagination and understanding,' and the '*a priori* principle of subjective purposiveness'. One again wonders whether these grounds might not be 'superimposed interpretations' (LC 44) or some kind of metaphysical *deus ex machina*. – But what kind of "evidence" can we reasonably look for in a transcendental philosophy? Freud is looking for causes, Kant for grounds. Thus Freud can be pressed for experimental evidence, not so Kant.

In the context of his criticisms of Freud, Wittgenstein says that "aesthetic questions have nothing to do with psychological experiments, but are answered in an entirely different way" (LC II 36). For him, aesthetics is not about tracing mechanisms and causality. Thus the more Wittgenstein sees Freud as a (pseudo-) scientist trying to find mechanisms and causal connections, the more he not only remains skeptical about his theory of dreams but also sees psychology – at least Freud's psychology – as different from aesthetics (LC III 8, 11). But what then is aesthetics? Would Kant's theory not be a suitable one?

Wittgenstein says that we have to learn many things (such as harmony in the case of music) in order to "get a more and more refined judgment" (LC I 15). Kant would most likely agree. But he was interested in our basic ability to make judgments of taste, and not in empirical ramifications. Wittgenstein, looking at some such ramifications, namely particular situations, says that they are so complex that it is impossible to describe them (LC I 20). So he leaves it there.

As Hume was skeptical about causality, so Wittgenstein was skeptical about dream connections: Both Hume and Wittgenstein were skeptical about certain alleged *necessities* (in causality and in our dreams). Kant tried to make progress over Hume by asking more radically (within his transcendental philosophy, based in particular on his notion of subjectivity of time and space) for the conditions of the possibility of our perceiving and understanding causal events *in the first place, as such.* It is in this sense that we should also understand his *a priori* principle of aesthetics. But Wittgenstein did not go in for so dramatic a transcendental turn, or transcendental twist (against Freud, for instance). Although he did show some sympathy for considering motives, justification, and the court of law in this context (see LC III 12-16) – which would bring us closer to Kant – he does not develop this into an aesthetic theory. Kant did.

Literature

Kant, I. 1929 (1781/87), *Critique of Pure Reason*, translated by Norman Kemp Smith, Macmillan & Co., Ltd.

Kant, I. 2000 *Critique of the Power of Judgment*, translated by Paul Guyer and Eric Matthews, Cambridge University Press.

Lewis, P. B. (ed.) 2004 *Wittgenstein, Aesthetics and Philosophy*, Ashgate.

Wenzel, C. H. 2005 *An Introduction to Kant's Aesthetics, Core Concepts and Problems*, Blackwell.

Wittgenstein, L. *Lectures and Conversations on Aesthetics, Psychology, and Religious Belief*, edited by Cyril Barrett, University of California Press.

Email: wenzelchristian@yahoo.com

A Note on Wittgenstein and Nietzsche

Peter K. Westergaard, Copenhagen, Denmark

0. Introduction

It is well known that Wittgenstein's thought was influenced in a number of respects by the religious writings of Tolstoy. We are all familiar with Russell's story about Wittgenstein buying a copy of Tolstoy's *The Gospel in Brief* in a bookshop in Tarnow in August or September 1914. We have all heard that among his fellow soldiers he was known as "the one with the Gospel". And we have all heard of Wittgenstein's reference to Tolstoy in his letter to the despairing Ficker: "You are living, as it were, in the dark and have not found the saving word. […] Are you acquainted with Tolstoi's *The Gospel in Brief*? At its time, this book virtually kept me alive" (Monk 1990,132). Less well known is that, while in Cracow – and just a few months after buying Tolstoy's reconstruction of Christ's teachings – Wittgenstein procured a copy of Volume 8 of Friedrich Nietzsche's *Works*. It is unclear whether the Volume 8 referred to was that of F. Koegel's *Gesamtausgabe* (1895–1897) or that of A. Seidl's *Grossoktav Ausgabe* (1899–1913). Both contain the same selection of texts written in Nietzsche's last active year (1888), including the works that are known in translation as *The Case Wagner* and *Twilight of the Idols*, Nietzsche's condensed summary of his philosophical views. Nietzsche himself described *Twilight* as "a very stringent and subtle expression of my whole *philosophical heterodoxy*"(SL 311). Volume 8 of Nietzsche's works also contains *The Antichrist*, which contains in turn his summary critique of Christianity – more generally, his "Revaluation of all values!"

We know that Wittgenstein at least dipped into the works Nietzsche wrote in 1888, and that they made a deep impression on him. On 8 December 1914, Wittgenstein noted: "Am very troubled by his animosity towards Christianity. For his writings also contain an element of truth" (GH,49-50). Some two decades later, Nietzsche's capacity to trouble Wittgenstein had not diminished. T. Redpath tells us that discussions he had with Wittgenstein left him with the impression that Wittgenstein had read a lot of Nietzsche. On the subject of the writing talent of philosophers, Redpath asked Wittgenstein which philosophers he considered the most impressive authors. Wittgenstein's prompt reply was "Nietzsche". Redpath goes on to say: "When I told him I had read a certain amount of Nietzsche and asked what he thought of his general world view, he said that he didn't think there was much 'consolation' to be had from it – it was 'too shallow'" (Redpath 1990,41-42). Evidence that Wittgenstein's responses here were not just plucked from thin air can be found in his own notes, among which we find many direct and indirect references to themes characteristic of Nietzsche's philosophy. Indeed, there is a great deal to suggest that over the years Wittgenstein read widely – even if only sporadically – in Nietzsche's works.

In the following I shall offer a few examples of these direct and indirect references. I shall however refrain from drawing any forceful conclusions on the possible extent of Nietzsche's influence on Wittgenstein. That being said, in light of these examples and other considerations I find it hard to avoid the impression that an element of influence does exist and that it may well run deeper than has hitherto been assumed. It is a possibility. But back to Redpath.

1. Is Wittgenstein's Wagner Nietzsche's Wagner?

Redpath's conjecture that Wittgenstein was to some extent familiar with Nietzsche's thought finds support in a number of comments on the French composer Georges Bizet. The impression of these is that Wittgenstein thought highly of Bizet. Moreover, Wittgenstein mentions that Bizet's compositions appealed to Nietzsche as a kind of "Southern music", in contrast to Richard Wagner's "Northern music" (Redpath 1990,56). This remark is a reference to Nietzsche's comparison of the two composers in the aforementioned pamphlet *The Case Wagner* and to his use in making that comparison of meteorological phenomena and Nordic and Mediterranean scenery as metaphors. If we follow this lead by taking a closer look at Wittgenstein's occasional remarks about Wagner, we notice that the latter show very clear parallels to Nietzsche's critique of Wagner in his text on that composer.

Let me summarise Nietzsche's position. In *The Case Wagner*, the eponymous composer is described as "a typical decadent". Or, as Nietzsche puts it in his comparative remarks: Bizet redeems us into and is a redeemer of life's abundance, whereas Wagner's art redeems us from life, the life that is marked by infirmity and weakness. The same is also apparent in Wagner's style (a literary decadence), especially in its tendency to disintegrate and in its use of rhapsodic and fragmentary forms. His style is characterised by a lack of organic (unified) structure and relies instead on the arrangement of its component elements to achieve unity. For Nietzsche, Wagner's talent lay in his evident ability to invent and exploit small thematic units, to make them conspicuous and imbue them with life. "Once more: Wagner is admirable and gracious only in the invention of what is smallest, in spinning out the details. Here one is entirely justified in proclaiming him a master of the first rank, as our greatest *miniaturist* in music" (CW 171). But this comment also indicates the limits of Wagner's talent, to the effect that he is incapable of creating a dramatically – epically – coherent whole from these miniatures. And this Nietzsche views as a characteristic of literary decadence: "[T]he anarchy of atoms, disgregation of the will" (CW 170). Here the organising force is in decline. Nietzsche writes: "How wretched, how embarrassed, how amateurish is his manner of 'development', his attempt to at least interlard what has not grown out of each other" (CW 170). "The whole no longer lives at all: it is composite, calculated, artificial, and artifact –" (CW 170).

Turning now to Wittgenstein, we find that he shares Nietzsche's scepticism about Wagner's talent. For example, Wittgenstein considers Wagner's use of irony to be lacking in depth, in contrast to that of Beethoven (CV 55). Wagner's irony often assumes a bourgeois aspect (CV 81). Nietzsche would have said a decadent aspect. The two philosophers agree that Wagner is an unusually skilful composer, but he is not an extraordinary artist. Wittgenstein notes: "Genius is what makes us forget skill. Where genius wears thin skill may show through. (Overture to the Mastersingers.)" (CV 43). Moreover, Wittgenstein agrees with Nietzsche's claim that "Wagner is *no* dramatist" (CW 175). In Wittgenstein's words: "In the days of silent films all kind of classical works were played as accompaniments, but not Brahms or Wagner. Not Brahms, because he is too

abstract" (CV 25). But apart from restating Nietzsche's crucial point, that Wagner's works show a lack of epic coherence, Wittgenstein also paraphrases Nietzsche's idea that Wagner's works show greatness only in terms of their loosely connected miniatures. In 1941 Wittgenstein wrote: "Wagner's *motifs* might be called musical prose sentences. And just as there is such a thing as 'rhyming prose', so too these *motifs* can be joined together in melodic form, without their constituting *one* melody. Wagnerian drama too is not drama so much as an assemblage of situations strung together as though on a thread which, for its parts, is merely *cleverly* spun and not inspired as the motifs and situations are" (CV 41).

2. Miscellaneous remarks

We find many other examples in a similar vein. Several of them refer or allude to philosophical themes or lines of argument that are central to Nietzsche's work. In some cases Nietzsche is referred to explicitly, as for example when Wittgenstein attempts to characterise his own thought and its place in the history of ideas. He refers to Nietzsche as an obvious point of comparison. In 1931 Wittgenstein wrote: "There are problems I never get anywhere near, which do not lie in my path or are not part of my world. Problems of the intellectual world of the West that Beethoven (and perhaps Goethe to a certain extent) tackled and wrestled with, but which no philosopher has ever confronted (perhaps Nietzsche passed by them)" (CV 9). On the subject of Nietzsche's achievements, and referring to the concept of nihilism and the overarching programmatic intention of the 1888 works, Wittgenstein wrote several years later: "Our age is truly one of the revaluation of all values. (The procession of humanity turns a corner & what was formerly an upward direction is now a downward direction etc.) Did Nietzsche have in mind what is now happening & does his achievement consist in having anticipated it & finding a word for it?" (DB 35-36).

I could add further examples to support the claim that Wittgenstein was familiar with more than just the 1888 works. One striking point in this respect concerns the *Tractatus*, insofar as we can ask whether that work's dramatic concluding remark, "Whereof one cannot speak, thereof one must be silent" (TLP 7) – which is also anticipated in the foreword to the *Tractatus* – can be viewed as taking up the same theme as introduced by Nietzsche – "*Where silence is demanded*" (HAH II 218) – or as a reformulation of the opening words, written in 1886, of the foreword to the second part of *Human, All too Human*, where Nietzsche writes: "One should speak only when one may not stay silent; and then only of that which one has overcome – everything else is chatter, 'literature', lack of breeding" (HAH II 209).

It is remarks such as these that tend to be ignored in the first of four typical responses to the question "Wittgenstein and Nietzsche?". This is superbly illustrated by Allan Janik and Stephen Toulmin, who fail to discuss Nietzsche in their celebrated work on the intellectual and culture-historical background to Wittgenstein's philosophy. It is an omission that is rendered all the more striking by more recent studies of Viennese culture, studies that accord Nietzsche a place as an obvious and significant variable. A different response from that of Janik and Toulmin can be found in isolated monographs and inquiries that seek to establish linkages of a more structural kind between Wittgenstein and Nietzsche, first emphasized by Eric Heller. Perhaps the most recent example is provided by S. Mulhall – who also brings in M. Heidegger. Mulhall writes: "these thinkers wish to retain or reconstruct an originally Christian conception of ourselves as in need of redemption from ourselves" (Mulhall 2005,120). In addition to these two approaches there is the more common trend of impressionistic comments about the similarities between the two philosophers. Here I am thinking of remarks like that of Bernard Williams, in which he views Wittgenstein and Nietzsche as sharing "a particular idea, that the ego or self is some kind of fiction" (Williams 2006,303-304).

3. Is "the inexpressible" (that which "shows itself") in the *Tractatus* the same as Nietzsche's "sign language" in *The Antichrist*?

The fourth and final approach to the question "Wittgenstein and Nietzsche?" is exemplified by Ray Monk, who, as is well known, seeks to establish that Wittgenstein was *directly* "influenced" by Nietzsche, and more precisely by *The Antichrist*. Monk views Wittgenstein's purchase of Volume 8 of Nietzsche's *Werke* as significant and explores the impact of this literature. Despite being troubled by Nietzsche's animosity towards Christianity, Wittgenstein acknowledges that Nietzsche's analysis contains an element of truth, although he does not relinquish the view that Christianity is "the only sure way to happiness". – "But what if someone spurns this happiness?! Might it not be better to perish unhappy in a hopeless struggle with the external world? Yet such a life is without meaning. But why not lead a meaningless life? Is it unworthy? […] But what must I do to prevent my own life being lost to me?" (GH 50). – Here Wittgenstein appears to be reflecting on the alternative offered by Nietzsche's philosophy of life. Which means he reflected on whether or not that alternative might be a source of help in coping with an unbearable and meaningless life.

Wittgenstein's reflections on this topic are concerned not with the extent to which Christianity or Nietzsche's alternative is true when viewed as a theory or an intellectual conviction, but rather with the ways these "philosophies" might help to heal the "sick soul" when viewed as concrete and practical approaches to life. This approach corresponds to that of Tolstoy in *The Gospel in Brief*, but also resembles the perspective that Nietzsche suggests, when, in *The Antichrist*, he makes the point that Christianity is not an intellectual attitude so much as a practice: "It is not a 'faith' that distinguishes the Christian: the Christian *acts*" (A 606). "It is false to the point of nonsense to find the mark of the Christian in a 'faith' […]: only Christian *practice*, a life such as he *lived* […]. Not a faith, but a doing […]. To reduce being a Christian, Christianism, to a matter of considering something true, to a mere phenomenon of consciousness, is to negate Christianism" (A 612-613). It is this emphasis in *The Antichrist* that leads Wittgenstein to conclude that there is some truth to Nietzsche's account. Monk writes: "The idea that the essence of religion lay in feelings (or, as Nietzsche would have it, *instincts*) and practices rather than beliefs remained a constant theme in Wittgenstein's thought on the subject for the rest of his life. […] [I]n the words and figure of Christ, [Christianity] provided an example, an attitude, to follow, that made suffering bearable" (Monk 1990,123).

Monk's argument can be taken further by noting that the view of Christ as an example to be followed leads our attention to Nietzsche's reconstruction and characterisation of "the type of the Galilean". In addition to the descriptions of Jesus in *The Antichrist* as "a free spirit", a "holy anarchist" and "this anti-realist", he is also characterised as "a symbolist par excellence". In Nietzsche's view, the pe-

culiarity of Jesus' statements is that they have to be viewed as a form of "sign language". In other words: "For this anti-realist, that not a word is taken literally is precisely the presupposition of being able to speak at all". When taken literally, the word *kills*. "The concept, the *experience* of 'life' in the only way he knows it, resists any kind of word, formula, law, faith, dogma. He speaks only of the innermost: 'life' or 'truth' or 'light' is his word for the innermost – all the rest, the whole of reality, the whole of nature, language itself, has for him only the value of a sign, a simile" (A 605).

With these formulations in mind, we can elaborate Monk's point. For one of the things which *The Antichrist* connects with the notion of religion as a kind of practice is the idea of a special form of linguistic usage: that of indirect "symbolism". Which brings us to the question of whether there is a relationship between the familiar distinction in the *Tractatus* between the scientific / descriptive sentences and the stammering articulations of "the feeling" (TLP 6.45), of that which is in principle "inexpressible", and typical of religious sentences. To put it another way: is there a line of connection – or are we dealing merely with a chance similarity – between, on the one hand, Nietzsche's description of "this great symbolist [Jesus]", who "accepted only *inner* realities, as 'truths'", and who understood "everything natural, temporal, spatial, historical, only as signs, as occasions for parables"(A 607), and, on the other, Wittgenstein's view "that ethics cannot be expressed. Ethics is transcendental" (TLP 6.421) and his description of language's ability to *show* this aspect of experience (*a*theoretically and non-empirically) in its running against the limits of language? Is there a line of connection between Nietzsche's talk of "an existence that was swimming in symbols and incomprehensibilities"(A 603) and Wittgenstein's talk of "the mystical feeling" (TLP 6.45), "the inexpressible [, which] *shows* itself" (TLP 6.522)? One thing is certain: with the *Tractatus*' description of the mystical in mind, we immediately grasp Nietzsche's characterisation of Jesus as the great symbolist.

4. Is Wittgenstein's St Paul Nietzsche's St Paul?

I shall conclude by briefly pointing out that also Wittgenstein's remarks on St Paul bear certain resemblances to the polemic comparison in *The Antichrist* of the apostle with Jesus. Nietzsche portrays St Paul as being of "the opposite type to that of the 'bringer of glad tidings'," as "the genius in hatred" (A 617), and as the figure who reformulates Christian practice as theory and dogma. A theoretical or doctrinal exposition constitute St Paul's "means to priestly tyranny" (A 618), his will to power. Parallel to this we could place, firstly, Wittgenstein's veneration for Tolstoy's interpretation of the Gospel message as a matter of intimate, simple, shared existence, and secondly his apparent agreement with Tolstoy's critique of the way the church has institutionalised practice and faith and turned them into dogma and that writer's aversion to the established church as an agency of (political) power.

Wittgenstein rehearses these ideas in a variety of ways. Several of them are sounded in the following remarks, which conclude with an echo of Nietzsche's declaration – in the 1888 works – that the sense of smell, the nose, is one of the most "magnificent instruments of observation" (TI 481). In 1937 Wittgenstein wrote: "The spring which flows gently and limpidly in the Gospels seems to have *froth* on it in Paul's Epistles. Or that is how it seems *to me*. […] [T]o me it's as though I saw human passion here, something like pride or anger, which is not in tune with the humility of the *Gospels*. It's as though he *is* insisting here on his own person, *and doing so moreover as a religious gesture*, something which is foreign to the Gospel. I want to ask […]: "What might Christ have said to Paul?" […] In the Gospels – as it seems to me – everything is *less pretentious*, humbler, simpler. There you find huts; in Paul a church. There all men are equal and God himself is a man; in Paul there is already something like a hierarchy; honours and official positions. – That, as it were, is what my NOSE tells me" (CV 30).[†]

Literature

Heller, Eric 1988 "Wittgenstein and Nietzsche" in: *The importance of Nietzsche. Ten Essays*, Chicago: The University of Chicago Press, 141-157.

Monk, Ray 1990 *Ludwig Wittgenstein. The Duty of Genius*, London: Jonathan Cape.

Mulhall Stephen 2005 *Philosophical Myths of the Fall*, Princeton: Princeton University Press.

Nietzsche, Friedrich 1967 *The Birth of Tragedy and The Case Wagner*, New York: Vintage Books. (CW)

Nietzsche, Friedrich 1982 *The portable Nietzsche*, Middlesex: Penguin Books. (A) & (TI)

Nietzsche, Friedrich 1986 *Human, All too Human*, Cambridge: Cambridge University Press. (HAH)

Nietzsche, Friedrich 1996 *Selected Letters*, Indianapolis: Hackett Publishing Company. (SL)

Redpath, Theodore 1990 *Ludwig Wittgenstein. A Student's Memoir*, London 1990: Duckworth.

Williams Bernard 2006 "Nietzsche's Minimalist Moral Psychology" in: *The sense of the Past*, Oxford: Princeton University Press, 299-310.

Wittgenstein Ludwig 1983 *Tractatus Logico-philosophicus*, London: Routledge. (TLP)

Wittgenstein Ludwig 1984 *Culture and Value*, Oxford: Basil Blackwell. (CV)

Wittgenstein Ludwig 1992 *Geheime Tagebücher 1914-1916*, Wien: Turia & Kant. (GH)

Wittgenstein Ludwig 1997 *Ludwig Wittgenstein. Denkbewegungen*, Innsbruck: Haymon. (DB)

Email: pkwest@hum.ku.dk

[†] My thanks to Peter Cripps for his translation of this paper.

Diffidere aude – Wahrheit im Internet und der Konsens der Netzgemeinschaft

Christian Zelger, Schlanders, Italien

1. Problemstellung

1991 wurde die private und kommerzielle Nutzung des Internet-Backbone der National Science Foundation gestattet und das World Wide Web geht über das CERN ins Netz (MÖLLER 2006, 53; ZAKON 2001). Erstmals in der Geschichte der Menschheit war es möglich, Raum und Zeit aufzuheben, da es das Internet gestattete, Daten, wo immer sie gespeichert waren, potentiell von jedem Punkt der Erde zu jeder Zeit abzurufen. Bereits Mitte der 90er Jahre wurde – nach einen kontinuierlichen Wachstum der Inhaltsmenge und der Benutzeranzahl – deutlich, dass diese Möglichkeit und damit Freiheit auch missbraucht werden kann. Konkret zeigte sich dies in Inhalten, deren Existenz im Internet aus unterschiedlichen Gründen problematisch war (ZELGER 1999, 40f.). Damit gehörte das Thema Zensur zu den brennendsten der frühen Internet-Geschichte und es wurde sowohl unter technischen, juristischen, politischen als auch ethischen Gesichtspunkten behandelt. Wenige Autoren haben sich damals für eine Zensur ausgesprochen (SEIM/SPIEGEL 1999, 289), Kampagnen wie die „Blue Ribbon Campaign" überwogen und setzten sich gegen eine von oben gelenkte Kontrolle des demokratischsten Mediums (WEGENER 1996) ein.

Die Praxis zeigt, dass das Internet zunehmend zur primären Informationsquelle unserer Gesellschaft wird. Sowohl in Schulen als auch immer häufiger unter Journalisten (WEBER 2007, 17f. und 20ff.) ist das Internet meist die erste und oft auch einzige Recherchequelle. Umso wichtiger wird damit die erkenntnistheoretische Auseinandersetzung mit dem Medium und seinen Inhalten. Wie sicher sind die Informationen und welche Rolle spielt dabei der Rezipient, der die Daten aus dem Internet erst durch eine Interpretation in Informationen verwandelt? (WEIZENBAUM 2006, 25). Ziel des Beitrages ist es, zu untersuchen, inwieweit die User in einem Konsens selbst über Wahrheit und Falschheit von Daten entscheiden.

2. Konsenstheorie der Wahrheit

Als Definition der Wahrheit wird bereits seit Aristoteles eine Korrespondenz zwischen Denken und Sein angenommen. Eine Aussage ist demnach genau dann wahr, wenn sie mit der Wirklichkeit übereinstimmt, d. h. „A" ist wahr, gdw. A. (MITTELSTRASS 1996, 584 und 592). Als Wahrheitskriterium innerhalb einer Wahrheitstheorie werden hingegen diejenigen Eigenschaften oder Beziehungen eines auf seinen Wahrheitsanspruch hin beurteilten Gegenstand bezeichnet, die als Begründung für das Vorliegen von Wahrheit herangezogen werden. In der Regel wird die Fähigkeit, wahr zu sein, Aussagen zugestanden. (MITTELSTRASS 1996, 594).

Die Konsenstheorie der Wahrheit kritisiert die Korrespondenztheorie als nicht kriteriumsfähig und bezeichnet eine Aussage dann als wahr, wenn sie eine mehrheitliche oder ausnahmslose, faktische oder idealtypische Zustimmung erfährt, zum Beispiel in einem rational-reflexiven Prozess einer wissenschaftlichen Gemeinschaft, d. h. „A" ist wahr, gdw. es einen Konsens zu „A" gibt (MITTELSTRASS 1996, 594 und 598).

3. Wahrheit in Suchsystemen

Um Informationen bzw. Daten im Internet zu finden, benötigt man – wenn die Adresse der entsprechenden Seite nicht schon bekannt ist – eine Suchmaschine. Die bekanntesten sind Google, Yahoo und Altavista. In ein solches Suchsystem werden Stichwörter eingegeben und ggf. mit logischen Operatoren wie UND, ODER, NICHT verknüpft. Die Maschine durchsucht ihre Datenbanken und liefert eine Liste mit Seiten, auf denen die gesuchten Begriffe vorkommen. Es handelt sich dabei um eine rein syntaktische Verbindung. Die traditionellen Suchmaschinen erkennen keine oder kaum semantische Zusammenhänge, wenn auch semantische Netze als Erweiterung des World Wide Web in Entwicklung sind.

Wird eine Suchmaschine von einem Benutzer verwendet, kann davon ausgegangen werden, dass die Motivation in der Informationssuche liegt, z. B. „Wann wurde Julius Caesar ermordet?", „Was versteht man unter der 4. Kränkung des menschlichen Geistes?" oder „Welches Forum bietet mir die Möglichkeit, über die Abholzung der Regenwälder zu diskutieren?". Suchmaschinen werden folglich dazu verwendet, um Antworten auf Fragen zu erhalten. Da in konkreten Fällen die Grenzen zwischen Wahrheit, Vertrauenswürdigkeit oder Glaubwürdigkeit nicht genau auszumachen sind, muss für die vorliegende Studie davon ausgegangen werden, dass eine brauchbare und von einem Benutzer tatsächlich verwendete Antwort von ihm damit als wahre Aussage akzeptiert wird. Wird diese Information von jemandem benutzt, der eine Frage beantwortet haben wollte, so ist es nicht abwegig, davon auszugehen, dass er an einer richtigen Antwort interessiert ist.

Die meistgenutzte Suchmaschine im Internet ist Google. 1998 von Larry Page und Sergey Brin gegründet werden heute über 80% aller Suchanfragen von Google bearbeitet (SIXTUS 2006). Es lohnt sich deshalb, sich mit der Funktionsweise von Google auseinander zu setzen. Was von der Suchmaschine gefunden wird und welche Reihenfolge sie bei der Ausgabe der Links liefert, wird in erster Linie von den Usern, also der Gemeinschaft von Internet-Nutzern, beeinflusst. Das nach einem der Gründer benannte PageRank-Verfahren ordnet jeder Seite eine Wichtigkeit zu. Je mehr andere Seiten auf diese verweisen, desto wichtiger wird die Seite; und je wichtiger die Seite ist, auf der ein Link zu einer anderen führt, desto höher steigt jene in der Hierarchie der Seiten (VISE/MALSEED 2006, 28). Dieses Verfahren kann und wird manipuliert (SCHULZKI-HADDOUTI 2003), unabhängig davon ob dies Google selbst macht (RÖTZER 2002) oder von anderer Seite geschieht (z. B. führt das Stichwort „failure" zur Biographie von George W. Bush oder Suchergebnisse werden aus kommerziellen Gründen verfälscht). Obwohl Google in Einzelfällen gegen so genannte Suchergebnisoptimierung vorgeht, beweist eine Eingabe der Stichwörter „ranking" und „websites" (am 23. April 2007 um 11:03 Uhr), dass bei den Anzeigen, mit denen sich Google finanziert, sogar kommerzielle Anbieter solcher Dienste genannt werden.

Wahrheit wird damit zu einem gefährlichen Begriff. Suchbegriffe liefern zwar Seiten, auf denen die gewünschten Begriffe vorkommen, aber die Wahrheit der sich darauf befindenden Daten ist weder zwingend noch sicher und damit problematisch. Vor allem dann, wenn man bedenkt, dass die überwiegende Zahl der User in den meisten Fällen nur die ersten der aufgelisteten Links durchsieht und verwendet bzw. die Texte nicht mehr vollständig liest und nur mehr nach auffälligen Stichwörtern sucht (WEBER 2007, 24f.). Wenn erst die Interpretation durch einen Benutzer aus Daten Informationen macht, dann bedeutet das, dass ein Link zu einer gefundenen Seite bzw. on- wie offline die Verwendung der Daten die Akzeptanz des Users impliziert und daraus für ihn eine wahre Aussage macht. Das führt uns zu folgendem Wahrheitskriterium: „A" ist wahr, gdw. „A" auf einer von einem Suchsystem ausgegebenen Internet-Seite vorkommt.

4. Wahrheit in Wikis

Unter einem Wiki versteht man ein offenes System im Internet bzw. in einem Intranet, das auf der MediaWiki-Software (oder einer ähnlichen) basiert. Offen bedeutet, dass jeder Nutzer auf einfache Weise die Inhalte der auf diesem System gespeicherten Seiten nicht nur verändern, sondern auch neue Inhalte (d. h. Seiten) schaffen und – in eingeschränktem Maße – löschen kann. Damit stehen solche Systeme im Gegensatz zu normalen Websites, auf denen nur diejenigen Personen Veränderungen vornehmen können, die im Besitz der Zugangsdaten sind. (FIEBIG 2005, 9ff.)

Das bekannteste Wiki-System ist das Online-Lexikon Wikipedia, das in mittlerweile über 200 Sprachen und Dialekten existiert (FIEBIG 2005, 14). Hinzu kommen noch themenspezifische Lexika (z. B. der Reiseführer World66.Com oder die Ardapedia über Tolkiens Roman „Der Herr der Ringe"). Die umfangreichsten Enzyklopädien sind dabei aber die englischsprachige Wikipedia mit über 1,75 Millionen und die deutschsprachige mit über 575.000 Artikeln. (WIKIMEDIA 2007). Zu vielen Stichwörtern, die in Suchmaschinen eingegeben werden, liefert Google zuerst einen Link zur Wikipedia (WEBER 2007, 27). In der Rangliste der am häufigsten besuchten Internetseiten steht die Wikipedia (mit über 900.000 Besuchern täglich allein auf der englischsprachigen Version) unter den ersten zehn (NAUGHTON 2006; DAMBECK 2006). Um zu belegen, dass die Wikipedia jeden Vergleich mit traditionellen, gedruckten Enzyklopädien standhält, wird vielfach der im Dezember 2005 publizierte Test der Zeitschrift Nature ins Feld geführt, der zu belegen scheint, dass die Encyclopaedia Britannica ebenso viele Fehler wie die Wikipedia enthält (MÄDER 2005). Allerdings wurde einige Monate später bekannt, dass die Vorgangsweise der Zeitschrift fehlerhaft und unlauter war, indem sie Artikel zusammenfasste, kürzte oder bearbeitete, bevor sie an die Tester weitergereicht wurden oder sogar Artikel verwendete, die nicht in der Britannica zu finden waren (ENCYCLOPAEDIA BRITANNICA 2006). Unabhängig davon soll es aber hier um den Wahrheitsbegriff oder zumindest vermeintlichen Wahrheitsbegriff in Wiki-Systemen gehen.

Ein Wikipedia-Lexikonartikel entsteht dadurch, dass ein anonymer, d. h. nur durch die IP-Adresse seines Computers aufscheinender, oder pseudonymer Benutzer den entsprechenden Artikel anlegt und in Folge jeder andere Benutzer diesen ergänzen und korrigieren kann. Selbst wenn sich ein User dafür entscheidet, kein Pseudonym sondern seinen richtigen Namen als Benutzernamen zu verwenden bzw. diesen auf der eigenen Benutzerseite zu veröffentlichen, gibt es keine Gewähr, dass die Angaben korrekt sind. Wird ein Artikel von einem Nutzer als nicht enzyklopädiewürdig eingestuft, kann er einen Löschantrag stellen. Darauf folgt eine zweiwöchige Diskussion, schließlich wird von einem der Administratoren nach Abwägung aller vorbrachten Gründe dafür und dagegen entschieden, ob der Artikel bleibt oder gelöscht wird. So ist jeder Wikipedia-Eintrag eine Momentaufnahme, die sich zu jeder Zeit ändern oder auch verschwinden kann.

Immer wieder wird berichtet, dass Artikel in der Wikipedia entweder grobe Fehler enthalten, trotz gegenteiliger Forderungen ideologisch motiviert oder sogar vollständig erfunden sind (GRAFF 2005; KOHLENBERG 2006, 17). Als korrekte Information wird von den Nutzern dennoch das akzeptiert, was in diesem Moment auf den Servern der Wikimedia Foundation gespeichert ist und was von der Gemeinschaft der Wikipedia-Autoren bis dahin erstens als relevant und zweitens als korrekt angenommen wird. Damit kann das Wahrheitskriterium für Informationen innerhalb eines Wiki-Systems wie folgt angegeben werden: „A" ist zum Zeitpunkt t im Wiki W wahr, gdw. es (in W zu t) unter den aktiven Mitarbeitern des Wiki-Systems einen diskursiven Konsens über „A" gibt. Daraus folgt unter anderem, dass eine Aussage „A" von der Gemeinschaft im Wiki-System X als wahr angesehen werden kann, von den aktiven Mitgliedern des Wiki Y aber nicht. Ein konkretes Beispiel: Der Artikel „Päpste sedisvakantistischer Gruppen" mit entsprechendem Inhalt hatte sich in der englisch- und italienischsprachigen Wikipedia bereits etabliert, die Bezeichnung und die Tatsache, dass es solche Päpste gibt, wurde anerkannt. Lange Zeit wurde selbiges von Mitarbeitern der deutschen Ausgabe vehement bestritten.

5. Was bedeutet Konsens im Internet?

In beiden Fällen – sowohl bei Google als auch der Wikipedia, die in Kombination fast eine Monopolstellung bei der Daten- und Informationsbeschaffung im Internet besitzen (JANNASCH 2007; WEBER 2007, 28; VISE/MALSEED 2006, 28) – wird in entscheidender Weise das geschaffen bzw. beeinflusst, was dann in Folge als Wahrheit betrachtet wird.

In vielen Fällen wird das als wahr angesehen, was von einer großen Gemeinschaft als wahr akzeptiert wird. Konsens wird damit rein quantitativ aufgefasst. Dazu zwei Beispiele (mit Suchmaschinenresultaten vom 26. April 2007): Google liefert für das Stichwort „Renaissance" über 68 Millionen, für „Renaisance" 178.000, für „Renaissanse" 14.600 und für „Rennaisance" noch 801 Ergebnisse. Wer die richtige Schreibweise nicht kennt und verwendet, wird damit ebenso fündig und zudem in der Meinung belassen, korrekte Daten gefunden zu haben. Ein Vergleich der Schreibweisen würde Klarheit schaffen, aber das setzt bereits Unsicherheit voraus. Wer glaubt, sicher zu sein und mit einem unkorrekten Stichwort ebenso Inhalte findet, wird den Fehler nicht mehr als solchen erkennen. Der Begriff „Metronym" (Familienname, der sich auf einen weiblichen Vornamen zurückführen lässt) bringt 1410 aufgelistete Seiten, „Matronym", der Begriff, der dasselbe bedeutet, aber vom Duden als weniger gebräuchliche Nebenform genannt wird, sogar 14.800 Seiten. Was demnach als korrekt anzusehen ist, wird von den Suchmaschinen und der Gewohnheit der Nutzer beeinflusst. Persönliche Beobachtungen zeigen, dass die Anzahl der durch Google ausgeworfenen Seiten in der Wikipedia häufig als kaum hinterfragtes Kriterium herangezogen werden, ob Lemmata relevant sind oder nicht.

Wird innerhalb der Wikipedia ein Löschantrag zu einem bestimmten Lemma gestellt, erfolgt die Diskussion

darüber unabhängig von der Kompetenz der Teilnehmer, in anderen Worten, das Ja bzw. Nein zu einem Artikel eines Grundschülers zählt letzten Endes genauso viel wie die Meinung eines habilitierten Wissenschaftlers. Dies betrifft nicht nur die Existenz von ganzen Artikeln, sondern auch Aufbau, Inhalt und Formulierung von Einträgen.

Das, was man durch diese Methode schließlich als wahr akzeptiert hat, wird über zahlreiche Mirrorpages, d. h. mehr oder weniger vollständige Kopien der Wikipedia-Server, verbreitet, so dass häufig die Eingabe eines Stichwortes in Google zwar eine Unzahl von Seiten auswirft, sich aber hinter den verschiedenen Adressen immer dieselben Inhalte befinden. Der bereits erwähnte Artikel „Päpste sedisvakantistischer Gruppen" findet sich unter anderem auf de.wikipedia.org, www.netzwelt.de, www.netencyclo.com, www.dmoz.ch, calsky.com, www.j-box.at, lexikon.webliste.ch und de.freepedia.org.

Das Problem, dass eine anonyme oder pseudonyme Mehrheit unabhängig von qualitativen Aspekten über Inhalte entscheidet, ist ein bekanntes Problem der Wikipedia. Im Projekt Citizendium, das von Online-Lexikon-Pionier Larry Sanger 2006 gegründet wurde, versucht man diese Schwierigkeiten zu umgehen, indem man keine a-nonymen Mitarbeiter zulässt und Kompetenzgrade ein-führt, was aber noch nicht verwirklicht werden konnte (CI-TIZENDIUM 2007). Damit würde ein Konsens über Wahr-heit nicht nur durch Quantität sondern auch durch Qualität, d. h. durch die Autorität und Professionalität der an dem Konsens Beteiligten geprägt.

6. Fazit

Das Internet ist eine Quelle, die lediglich eine Schein-Wahrheit präsentiert und serviert, wenn es keine kompe-tente Interpretation der Daten gibt. Suchmaschinen und Online-Enzyklopädien liefern nicht mehr überschaubare Mengen an Daten, die in der Praxis häufig kritiklos als wahr akzeptiert werden. Diesen Tendenzen, die in vielen Bereichen erkennbar sind, gilt es entgegenzuwirken (WEI-ZENBAUM 2006, 173ff. und 186ff.) Der ehemalige Kunst-minister Rudolf Scholten fasst das Problem im März 2007 auf dem Philosophicum zusammen, wenn er zu bedenken gibt, dass das Internet lediglich eine *Illusion von Verfüg-barkeit von Wissen*" erzeugt (APA 2007). Das „Sapere aude" der Aufklärung kann in Zeiten globaler Vernetzung auch als ein „Diffidere aude" gelesen werden.

Literaturangabe

APA 2007 *Meldung: Das Internet ist keine Kulturtechnik*, http://science.orf.at/science/news/147737 (17.04.2007)

Citizendium (Hrsg.) 2007 *Citizendium Homepage* http://en.citizendium.org/wiki/Main_Page (27.04.2007)

Dambeck, Holger 2006 *Der Siegeszug der Web-Communities*, http://www.spiegel.de/netzwelt/web/0,1518,429099,00.html (23.04.2007)

Encyclopaedia Britannica Inc. (Hrsg.) 2006 *Fatally Flawed. Refut-ing the recent study on encyclopedic accuracy by the journal Na-ture* http://corporate.britannica.com/britannica_nature_response.pdf (11.05.2007)

Fiebig, Henriette 2005 *Wikipedia – Das Buch*, Berlin: Zenodot.

Graff, Bernd 2005 *„Krise der Wikipedia"*, http://www.sueddeutsche.de/kultur/artikel/772/65707/article.html (18.04.2007).

Hamann, Götz 2006 *„Die Eingeborenen des Internet"*, in: DIE ZEIT 16. März 2006, 21-22.

Jannasch, Sebastian 2007 *Generation Wikipedia* http://www.maerkischeallgemeine.de/cms/beitrag/10888557/61129/ (23.04.2007)

Kohlenberg, Kerstin 2006 *Die anarchische Wiki-Welt*, in: DIE ZEIT 7. September 2006. 17-19

Mäder, Alexander H. 2005 *Wikipedia kann sich mit Lexika messen* http://www.berlinonline.de/berliner-zeitung/archiv/.bin/dump.fcgi/ 2005/1215/ wissenschaft/0068/index.html (08.05.2007)

Mittelstraß, Jürgen (Hrsg.) 1996 *Enzyklopädie Philosophie und Wissenschaftstheorie*, Stuttgart: Metzler Verlag.

Möller, Erik 2006 *Die heimliche Medienrevolution*, Hannover: Hei-se.

Naughton, John 2006 *Websites that changes the world*, http://observer.guardian.co.uk/review/story/0,,1843263,00.html (23.04.2007)

Rötzer, Florian 2002 *Die Welt ist keineswegs alles, was Google auflistet* http://www.heise.de/tp/r4/artikel/13/13486/1.html (19.04.2007)

Schulzki-Haddouti, Christiane 2003 *Google darf Suchmaschine-noptimierer ausbremsen* http://www.heise.de/newsticker/meldung/34045 (24.04.2007)

Seim, Roland/Spiegel, Josef (Hrsg.) 1999 *Der kommentierte Bild-band zu „Ab 18". Zensur in der deutschen Kulturgeschichte*, Müns-ter: Telos

Sixtus, Mario 2006 *Jenseits von gut und böse* http://www.heise.de/ct/06/10/162/ (23.04.2007)

Vise, David und Malseed, Mark 2006 *„Das ganze Web auf dem PC"*, in: DIE ZEIT 9. März 2006, 28-29.

Weber, Stefan 2007 *Das Google-Copy-Paste-Syndrom*, Hannover: Heise.

Wegener, Franz 1996 *Stoppt die Zensur im Internet!* http://www.fitug.de/archiv/presse/ fw/fw4.html (13.06.1998)

Weizenbaum, Joseph 2006 *Wo sind sie, die Inseln der Vernunft im Cyberstrom?*, Freiburg: Herder.

Wikimedia Foundation (Hrsg.) 2007 *Wikipedia* http://de.wikipedia.org/wiki/Wikipedia (27.04.2007)

Zakon, Robert H. 2001 *Hobbes' Zeitgeschichte des Internet v5.2* http://www.michaelkaul.de/Geschichte/geschichte.html (08.05.2007)

Zelger, Christian 1999 *Zensur im Internet*, Berlin: VWF.

Email: triablue@yahoo.com

Utilizing OWL for Wittgenstein's *Tractatus*

Amélie Zöllner-Weber, Bielefeld, Germany / Alois Pichler, Bergen, Norway

This article presents experience gained from an attempt to develop an ontology for Wittgenstein's *Tractatus*. The term "ontology" is here used as in computer science (Artificial Intelligence). A computational ontology structures information hierarchically and supports semantic retrieval and reasoning. In this article, we outline the mentioned ontology, its development as well as possible applications. Several projects in the field of humanities have already utilized or developed ontologies for different topics. But modeling topics using ontologies represents just a starting point for more advanced (computational) applications in the humanities. In philosophy, the development and application of ontologies seems still at an early stage. With this article, we wish to help catalyse and develop this process further.

1. Introduction

Ontologies as they are used in Computer science[1] include taxonomies of our conceptualization of a part of the world. This part of the world is called the *domain*; an ontology structures this domain hierarchically into *classes*; the classes can have *properties* (*slots*) and *restrictions*, and *instances*, individual objects, which can be attached to a class. Although the structure of an ontology is rather static, the information included in the ontology can be queried and manipulated in several ways. Ontologies are used today in a wide range of fields, including research, industry and the public sector, primarily to help organize and retrieve semantic information, or more generally, to express structured information. In the last years, such ontology work has also entered the field of humanities and linguistics. Several applications of ontologies have already been developed in linguistics,[2] library science[3] and literature studies.[4] Even though one would expect that formats already developed to express and utilize ontologies are just as useful for storing, retrieving and processing data in the humanities as they are in other areas, using ontologies in the humanities is not yet very common.

For this paper, a Wittgenstein scholar on the one hand and a scholar on ontologies on the other (and both with a heavy interest in Digital Humanities), have come together in order to explore the possibilities for fruitfully applying the method of ontology to a piece of philosophical writing, Wittgenstein's *Tractatus logico-philosophicus.* The idea behind this endeavor was to investigate to what extent it is possible to model the content of a philosophical text such as Wittgenstein's *Tractatus* using a formal ontology language, as well as to test subsequent computational applications. This is not a task which is far removed from either the humanities or philosophy. In fact, in 2006 the EU decided to finance, through its *e*Content+ program, a project in philosophy which has semantic enrichment and ontology based machine extraction of philosophical information on its primary agenda.[5]

For our purpose of building an ontology for the *Tractatus*, we have chosen a popular and widely used ontology language: OWL.[6] The fact that OWL works strictly hierarchically and is focused on instances, seemed an advantageous feature, since the *Tractatus*, at least at first glance, appears to be a work which is hierarchically structured and has a conception of (a part of) reality which can easily be categorized into *classes*, *subclasses* and *properties.* Also, the *Tractatus* – with its discussion of *Gegenstände* and *Namen* - seemed to provide the *referents* required in any ontology making which is oriented towards *instances*, much more than most philosophy texts. In the course of applying OWL to the *Tractatus* we discovered, however, that things were more tricky than it at first seemed. In particular, the ontology's hierarchical demand and class-subclass (*genus-species*) focus posed challenges which may show yet unresolved problems for its applicability in the humanities more generally. At the same time, applying such a strict language as OWL to relatively un-strict philosophy texts, or even literary texts, will nevertheless always help to illuminate one's understanding of these texts and to explicate, communicate and document this understanding. The limitations which we encountered in our small project have therefore not discouraged us from continuing to build and utilize ontologies for philosophy texts, since the advantages remain substantial.

In the following, we first present OWL in more detail. An outline of a part of the ontology is then given and possible applications are sketched. Finally, problems and limitations as well as advantages of our ontology approach are discussed.

2. Applying OWL to Wittgenstein's *Tractatus*

OWL was introduced to enable machine-processing of semantic information on the internet, including logical reasoning: "The OWL Web Ontology Language is designed for use by applications that need to process the content of information instead of just presenting information to humans."[7] There are different versions of OWL, which involve different degrees of rigorousness: In *OWL Full*, every object of the ontology can take on all ontology categories, i.e. *class*, *instance*, etc.[8] By contrast, in *OWL DL* (*D*escription *L*ogic) objects have to be defined uniquely. This prevents certain problems in applications of the ontology. Especially for logic-based applications, OWL DL is most adequate. Users who have already specific applications in mind can create limited and small ontologies with *OWL Lite.* OWL DL seemed for our purpose the most apt version since the developed ontology should eventually be applicable also to other philosophical texts, while at same time also permitting applications which are as rigorous and controlled as possible.

---

[1] It is only in this sense we use the term here. Computational ontologies were first introduced in *Artificial Intelligence* (AI) where they focus on the modelling of concepts and their relations in computer systems. See Gruber 1992, p.199: "An ontology is a formal, explicit specification of a shared conceptualisation."
[2] This includes *GOLD*, an ontology for descriptive linguistic (http://www.linguistics-ontology.org/gold.html) and *WordNet*, a lexical reference system (http://wordnet.princeton.edu/).
[3] See the *FRBR ontology* for bibliographic records (Renear 2006).
[4] See Zöllner-Weber 2005.

[5] DISCOVERY - Digital Semantic Corpora for Virtual Research in Philosophy; see http://www.discovery-project.eu/.
[6] OWL - *W*eb *O*ntology *L*anguage; see http://www.w3.org/TR/owl-features/.
[7] Web Ontology Working Group 2004, see http://www.w3.org/TR/owl-features/.
[8] See Antoniou and Harmelen 2003.

To build our ontology, we identified first central concepts of the text and then modeled their relations in a hierarchy.[9] After several revisions, we settled on making *Wirklichkeit* and *Bild* superclasses of the ontology, while other concepts, including *Sachverhalt* and *Element*, were defined as subclasses. Our going back and forth was caused by the difficulty met identifying which *classes* would allow the most smooth and consistent inheriting of *properties* throughout the level of *instances*. It quickly became clear to us that the hierarchy and inheritance character of the ontology as also its intended *genus-species* structure met serious obstacles in the text. At the same time, it is through these filters that one very effectively detects that the conceptuality of the *Tractatus*, at least partly, opposes the hierarchy and inheritance characteristics of, for example, zoological taxonomies. Fig 1 shows a part of the class structure of our *Tractatus* ontology.

Fig 1: Extract of the ontology in the Protégé editor. Every point represents a class; the class hierarchy is represented by indentation.

For building ontologies, the identification of *instances* or *example realizations* is crucial. But the *Tractatus* is very sparse in giving concrete examples. Nevertheless, we identified at least a few instances, including *roter Fleck im Gesichtsfeld* and *hoher Ton*. Features of the instances were expressed by attributing different *properties*, e.g. *Färbigkeit*. To enrich the informational content of the ontology, the properties were also hierarchically ordered as is shown in Fig.2.

Fig. 2: Properties *externe Eigenschaft*, *interne Eigenschaft*, *Färbigkeit*, *Räumlichkeit*, *Zeitlichkeit*, hierarchically ordered in the Protégé editor.

We are aware that the structure of our ontology can be debated and questioned on the basis of a different understanding of the *Tractatus*. This is, however, not the place to discuss adequate interpretations of the *Tractatus* and arrangements of its conceptuality as such. It is, however, the place to point out that through such ontology arrangements we not only are better enabled to explicate disagreements in our understanding of the text and to revise our views, but also can have the machine's assistance for it.[10] At the same time, it should not go unnoticed that our ontology endeavor was not straightforward, not without significant uncertainties, and not without unsatisfactory solutions to the problems we met, to which we will return to in the last section of our paper.

3. Possible Applications using the Ontology

On the basis of ontologies, especially OWL ontologies, different kinds of applications are possible. Because of its specification, OWL DL inherits concepts of a logic formalism called *Description Logic* (DL). Thus, it is reasonable to apply mechanisms of logic formalism like reasoning or drawing inferences to an ontology built with OWL DL. In logic-based languages, e.g. *Prolog*, or in inference machines like *Racer*, inferences can be drawn and implicit information can be made explicit. These programs use a *knowledge base*, e.g. an ontology, *facts* and *rules*. By querying on the knowledge base, the facts and rules are interpreted so that a result can be found. A scheme of drawing inferences is shown in Fig. 3.

On the basis of our *Tractatus* ontology, it is possible to draw inferences which provide information about the relations between different concepts of the *Tractatus*. Queries using *backtrack* methods[11] can be applied to draw inferences on the hierarchy of the ontology. A scheme of backtracking is shown in Fig. 4. Further inference types can be querying special properties or instances included in the ontology. In addition, there might be alternative applications – apart from logic-based approaches - in order to represent information. For example, OWL ontologies can be stored in database systems that can handle their structures. By storing these ontologies in for example *eXist*, a special database system, indexing and text-search are supported.[12] One can also imagine developing web interfaces that allow editing and searching within an ontology.[13]
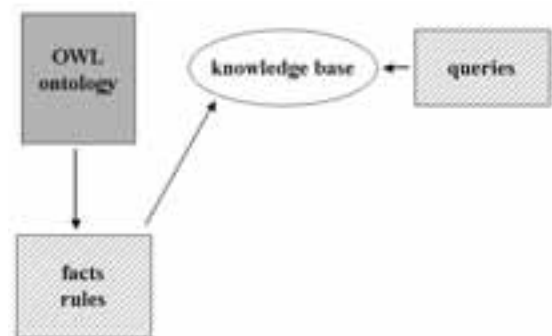

Fig. 3: Scheme of the organization of logic reasoning

All these applications are reasonable approaches toward utilizing ontologies in philosophy. In conclusion,

---

[9] For creating the ontology, we have used Protégé ((see http://protege.stanford.edu/). Protégé is a general editor for ontologies, but includes plug-in support for the syntax of OWL and offers a graphical interface. In addition, more plug-ins have been developed for Protégé for support of logical reasoning. Other free available editors are SWOOP (http://code.google.com/p/swoop/) as well as SWeDE (http://owl-eclipse.projects.semwebcentral.org/).

[10] This has been observed on a more general level with regard to text encoding (see Pichler 1995).
[11] See Charniak and McDermott 1985, Brassard and Bratley 1995.
[12] See http://exist.sourceforge.net/.
[13] A client-server based system to enable access to an ontology for literature studies is introduced by Zöllner-Weber 2007.

one should check which kind of result is required and should choose the techniques with regard to the demands. In the case of the *Tractatus* ontology, *backtracking* proves to be a valuable tool as is exemplified in Fig. 4.
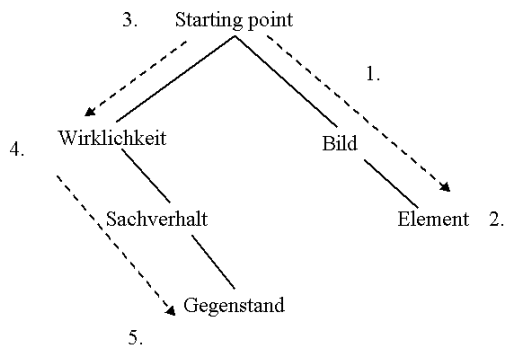

Fig. 4: Scheme of backtracking in the *Tractatus* ontology. Exemplarily, it is queried for *Gegenstand*: (1.) Traversing search space, (2.) Search condition no longer valid and solution (*Gegenstand*) not found, (3.) Backtracking to starting point, (4.) New search of remaining part of the tree, (5.) Solution found, stop of search.

4. Discussion and conclusion

One aim of our undertaking was to explore the possibilities as well as identify the problems of developing a formal ontology representation for a text of philosophy. We picked Wittgenstein's *Tractatus* which seemed as promising a candidate as a philosophy text can be. In the process of creating the ontology, we soon faced problems and limitations. Wittgenstein's terms cannot always be organized hierarchically, as the OWL specification demands. Sometimes, it was difficult to decide whether a term was completely subsumed by another one, or where a term was used as a synonym, belonging to the same hierarchical level rather than to a sublevel. Hierarchy poses a problem also on another level: Information which lies outside the hierarchical relationships cannot easily be included by using OWL. But, at least with regard to synonymy, we could use cross-links or use an OWL construct which defines objects as synonyms.

A second problem was the inheritance feature of OWL. This means that *properties* referring to features of *Tractatus* concepts defined as *classes*, are inherited by their *subclasses*. But surely, even if a term is the *superclass* of another *term*, the subsumed term has not all the features of the superordinated term. This led to problems regarding e.g. classifying *Tatsache*, which on the one hand naturally belongs under *Sachverhalt*, but in other respects does not have all the properties of *Sachverhalt*. Here, a solution could be to use an anonym ancestor which only contains features that subclasses have in common. Then, different features can be attached to the subclasses. The same problem arose on a higher level, since *Sachverhalt* belongs to both superclasses *Wirklichkeit* and *Bild*, but should not inherit all their features.

Modeling theories is often difficult and challenging, and this may in particular be the case with regard to philosophical theories. But we have seen several advantages of using ontologies. If parts of Wittgenstein's thought are modeled in an ontology, a structured formal overview can be produced. This overview or taxonomy of one's understanding can be easily shared and used as a foundation for discussing Wittgenstein's thought. Furthermore, on the basis of the ontology, machine-based applications can be carried out. Summarizing, we consider developing ontologies for philosophy texts an interesting and challenging enterprise which will stimulate and improve the application of formal methods for qualitative text analysis, the interpretation of philosophical texts and their validation.[14]

Literature

Baader, Franz, and Nutt, Werner 2003. Basic Description Logics, in: Franz Baader, Diego Calvanese, Deborah L. McGuinness, Daniele Nardi, and Peter F. Patel-Schneider (eds.), *The Description Logic Handbook*. Cambridge: Cambridge University Press, 43-95.

Brassard Gilles, and Bratley, Paul 1995. *Fundamentals of Algorithmics*. Prentice-Hall.

Charniak, Eugene and McDermott, Drew 1985. *Introduction to Artificial Intelligence*, Addison-Wesley.

Gruber, Thomas R. 1993. *A translation approach to portable ontology specifications*. Knowledge Acquisition, 5(2), 199–221.

Nardi, Daniele, and Brachman, Ron J. 2003. An Introduction to Description Logics, in: Franz Baader, Diego Calvanese, Deborah L. McGuinness, Daniele Nardi and Peter F. Patel-Schneider (eds.), *The Description Logic Handbook*. Cambridge: Cambridge University Press. 1-40.

Pichler, Alois 1995. "Transcriptions, Texts and Interpretation", in: Kjell S. Johannessen and Tore Nordenstam *Culture and Value. Beiträge des 18. Internationalen Wittgenstein Symposiums*. 13.-20. August 1995 Kirchberg am Wechsel, 690-695.

Puppe, Frank, Stoyan, Herbert, and Studer, Rudi 2000. Chapter 15: Knowledge Engineering, in: Günther Görz, Claus-Rainer Rollinger and Josef Schneeberger (eds.), *Handbuch der Künstlichen Intelligenz*. München: Oldenbourg Verlag, 599–641.

Web Ontology Working Group 2004. *Web Ontology Language (OWL)*. http://www.w3.org/2004/OWL/.

Zöllner-Weber, Amélie 2006. Formale Repräsentation und Beschreibung von literarischen Figuren, in: Georg Braungart, Peter Gendolla, Peter and Fotis Jannidis (eds.), *Jahrbuch für Computerphilologie* (7). Paderborn: mentis Verlag, 187-203.

Zöllner-Weber, Amélie 2007. Noctua literaria - A System for a Formal Description of Literary Characters, in: Georg Rehm, Andreas Witt and Lothar Lemnitzer (eds.). *Data Structures for Linguistic Resources and Applications*. Tübingen: Gunter Narr Verlag, 113-121.

Email: amelie.zoellner-weber@uni-bielefeld.de /
    alois.pichler@aksis.uib.no

---

[14] We are aware of other possibilities for modelling semantics than ontologies, e.g. *Topic Maps* which focus on the relation between objects rather than on elaborated hierarchy. – Thanks to Deirdre Smith for improving our English. We would like to thank Stefano David for comments on an earlier version of this paper.

Spontaneous Orders in Social Capital Architecture

Gloria L. Zuniga, Allendale, Michigan, United States

The impetus for this investigation is the relation that I believe exists between information flows and social capital formation. Social capital is a relatively new term popularized by Robert Putnam, most notable for his book *Bowling Alone*. According to Putnam, social capital is constituted by "features of social life—networks, norms, and trust—that enable participants to act together more effectively to pursue shared objectives." (Putnam 1995b) How does social capital develop in the first place? The inquiry into the conditions that lead to social capital formation has even more currency in light of the globalization phenomenon that seems to permeate all areas of human experience today. The important concern is whether the phenomenon of globalization will foster or hinder social capital formation. My interest in addressing this concern is to examine technology and, more specifically, the role that information flows have in the rise of technologically-driven social networks.

We cannot deny that many view technology as heralding a new era of individualism and moral decadence. They perceive the Internet as the ground for a modern-day Hobbesian state of nature in which life is solitary and interactions with others brutish and nasty. In response, we must concede that because the Internet presents an alternative to direct interactions with people, life for some may be solitary. And we must also admit that communication via email and text messaging has had the effect of eroding the aesthetics of correct and artful language and social etiquette, so some may experience life as brutish and nasty. Nonetheless, it is important to point out that today's technological advancements encourage more personal interaction than any other mode of communication in the history of mankind.

I shall argue here that technology-driven social networks are not only the result of spontaneous orders of information flows but, in addition, they are the best means for social capital formation today. And I will show that the architecture of the social networks that is emerging on the Internet can be best described as having a morally-relevant character.

1. Social Capital

Let us first revisit the notion of social capital in more detail now. Social capital is the psychic income that individuals find in social networks by means of shared objectives. We can understand psychic income as any gain in the mental disposition of a worker to act in ways that can be described as optimistic, hopeful, self-confident, or that at least display a positive outlook generally. Arguably, such attitudinal gains will positively serve all realms of experience, including work. Accordingly, an investment of psychic income at work means that one brings a positive disposition to one's tasks. This mental disposition that one brings to the job (combined with other investments such as education and experience) is positively correlated to work performance and, thereby, to gains in pecuniary income. But work performance is not dependent solely on the human capital that a worker brings because the social network at the work environment will indeed affect psychic income. All social networks seem to have a common denominator: information flows. Bowling leagues—Putnam's driving

metaphor—presents the prototypical example of a social network. Consider that the central purpose of bowling may not be competition. Rather, it may be a means for exchanging useful or amusing information that we want. These information flows serve as the glue of camaraderie, which boosts psychic income. This exemplifies how information flows can be positively correlated to social capital gains. If we now consider technology-driven social networks, then information flows are even more obvious.

2. The Web 2.0

While it is true that there are newer application technologies today, these are only the effect of what characterizes what we now commonly call the Web 2.0. The causal factor is the new *way* in which the web platform is employed. What merits the name Web 2.0, then, is demarcated by the web-based communities and hosted services, such as social networking applications, that did not exist in the 1.0 period. We have all witnessed in the last few years an increase in web-based communities such as YouTube.com and del.icio.us. But these are only two of the myriad of successful examples of social networking applications.

But take notice of the following contrast. In Web 1.0 applications, there are sellers that provide information about what they offer for sale. This is a one directional information flow. And there are buyers who provide sellers with their financial information to execute the purchase. This is also a one directional information flow. It seems to me that the principal feature of all 1.0 applications is that they are an advertising vehicle. What I call the 1.0 perspective is the narrow view that web applications serve only commerce. What the 1.0 perspective lacked is actual information exchange. Users only gave information in order to complete a transaction. Consequently, there was no adaptation of the content or functionality based on user input. As a result, the content remains static, meaning that it only changes if the web site owner decides to change the web site. By contrast, Web 2.0 sites allow users to choose the type, amount, and nature of some or all of the content they see.

Free participation and dynamic collaboration have led to new markets of information that could have never been imagined. Who would have designed a source for information on the lowest gas prices in one's vicinity? GasBuddy.com provides participant-driven gas price data that is continuously updated. Who would have thought that the quest for shared intelligence would override what we had previously accepted as the fundamental right of property? From the pioneering effort of Linus Torvald's open code operating system, Linux, open source platforms are now commonplace. We can also find web-based regions of shared intelligence known as wikis. Who could have thought that the latest scientific discovery on any given subject matter could be accessible even to the layperson without any formal education? Wikipedia, for example, offers accessible and up to date specialized knowledge obtained from the collaboration of all willing experts in the world on any subject. It is not a perfect medium of shared intelligence, of course, for we know that open source communities are not immune to human frailties: from the selfish use of the medium for airing a favored political posi-

tion to the deliberate posting of incorrect information for no defensible reason. But as a result of these inevitable snags, open source communities have learned to be self-regulating without neglecting incoming information flows. It is the efficient use of information flows in Web 2.0 applications that permits the evolution of shared intelligence that crosses national boundaries and languages.

Everything seems to suggest that the success, in the sense of user participation, of 2.0 applications can be explained in the following way: users are motivated by a sense of social belonging, one that can be only obtained from taking part in the creation of something with other people. This *is* social capital formation. It is at least conceivable, then, that the Internet's contribution to the globalization phenomenon may not be as gloomy as many fear. Perhaps it would be more accurate to describe the Web 2.0 perspective as the pursuit of expanding social capital globally.

Similarly to markets, social networking sites have been a spontaneous development. In the case of markets, Friedrich Hayek observed that only by far-reaching decentralization, it would be possible to make full use of the knowledge and information dispersed among all individuals in society. (1945) Today's technological advancements confirm Hayek's observation in the new social frontier: the Internet. The knowledge collaboration that occurs via the Internet is possible because participants enter freely, and the unfettered nature of their interactions maximizes efficiency by directing information to their most wanted uses.

3. The Information Architecture of Social Networks

Let us now consider the infrastructure of social networking sites more closely. From a technical perspective, an information architecture is the blueprint of a web site's content, and it includes function, language, navigation, interface, interaction, and visual design.

The taxonomy of information architectures in Web 1.0 applications can be summed as follows: (1) information flows from sellers to consumers, (2) information flows from consumers to sellers. What it lacked is an interactive dynamic. An awareness of the topology of information flows would have helped, but this would have not been sufficient. Even with all the financial resources available to hire the best ontologists, programmers, and information engineers, the end result might still be a less than adequate information architecture because the perspective is one-sided and the information flows are not interactive.

The remarkable thing is that 2.0 web site developers do not seem to dedicate many resources to the planning of the information architecture, yet it is exponentially more efficient. Opening the door to multi-directional information flows permitted the emergence of new programming technologies that supported such multi-directional information flows. In the taxonomy of a 2.0 information architecture there are no web owners, on the one hand, and clients, on the other. There are only participants and as a result there is no micromanagement at work. In fact, it is necessary for the web site owner or webmaster to relinquish of control of the web site and to place trust on the users to create the content. Since the information flows are not only multi-directional but also unpredicted, these carve the path for new web technologies rather than the other way around. Web 2.0 information architectures are thus orchestrated spontaneously. How did this happen? It is tempting to call

this phenomenon a natural social phenomenon because it seems a characteristic of human nature to discover new social orders.

4. Human Nature, Morality, and Social Networks

Some biologists have discovered a link between behaviors of reciprocity and moral goodness. Moreover, we appear to value morally relevant behavior even more highly if there is no kin selection incentive. We expect people, for example, to be emotionally supportive of friends. Consequently, although we approve of those who behave in this way, we do not find the fulfillment of this expectation particularly praiseworthy. We would find it unusual only if the expectation is *not* fulfilled because we understand emotional support as an obligation among friends. Accordingly, we would judge the failure to fulfill this obligation to be morally wrong. But when someone is willing to provide such an effort toward a stranger, then we judge this to be morally meritorious behavior because we do not feel morally obligated to strangers. Any such deeds that are made for the benefit of others without the motivation of kinship are indeed socially beneficent and thereby good. In this light, we can see more clearly the moral significance of the phenomenon that has resulted from the 2.0 perspective. The social interaction among participants is morally relevant insofar as it is reciprocal, but it is also morally meritorious because the beneficiaries are strangers.

But, however morally meritorious we find human social cooperation with strangers to be, we have to admit that, typically, it is rare. But I do not believe that this is so because we are not disposed toward socially cooperative behavior toward those with whom we do not have relations of kin or of friendship. Rather, I believe that the reason is that we do not have many opportunities in our modern, survival savvy societies of self-sufficient individuals. When given the chance, however, people have embraced non-self-interested social cooperation. We can find the evidence of this in the many Web 2.0 communities.

It seems to be the case, then, that the architectures of multi-directional information flows that we find on the Internet indeed strengthen social capital formation because they provide the opportunities for social cooperation. Aside from the potential aesthetic and economic benefits that may be obtained in technology-based social networks, the value of their information architectures is fundamentally moral in character because the goal is only social contact in exchange for mere reciprocity. I find it much like a game of tugging with my cat, in which the goal is the tugging, not possessing my sock.

Literature

Arrow, Kenneth "Observations on Social Capital," *Collected Papers of Kenneth J. Arrow*, Volume 5, Production and Capital, Harvard

Axelrod, Robert, 1984. *The Evolution of Cooperation*, Basic Books

Axelrod, Robert "The Evolution of Cooperation," *Science* 211(4489):1390-6

Robert J. Barro and Rachel M. McCleary 2003. *Religion and Economic Growth*, NBER Working Paper No. W9682

Becker, Gary 1975. *Human Capital*, Chicago: University of Chicago Press

Bourdieu, Pierre "Ökonomisches Kapital, kulturelles Kapital, soziales Kapital" in *Soziale Ungleichheiten* (Soziale Welt, Sonderheft 2), Reinhard Kreckel (ed), Goettingen: Otto Schartz & Co., 183-198

Bourdieu, Pierre "The Forms of Capital" In: Richardson JG (ed). *The Handbook of Theory: Research for the Sociology of Education*, J. G. Richardson (ed). New York: Greenwood Press, (1986) 241-258

James Coleman, "Social Capital in the Creation of Human Capital," *American Journal of Sociology*, 94 Supplement (1988) S95-S120

Ferguson, Adam 1767. *An Essay on the History of Civil Society*, London: T. Cadell, et al.

Foley, Michael W. "Is it Time to Disinvest in Social Capital?" *Journal of Public Policy*, 19 (2) 141-173

Forguson, Lynd 1990. *Common Sense*, Routledge

Hobbes, Thomas 1651. *Leviathan*, Andrew Crook

Hume, David 1748. *An Enquiry Concerning Human Understanding* and *Dialogues Concerning Natural Religion*, Edinburgh

Hayek, Friedrich A. 1973. *Law, Legislation, and Liberty*, Chicago: University of Chicago Press

Hayek, Friedrich A. "The Use of Knowledge in Society," *American Economic Review*, XXXV (1945) 519-530

Mandeville, Bernard 1714. *The Fable of the Bees*, London: J. Tonson

Menger, Carl 1871. *Principles of Economics*, 1976 James Dingwall and Bert F. Hoselitz (trans.) New York University Press

Putnam, Robert D. 2001. *Bowling Alone*, New York: Simon & Shuster

Putnam, Robert D. "Bowling Alone: America's Declining Social Capital," *Journal of Democracy*, 6:1 (1995) 65-78

Putnam, Robert D. "Tuning In, Tuning Out: the Strange Disappearance of Social Capital in America," *Political Science and Politics*, 28:4 (1995) 661-683

Smidt, Corwin (ed) 2003. *Religion as Social Capital*, Waco, Texas: Baylor University Press

Smith, Barry "Formal Ontology, Common Sense, and Cognitive Science," *International Journal of Human-Computer Studies*, 43 (1995) 641-667

Sobel, J. "Can We Trust Social Capital?" *Journal of Economic Literature*, 40 (1): 139-154

Solow, R. M. 2000 "Notes on Social Capital and Economic Performance," in Social Capital: A Multifaceted Perspective, Ismail Serageldin and Partha Dasgupta (eds) Washington, DC: World Bank

Wilson, Edward O. "The Biological Basis of Morality," 1998 *The Atlantic Monthly* 53-70

Email: ontogloria@gmail.com

Volume 1 *Friedrich Stadler, Michael Stöltzner (Eds.)*

Time and History
Proceedings of the 28. International Ludwig Wittgenstein Symposium in Kirchberg am Wechsel, Austria 2005
ISBN 3-938793-17-1
621pp., Hardcover € 79,00

Time and History presents the invited papers of the 28th International Wittgenstein Symposium 2005 in Kirchberg/W. (Austria). Renowned scientists and scholars address the issue of time from a variety of disciplinary and cross-disciplinary perspectives in four sections: philosophy of time, time in the physical sciences, time in the social and cultural sciences, temporal logic, time in history/history of time, and Wittgenstein on time. Questions discussed include general relativity and cosmology, the physical basis of the arrow of time, the linguistics of temporal expressions, temporal logic, time in the social sciences, time in culture and the arts. Outside the natural sciences, time typically appears as history and in historiography in different forms, like a history of our conceptions of time. The first chapter of the book is dedicated to the major positions in contemporary philosophy of time. Is there a real sense of past, present, and future, or is time just a special coordinate among others? What does it mean that identity persists over time? The importance of Wittgenstein for present-day philosophy notwithstanding, his ideas about time have hitherto received only little attention. The final chapter, for the first time, provides an extensive discussion of his respective views.

Volume 2 *Alois Pichler, Simo Säätelä (Eds.)*

Wittgenstein: The Philosopher and his Works
ISBN 3-938793-28-7
461pp., Hardcover € 98,00

This wide-ranging collection of essays contains eighteen original articles by authors representing some of the most important recent work on Wittgenstein. It deals with questions pertaining to both the interpretation and application of Wittgenstein's thought and the editing of his works. Regarding the latter, it also addresses issues concerning scholarly electronic publishing. The collection is accompanied by a comprehensive introduction which lays out the content and arguments of each contribution.
Contributors: Knut Erik Tranøy, Lars Hertzberg, Georg Henrik von Wright, Marie McGinn, Cora Diamond, James Conant, David G. Stern, Elke von Savigny, P.M.S. Hacker, Hans-Johann Glock, Allan Janik, Kristof Nyíri, Antonia Soulez, Brian McGuinness, Anthony Kenny, Joachim Schulte, Herbert Hrachovec, Cameron McEwen.

Volume 3 *Christian Kanzian, Edmund Runggaldier (Eds.)*

Cultures. Conflict - Analysis - Dialogue
Proceedings of the 29th International Ludwig Wittgenstein-Symposium in Kirchberg, Austria 2006.
ISBN 978-3-938793-66-4
431pp., Hardcover, EUR 59,00

What can systematic philosophy contribute to come from conflict between cultures to a substantial dialogue? – This question was the general theme of the 29th international symposium of the Austrian Ludwig Wittgenstein Society in Kirchberg. Worldwide leading philosophers accepted the invitation to come to the conference, whose results are published in this volume, edited by Christian Kanzian & Edmund Runggaldier. The sections are dedicated to the philosophy of Wittgenstein, Logics and Philosophy of Language, Decision- and Action Theory, Ethical Aspects of the Intercultural Dialogue, Intercultural Dialogue, and last not least to Social Ontology. Our edition include (among others) contributions authored by Peter Hacker, Jennifer Hornsby, John Hyman, Michael Kober, Richard Rorty, Hans Rott, Gerhard Schurz, Barry Smith, Pirmin Stekeler-Weithofer, Franz Wimmer, and Kwasi Wiredu.

Volume 4 *Georg Gasser (Ed.)*

How Successful is Naturalism?
ISBN 13: 978-938793-67-1
ca. 300pp., Hardcover, EUR 69,00

Naturalism is the reigning creed in analytic philosophy. Naturalists claim that natural science provides a complete account of all forms of existence. According to the naturalistic credo there are no aspects of human existence which transcend methods and explanations of science. Our concepts of the self, the mind, subjectivity, human freedom or responsibility is to be defined in terms of established sciences. The aim of the present volume is to draw the balance of naturalism's success so far. Unlike other volumes it does not contain a collection of papers which unanimously reject naturalism. Naturalists and anti-naturalists alike unfold their positions discussing the success or failure of naturalistic approaches. "How successful is naturalism?" shows where the lines of agreement and disagreement between naturalists and their critics are to be located in contemporary philosophical discussion.

Volume 5 *Christian Kanzian, Muhammad Legenhausen (Eds.)*

Substance and Attribute
Western and Islamic Traditions in Dialogue
ISBN 13: 978-3-938793-68-8
ca. 250pp., Hardcover, EUR 69,00

The aim of this volume is to investigate the topic of Substance and Attribute. The way leading to this aim is a dialogue between Islamic and Western Philosophy. Our project is motivated by the observation that the historical roots of Islamic and of Western Philosophy are very similar. Thus some of the articles in this volume are dedicated to the history of philosophy, in Islamic thinking as well as in Western traditions. But the dialogue between Islamic and Western Philosophy is not only an historical issue, it has also systematic relevance for actual philosophical questions. The topic Substance and Attribute particularly has an important history in both traditions; and it has systematic relevance for the actual ontological debate.
The volume includes contributions (among others) by Hans Burkhardt, Hans Kraml, Muhammad Legenhausen, Michal Loux, Pedro Schmechtig, Muhammad Shomali, Erwin Tegtmeier, and Daniel von Wachter.