



Lars-Henrik Schmidt

On Thinking
or the secret passages of the mind

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On Thinking

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Friedrich Nietzsche (1844-1900) uses the phrase “dass der Mensch das noch nicht festgestellte Tier ist” [that man is the not yet founded animal] in an enigmatic inserted clause in *Beyond Good and Evil* from 1886. He does not state whether man is determined or, as some translators prefer to put it, fixated. The phrase had great impact on the philosophical anthropology of the sociologist Arnold Gehlen (1904-76). Nietzsche is not absorbed by an abstraction; rather he deals with the empirical-anthropological man, who unlike ‘the transcendental subject’ possesses both a sex¹ and a childhood²; Nietzsche rebels against the transcendentalist’s study of man. Beyond doubt and discussion man is a *natural* being; the problem resides in the allusions to the “Gestell”, the German word for scaffold or rack. In other words, man is incomplete; but he also lacks a support to lean on. In short, man is not well-founded, and ideas about ‘him’ even less so.

Nevertheless this Nietzschean inserted clause is the mantra of the research initiative going under the name of Gnosis: Man is the not yet founded animal.

Prologue

By way of introduction, let me thank CCC³ for this opportunity to present some of the preliminary ideas of Gnosis’s work. Perhaps I should start by making it clear that this inter-faculty initiative within the pedagogical-philosophical field stems from

¹ This was established by law in the 19th century and can no longer be ignored. The normal condition is to be of one sex, and this is the way one’s being in the world is registered by society.

² This ought not to be a trivial observation. In the 18th century it became obvious that children are not small adults. Moreover, they were not born as adults like the biblical Adam.

³ Research-cluster ‘Cognition, Communication and Culture’ University of Aarhus. Paper presented on the 7. of March 2008.

Vice-Chancellor Lauritz B. Holm-Nielsen, who has great expectations regarding the CFIN-project at the University of Aarhus. The Vice-Chancellors initial idea was that an additional academic initiative should be launched to strengthen the philosophical and pedagogical profile even more. For a number of reasons, however, for the time being the most convenient solution has proven to be the establishment of Gnosis as an autonomous research centre. Among these reasons belongs an enlarged portfolio. Gnosis is an inter-faculty initiative and its interdisciplinary approach is not directed towards just one project or subject – say neuroscience or the brain – but also poses the question of whether it is possible to outline and elaborate a university course module for PhD students across the faculties, one bearing a certain resemblance to the *studium generale* offered to all new students at the University of Aarhus. The idea and the vision is that this module will contribute to a stronger sense of the university's identity as 'the thoughtful university'. (Whilst attempting to avoid biting the hand that feeds us, we might observe that such ambitious dreams have more than once been put forward by university Vice-Chancellors - it goes, so to say, with the territory. On the other hand, all experience warns us to be very cautious in these matters. The different University Faculties seem to be so self-sufficient; which means also self-confident (and which makes them so self-confident). But from time to time general concerns have to be addressed, also in order to remind us of the idea of a university.)⁴

Complex of problems

It is quite obvious that the implementation of such an aspiration must take place at a high and general level. For a university the level has to be the pedagogical-philosophical or the philosophical-pedagogical. There can be no monopoly and no evasion.

⁴ 'The idea', by the way, is non concurrent with 'the concept'.

Let me track the *problematique*⁵ to the next level, which is not to say to take it to a more elevated level. I intend to focus on a specific mental activity usually referred to simply as ‘thinking’. The people who engage in the activity of thinking are not the least people who are also engaged in research and education or people who are exposed to these activities (which is not quite the same as to claim that they philosophize, since philosophy has become professionalized in line with the development of the idea of the modern university - some of us teach philosophy but anyone may philosophize). Thinking does not equal abstraction since it may as well be very concrete, as when dealing with concrete matters. Everyone, regardless of subject area, has to consider some questions before they engage in their calling. Among these questions are the following:

What is thinking?

What is research ethics?

What is the politics of knowledge?

These three fields lead to further questions, such as: Where does thinking take *place*? How does thinking occur? How do we encounter thinking? Not first and foremost ‘who thinks?’ but: where are you when thinking takes place? Just asserting that the brain thinks might turn out to be a shortcut.

Exactly here the two tracks which constitute the problem agenda of Gnosis converge; it is so to speak the differential inheritance, a marriage of different traces, and not really an origin. The so-called natural answer – the predominant and successful answer – is that thinking, of course, takes place within the brain, in this overrated organ which believes it governs everything. However, it is this truism Gnosis is destined to query, which implies allowing it to become a *problematique*. The challenge is to grasp how this answer has become the ‘natural’ answer and to exami-

⁵ I use a French term referring to a tradition of “épistémologie historique” best described as transmitted by Dominique Lecourt.

ne whether it is sustainable. The unity of the comprehension and the validating process puts the *problematique* into *perspective*. Apparently thinking has come to be situated in the ‘little reason’, as Nietzsche labeled the phenomenon, in distinction to the ‘large reason’ of the complete organism.

It might be necessary to add that to detect a *problematique* does not imply saying ‘No’ to it or negating it. It means that you look into a problem by “problematizing” (the notion hardly exists in English) and demarcating it from other problems, making a problem out of it in discussing its self-evidence.

In the following I shall concentrate on the issue of how to expose and scrutinize the way one encounters thinking. On a later occasion I shall happily demonstrate the training program Gnosis intends to pursue, should we be given the opportunity to guide what may, with an allusion to Gaston Bachelard (1938), be termed ‘the formation of the scientific spirit’ (“la formation de l’esprit scientifique”).

The secret passages of the Mind

Unlike science, philosophy has no hypotheses to prove. Philosophy proposes theses and gives birth to distinctions, hopefully effective ones. Philosophical propositions are tested by their effects. The disposition of philosophy is therefore ‘conflictual’: it takes place on a battlefield; whereas ideology, by contrast, aims to overcome ‘conflictuality’. The purpose of ideology is to prevent conflictuality from arising and to hinder it from being articulated as a manifest conflict.

Let me outline a couple of theses to get the investigation and thereby the intervention going.

Firstly the thesis is that thinking does not only, or perhaps not first and foremost, take place in the brain. The issue is far more complex. Matter is not substance but networks.

Furthermore, the thesis is that the mind has passages to which the neurosciences have no privileged access, and that their simple will to access is the actual hindrance. The social conditions for the growth of brain capacity cannot be ignored. There are now few if any spokespersons for ignorance, but it is difficult to say which form of arrogance prevails.

Finally, the thesis is that when awareness is articulated as consciousness in terms of forms of representation and correlation it takes on subjectification and thereby reification. The *subjectum* (the traditional “ground” in Latin, *hypokeimenon* in Greek, *das Zugrundelegende* in German) becomes the underlying and fundamental substance, it becomes a reS-presentation and not a re-presentation. And the substance in question is the brain.

To conclude, the so-called brain is a ‘construction’ born out of a monitoring technology and the techniques we control to provide evidence and strategies of documentation of the whereabouts of an organ whose existence no-one of sound mind denies. This reasoning is open to dispute.

Mental structures

On the other hand, however, one could try to construe a perspective concentrating on mental structures and activities in line with Hannah Arendt’s speculation on ‘the life of the mind’.⁶ This is what Gnosis implies with its use of the term ‘passages of the mind’. The whole idea is to grasp and come to terms with

⁶ Cf. her investigation of this title of *how we think* (Orlando 1976)

the fact that we are led through corridors of which we are not conscious, through certain possible openings, limited in number but of more interest.

Monitoring calls for documentation: Whereas our colleagues in the 19th century were obsessed by the idea of method we are forced to think of strategies of documentation. In both cases science suffers since specific techniques play the leading role. What appear to us are certain mental structures, but the brain is not the subject (in a strict philosophical sense of the word) to or of its thinking. Thinking happens, mental activity happens. So much may be said; but it does not take place consciously, since consciousness does not happen: nevertheless, it happened.

It remains to be explained why it is advisable to draw on a philosophical construction and not on a technical presentation. The first questionable answer is that a speculation is not pretentious but follows a sort of relaxed knowledge ideal, and we intend to demonstrate that it is all a matter of knowledge ideals and not of forms of representation. But before we address this we shall have to take note of a couple of matters regarding the very paradigmatic breakthrough neuroscience is undergoing and provoking, and comment on the great expectations relating to this breakthrough in fields such as philosophy and pedagogy. The removal of 'an epistemological obstacle' - i.e. a 'break' in one field of knowledge - may result in a 'rupture' in the *problematique* of other fields of knowledge.

Let me make use of a negation to stress that the study of mental structures should not be mistaken for research on cognition. One can hardly fail to realize that the concept of cognitive science has imploded and that these days the term is used to cover all sorts of knowledge of perception. For my part I insist on strictly reserving the term to only denominate the rationality of 'thought-activities'. The study of mental structures, supported by technologies interested in repetitive activities in brains in

general, is on the other hand not neuroscience either; nobody knows 'The Brain'. The study of mental structures is a philosophical endeavor in its own right, using its own categories and taking a special interest in learning processes. The study of mental structures has mental activities, or in short 'thinking', as its 'theoretical object'; the very category of 'structure' signifies that we are not dealing with a substance.

The technological fix

No-one fails to recognize and refer to the new technical resources. From simple journalistic reviews to highly academic papers, we encounter references to new forms of scanning techniques and generations of scanning equipment able to monitor ongoing brain activity by freezing images which are then colored and the results interpreted. These interpretations are then communicated in a new generation of documentation.

Looking more closely into the scientific process outlined above, one observes that it is very fragile from an epistemological perspective. It must be said clearly and frankly that all steps in the process are vulnerable to scrutiny and argument. The procedure becomes even more questionable since the different steps build on one another.

How do we truly know that blood flow and oxygen transport (the so-called BOLD-signal)⁷ are expressions of activity and not of its opposite, namely resistance to activity? How do we know that a snapshot tells anything about the localization of the activity? And how do we know that the coloring is not due to a deficiency in the computer; and who are the guys doing the interpreting, and what are the regimes accepting these inter-

⁷ Jf. Morten L. Kringelbach: *Hjernerum*; Kbh. 2006 p. 237. The BOLD-signal is generally regarded, even accepted, as a good indicator of the entire neural activity. But let's face it: the knowledge derives from rat studies and it is an indicator; in short it is a dual in-immediacy.

pretations or rejecting them; how did they come into being and how are they controlled; are they for instance open to appeal? I shall not go further into these matters on this occasion. I am merely trying to point out that it is not a simple thing to say that we now have pictures of the brain in action, or of the normal brain. Let me remind you of the story of fractals. At one point in the history of science everybody agreed that fractals were beautiful, and everybody failed to see that if so it must be the animation and the coloring that should be regarded as beautiful.

I have already claimed that a contemporary philosophical praxis takes the form of an intervention using *theses* as its tool to set up demarcations. In the classical philosophical praxis (curiously enough it is modern in comparison to antique and traditional practices) this endeavor was described as a ‘critique’. In the 18th century philosophy tried to reclaim and confiscate the omnipotence of recognition by drawing borderlines secluding the force of enunciation and showing that there were limits to the areas where rationality was reliable and that at this point one had to turn to other forms of wisdom. Contrary to the ancient philosophy, these philosophers became reluctant to identify the nature or condition of the case as such (*ontological* metaphysics) and turned instead to investigating the powers of our intellectual faculties to grasp the world (*epistemological* metaphysics). Contemporary philosophy differs from this by being rather more interested in how we interact in the communal world (*social* metaphysics). Between the genres of the epistemological and the social metaphysics one recognizes what one must admit is what most people relate to when the talk is of ‘philosophy’. And that is a type of clarification concerning the very way we speak of the world around us, the way we deal with the world using language, science and technology. This peculiar strategy is not omnipotent: philosophy takes time off; philosophers write poems, go to the movies and so on and so forth. The aim of philosophy is not to express the truth and nothing but the truth. It is a very specific praxis following its own diversified rules,

one diverted field of knowledge among others. However, many philosophers claim that their training in clarification might be helpful to other disciplines when they are involved with clarification processes.

From the Social Analytical Perspective⁸ which I represent here today, the advances of the neurosciences and their neo-“*scienticistique*” approach to older knowledge calls for attention, indeed, for some wondering.

The aim might be targeted in a traditional philosophical sense since the language-and science-handling seems pretty unclear, and not by volition, which incidentally is often the case within philosophy. I shall try to outline a few examples where a traditionally trained philosopher gets rather confused. Other examples might have been mentioned.

During the 20th century, academia realized that if one wanted to clarify and determine the impact of words, notions and concepts and sayings it was fruitful to be able to handle what I shall call three different strategies of identification, which I will attempt to summarize here. They are all what one might call lexical – i.e. serving clarification. Firstly academia became obsessed with the etymology of words, believing, as children of the 19th century, that history holds the secret of the true sense and thus the meaning of ideas. Although it is not completely to the point, forgive me if I use the name of Martin Heidegger as emblem of this type of philosophical analysis. I hereby imply that most of the so-called ‘continental philosophy’ breathes historical as opposed to social air. Secondly an analytical tradition was interested in giving weight to expressions which stated that function was the issue; later on this became known as ‘con-textuality’ signifying the social *condition*. I tend to use Ludwig Wittgenstein as the emblem for this approach, thereby alluding, much to his post-

⁸ We call it the SAP-strategy, a convenient acronym for my philosophy and that of colleagues following my regime.

humorous discontent I am sure, to the many diverse varieties more concerned with analytical and social issues than with history, i.e. the Anglo-American traditions in philosophy. The third strategy is not especially philosophical. I shall call it the search for *synonymy*; which means the possibility of translation. In a way translation has been a philosophical genre from the very beginning. The best example is the philosophy of Immanuel Kant. Following Kant's enormous achievement the whole of the philosophy, with all its different traditions, may be expressed in German. He did not himself translate but rewrote in his own perspective. The pertinent question now was whether there were equivalents which could be trusted, and this gave us a whole new philosophical *problematique* which is still causing us trouble since the linguists are of no help in these matters. How does one translate from one vocabulary to another? That is a problem in its own right. And moreover, how does one retranslate? Kant translated Hume; when Kant is translated into Hume's mother tongue the result is unrecognizable. The transformation is what is at stake, and it gives rise to a new form of philosophizing. I shall try to pinpoint the problem: The question is whether all synonyms are pseudonyms. Is the thing that we name given or is the very naming – i.e. the differences in naming - of importance? I do not presume to find an emblem like Heidegger or Wittgenstein to cover this third strategy since it is the very homogenization which we tangle with. In the last instance the emblem is the definition of the capability of defining - i.e. the definition-power. Given the growing problem in these areas I might mention, not the problem of thinking as such, but the question relating to 'where thinking takes place'. I point to the category named 'mind'. The Danish term is to my knowledge 'sind' but there is an ongoing discussion as to whether 'sind' is the correct or useful translation of 'mind'. Some hold that 'sind' should be translated as 'consciousness', and now the problem becomes obvious. One might translate 'sind' as 'consciousness' but one would never retranslate 'consciousness' ('bevidsthed' in Danish) as 'mind'.

To be more precise: The objective of neuroscience is probably not to solve the *problematique* of consciousness but to disentangle itself from it. This is the idea I am opting for - my thesis, so to speak. Furthermore, neuroscience should not attempt to encroach on fields of pedagogy and learning theory but it should modestly provide new insights that might be of interest regarding other forms of evidence. Both the misery and the hope lies with the phenomenon named learning, but 'the learning brain' is a chimera when one looks into its meaning by the means we outlined before.

The problem is that the contemporary vocabulary of the social sciences tends to describe development *as* learning. This is the outcome of the collapse of developmental psychology, which again is due to the collapse of the philosophy of history which enabled us to think in terms of steps, of necessary or *indispensable* steps.

Examples

Taking these demarcations for granted, a person like me has some difficulties with some of the key concepts in neuroscience (I am well aware that I might have overlooked more than one nuance but this is on the other hand the rule of the game - we call it rectification. My suggestion, and its troublesome outcome, might not invalidate the whole intervention).

My intention is to exemplify the proposition that sometimes you don't know what you're talking about. May I remind you of the allusion to Nietzsche: Was heisst feststellen? I want to warn you about the vocabulary. You have to say No, to distance yourselves from a worn-out vocabulary. You have to say No to outdated insights (I shall call that ideology I) but in the same breath you should be reluctant to draw unfounded consequences (I use the term ideology II as the naming for this tempting will to

prove oneself right) of the knowledge gained. A philosophical intervention has to demonstrate with documentation the effects that make the different regimes of knowledge rethink certain formulas. It is not the task of philosophy to determine the consequences. And therefore of course it is often questioned whether it is worthwhile looking into philosophy.

I shall give it a try.

Ad representation:

You have to admit that the very conception of representation is tied to the idea that something is taking the place of something and this means that you are able to handle something by handling something else. The model is sufficient for your purpose. By way of illustration you could say that my knowledge of the hormonal system enables me to handle the balance of hormones. By understanding its semiotics I am capable of intervening and that is sufficient. In this respect the representation counts as a realistic model. And this is actually what happens in brain scanners, as different as they are and may be. The colors represent centers; but in between lies a whole lot of accounts which you pass over in silence. And no one hears of them. Representation engages with things and matters that take place otherwise. To a trained philosopher the traffic appears otherwise. One determines from the representation to the thing (“Sachverhalt”). This is complicated since it means that the very will to represent advocates that there is ‘a thing’ to be represented, but the representation creates ‘the thing’. One thus sides with certain forms of determinism. Neuroscience believes it has brought an end to psychoanalysis, but it is just reinventing some of the problems that psychoanalysis could not come to terms with. How does ‘Die Trieb’ represent the somatic drive in the psychic world? Neuroscience is nowhere near a solution to the psycho-physical-problem.

Ad correlation:

One cannot avoid thinking that the scanning results correlate with given facts, that stimulations both show up in the mapping and are a sort of response to psychic-physiological conduct. The two factors are dependent on something of a third kind – meaning that ‘the third kind’ might be a whole endless chain or line of influencing factors. This does not weaken the argument as long as the correlation is significant. We are witnessing a postponed determinism. But along the same line of argumentation you may conclude (and it has been done) that there is a correlation between the performance of pupils and the number of books on the shelves in their homes. Is there a correlation between books and intelligence? And what about the notorious correlation between the number of storks and of registered childbirths? Might there be a correlation between weather and sex? To say it out loud: Correlations say nothing about causality and adds nothing to it – not even to mention advanced chains of causality. This is not news, but it is necessary to mention it over and over again.

Ad centrism (uniqueness and closeness):

Researchers regard the brain as special among the human organs since any idea of transplantation is out of the question; on the other hand it is very salient. But similarly, if you remove all my blood I shall truly die. The self-assurance of brain research stems from the assumption that the brain is incapable of regenerating and that it is not a simple twin organ, like the kidneys and the eyes. It cannot be harvested. The brain is just another organ in an organ. One may cite a whole series of literary experimentations on the autonomous brain (Seeberg, Enquist etc. just to mention a couple of Nordic writers). It is furthermore presumed that lost functions are taken over by nearby domains. In short the presumption is centrist. It is a common experience that functions and senses are capable of compensating for one another, but it is an ongoing discussion whether it has been

documented that the tissue located nearest is the one that takes over. It feels safe to think so since we are victims of a spontaneous idea of the determinism of locality.

Ad reductionism:

At this point in the history of science it is generally accepted that the so-called genetic revolution had its drawbacks. The genome simply does not contain enough information to control human behavior, and therefore the epigenetic factors have become decisive. Nevertheless one seems to identify a tendency among neuroscientists to concentrate or reduce the epigenetic information handled in the brain, so it makes good sense to call their efforts closet reductionism ('skabs-reduktionister' in Danish). They have not left the closet; they have not confessed their inner beliefs, not to mention their sins. Their faith is *in* the brain. It is the brain that does the job, it is the brain that creates, it is the brain that is the foundation and basis for experience. Give me a break. How do they know? What is the benefit of reducing the nervous system to a specific location, i.e. to the brain? How can that be done without reproducing the psycho-physical-problem, the slayer of great traditions in psychology? What we find here is theoretical reductionism as the victim of technological reductionism. It recalls a story from the Sufi tradition of wisdom: The Persian Mullah Nasrudin returns to his house after a party and discovers that he has lost his key. He undertakes a thorough investigation in the glare of the house-lights. Another member of the party on his way home asks Nasrudin why he is searching in that particular spot. And Nasrudin answers promptly: "This is where the light is!" I hope this illustrates the current situation. We are fumbling in the light of the scanner, but perhaps the key is hidden somewhere else.

'The unconscious' is often conceived of as irrational in its origin. Sigmund Freud did not discover the unconscious, as often supposed, he did not find a new scientific continent, but he

did show that its romantic whereabouts were pretty rational. The contemporary neurosciences seem to show that when it comes to the point the brain is just a machine of cognition, even though the machine metaphor has had its day. It gives us an idea, but to describe the brain in machine terms is wrong. It is a machine capable of becoming so much more than a machine, just as the philosophers of the 18th century described nature by its potential to become more than nature, which in their horizon meant the capacity of also becoming culture. The brain is growing; which means that the real problem is whether or not it dies (its neurons collapse) at a higher tempo than new neurons are created and networks established. But once again: A mechanistic feature is reenacted since one eludes the mere quantity of neurons figuring a measurement.

The handling of the physiological changes the brain.
The handling of the self-relation changes the brain.
The handling of the social conditions changes the brain.

Exactly because the brain is plastic and a reproductive, a regenerating (dual) organ a person cannot be reduced to an epigenetic phenomenon – and to repeat: No-one claims nowadays that genetic information is sufficient to account for human behavior. The brain is a ‘learning brain’ and no doubt this is a challenge to prestigious pedagogical strategies.

The neo-phrenologist eager to localize risks blocks investigations into the chemistry of the ‘sphere of circulation’ – i.e. the chemistry of the signal characters of the brain so significant to the wellbeing of many citizens. We face a possible conflict between the knights of the sphere of production and the knights of the sphere of circulation. It might be predictable.

The scanning-technology eludes seeing the living brain immediately – i.e. without mediation. But this is not the case. Comparison can be made with the hormonal system, for instance.

Nobody has ever seen the hormonal system, let alone monitored it. But by experience we know of its semiotics and we are confident that it gives us a pretty good idea of the way it functions. The point is, though, that we are able to handle crises, to predict and intervene, and to reestablish balance by using the semiotics since we have a correlation as a prerequisite. One operates expressly on a representation. That might also be the case for the neurosciences. Perhaps you ain't seen nothing yet.

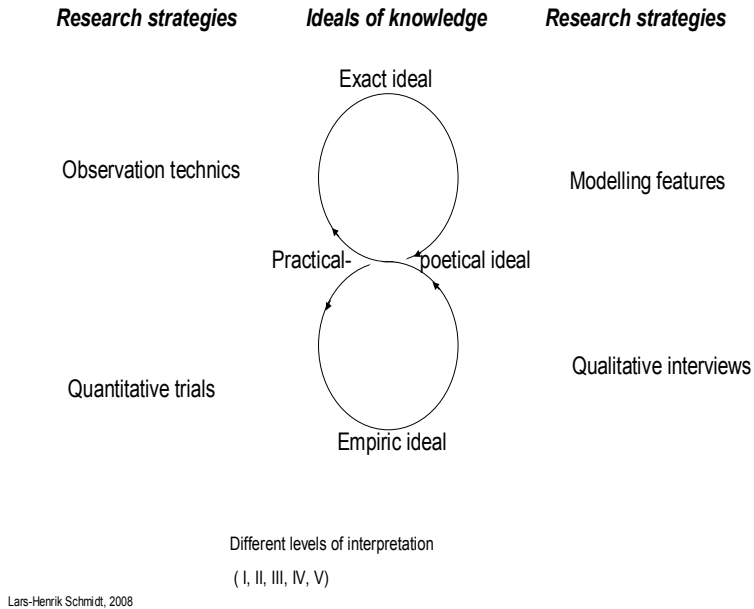
The scientific process

Ambition threatens to shortcut the scientific process. I might illustrate this process by using a map (not a model, not a chart) which I call 'a map of orientation', and which is able so to speak to "figurate" specific lines of conflicts just by mapping and thereby showing the very "Logicität" (in German) – i.e. the path to categorizing 'the logical structure of theoretical praxis'.

The scientific process does not consist of a hierarchy, though one might picture a defined distribution of different knowledge ideals. The specific sciences self-righteously believe themselves to be unique; but from an epistemological point of view like my Social Analytical Perspective (SAP) it is not so hard to point out a logic, not of scientific discovery but of processes of documentation. One must just look at the praxis involved and not be baffled by the insistence on theoretical objects and relations.⁹

⁹ Cf. Lars-Henrik Schmidt: *Filosofierende eksperimenter, Diagnosis I*; Kbh. 1999

Figure 1: The endless circle figured by SAP-strategy:



Following the path suggested by the figuration, one might take one's point of departure in an interpretation (I), where the aim is to get to grips with the state of the arts currently dominant in the specific field of knowledge. A reasonable next move is to validate interpretation (I) by means of quantitative studies, which leads to a new interpretation (II), grounded in documented figures and significance. Obviously it is not always the case that a relevant randomized trial can be followed, and even if it is possible it might not yield the specific validated insight. The limited "potency" drawn on pure figures leads to yet another form of validation called qualitative studies, which take account of well prepared directed news transmitted by a limited number of persons. This form of generalization does not rely on randomized trials derived from chance and bell-curves; interpretation (III) hopes to grasp something general in the individual case regarded

as more than simply individual (meaning exemplary) – i.e. validation through another form of representativity and normality. Interpretation (III) represents a further and more valid generation of knowledge stemming from interpretation (I). In the next step it is necessary to ascertain whether the new generation (interpretation III) functions in praxis, so observations are made which might lead to a reformulated interpretation (III), here called interpretation (IV). Solidly founded on a study of the state of the arts, using literature, quantitative methods, qualitative questioning and now supplemented by observations, an attempt might now be made to model, to form, to abstract, to create models – i.e. concentrated representations – of the knowledge in question. This operation brings about a new generation of interpretation (III), which in itself was a new generation of interpretation (I). The result (interpretation (V)) may now be considered part of a new interpretation (I), and the show can go on endlessly.

Few fields of knowledge undertake the whole journey outlined ideally here. To be sure most sciences focus on one of the steps mentioned. Exceptions are the “weak, unstable” sciences, the ones we are interested in in connection with philosophy and neuroscience, namely education and medicine. The thesis proposes that all fields of knowledge are governed by certain regimes and rules of acceptance. And this is exactly why education and medicine are condemned as ‘weak’: they have to live up to all forms of politics of knowledge – i.e. ideals of knowledge.

Where does one localize neuroscience in this circle? It is a mess and a non-stringent mixture. The technology in question, the scannings, are observation look-alikes. The modeling is really composed of quantitative layer upon layer and comes to reflect an empirical population; but the experience stems for the most part from specific individuals who have suffered damage, and is thereby ascertained by qualitative methods.

The knowledge ideals

It has to be acknowledged that there are different and to some extent conflicting ideals of knowledge which make sense in the sciences. We live by different forms of validation and acceptance of stated propositions. Not so long ago the Bible and the writings of Aristotle and Galen were authoritative. It is only around 60 years since so-called scientific medicine took its leave from the library. Nowadays it seems that we only want to rely on data we have produced ourselves, and we are confident in confronting these data with doxa. Scientific medicine is something of a youngster in the history of science and is becoming more and more of an empirical endeavor - i.e. not governed by the laboratory. It is coming closer and closer to the behavioral sciences. This leads us to a short ideology critique of the scanning enterprise which sanctions the neurosciences.

One problem with brain research is that it thinks of itself as an exact science, even though an epistemological investigation shows it to be more like an empirical and practical field of study. Even the coloring business turns it into a poetic affair (“poiesis” in Greek). It tries to convince, and the scanner evidence may be regarded as a rhetorical trick.

One notices a confusion of knowledge ideals and following on this a mixture of images of evidence. The problem seems to be that one bends ideologically before a hierarchy of evidence forms and truly believes that brain research should come to be to the humanities and behavioral sciences what physics became to the natural sciences. The knowledge regimes do not set physics aside; but these days we are reinvesting in the classical French idea of a ‘science de la vie’. Many took this to be outdated, but ‘life science’ has become a euphemism for the science of growth and of sustainability (as opposed to rock-bottom matter). However, both elements are incorrect. You might follow the historical differentiation of the different fields of knowledge and look into their historical and epistemological regions, you can

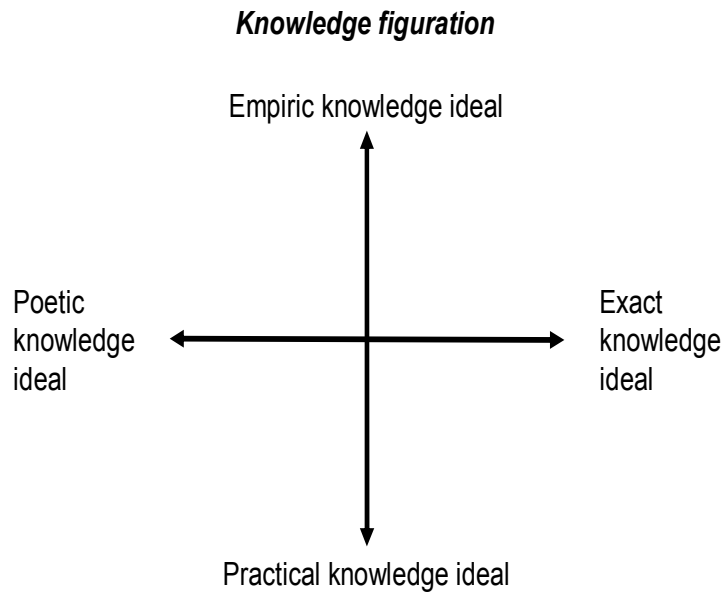
discipline the fields, map their interests and so on and so forth. According to the social analytical perspective I advocate here, the most fruitful epistemological enterprise is to look into the fields of knowledge and investigate the ideals of knowledge regimenting the rules of acceptance. In the contemporary situation it seems to be a matter of course that these regimes are social regimes. Naturally it is not a matter of course, but this is the evidence we live by.

From Aristotle to Kant, the traditional distinction in the history of ideas with regard to knowledge regimes is drawn between ‘the practical’ and ‘the theoretical’, between ‘contingency (or freedom)’ and ‘necessity’, between matters that might be different and matters that could not be different. For Aristotle this concerned ontological regions, but in Kant it came to be the differences between intellectual faculties, and for us it is about distinguishing between specific epistemological regimes, giving rise to new distinctions.

Since the Enlightenment, the ancient conception of ‘the theoretical’ area has been decomposed into two distinct regimes ruled by their specific ideals. During the 19th century the exact and the empirical ideal became distinct. But as opposed to the practical, the two components of the practical-poetic knew one another. In contemporary (late-modern, postmodern) conditions I observe more and more signals which incline us to intervene into the practical-poetical ideal and make an epistemological demarcation in this opposition too. It might be useful to decompose and demarcate a distinction between a practical and a poetical ideal of knowledge, for reasons mostly owing to the rebirth of rhetoric in the learning society.

The dual distinction gives rise to the following map:

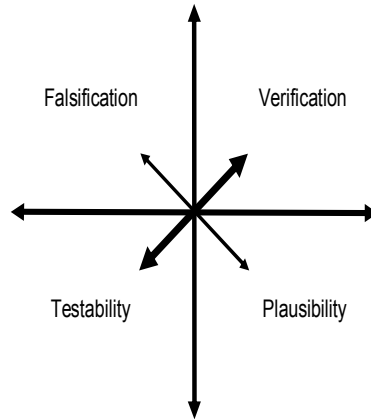
Figure 2



Lars-Henrik Schmidt, 2008

Let me suggest extending the mapping and also naming the domains.

Figure 3



Lars-Henrik Schmidt, 2008

Each domain has its distinct forms of trials, which are plotted in on the map. I thereby imply that the distinctions between the four poles indicate direct opposition between the four domains. Both the distinctions and the oppositions are ways of distinguishing which imply that they are weighted (vectors) and that the experience of the significant weight (unbalanced) is suspended (or lifted into – i.e. “aufgehoben” in German) in a sort of ‘historical block’ determining a ‘hegemony’ (to use categories from Antonio Gramscis’ political philosophy) represented by a ‘dominant ideology’ (in Louis Althussers vocabulary). In the weak sciences of our time the dominant ideology may be termed ‘evidence-based knowledge provided by randomized trials’, and

within our theoretical horizon neuroscience plays a leading role in the epistemological scenario.

In order to clarify the differences in knowledge ideals one should examine the form of references used in the particular field of knowledge, whereby one readily discovers the idolization inherent in their documentation praxis.

The knights of the exact knowledge ideal refer to predecessors whom they take into account and build upon since they never question that science is progressing. The knights of the empirical ideal demonstrate by their references to other writers that they are not alone in maintaining the points in question. And the knights of the practical-poetical ideal use quotations to demonstrate how well-versed and keen they are and to draw on the authority of eminent persons in support of their own perspective. Until now it has not been evident that it is possible to point to a separate poetical system of reference, and it will be difficult to identify since originality (as opposed to the other ideals mentioned) tends to draw the longest straw. One might suggest though that it would sound something like: "Observe the great interest this point of view gives rise to!" Where the empirical knowledge ideal sets out to demonstrate accordance, the poetical ideal is satisfied with conviction and approval: "This is so exciting! And it is new!"

From sense organs to the order of sensuality

Taking these reflections into account we may now consider more closely the proclaimed epistemological effects of neuroscience and consider to what extent they are really epistemological and not ideological effects. 'Sensing', or the phenomenon of 'having sensations', might appear to be a proper example of a line of questioning for the *problematique* at stake here.

Almost everybody is familiar with Aristotle's' formulation of the five senses as the mirror of the soul, and it is not hard to recognize the five senses in dealings with everyday life. More to the point, hardly anyone would protest when presented with this point of view. On the one hand, however, it is beyond discussion that our perception capacity recognizes more than five senses; and on the other, there is no evidence that the phenomenon of perceiving and sensing could be reduced to special organs or even more to specific related parts of the brain. Of course this matter presupposes consciousness of the sensation, i.e. that there is a link between sensing and being conscience, a link that privileges self-consciousness since no one else can claim to sense what I sense; and it so happens that it is me who is sensing; and so the 'me' (self-consciousness) produces an 'I' as the subject, as the actor of the sensation. This phenomenon we bind via representation and correlation to something named the sixth sense, which is bound to a particular organ called 'the brain'. And whenever stimulations land from the outside as drives or from inside as emotions a provocation takes place. Sex is often regarded as the most intense form of sensuality. The story goes that when asked where the sexual feelings were located the famous Mae West pointed to her head, and later on another Hollywood star, Raquel Welch, expressed the idea by pointing out that the brain is the most erogenous zone of all.

Using a philosophical perspective such as mine, there is very little evidence to indicate that sensing is located in the brain and even less to signify that the phenomenon is a conscious one. More convincing is the idea that sensing should be considered as awareness and not consciousness. The thesis is that a line of demarcation must be drawn between awareness and consciousness. This proposition makes it possible to disentangle a new *problematique* and say 'No' to an old one. Sensations are not tied to an organ but to the mind. To be sure, the mind consists of sensation; but the mind is articulated as consciousness. The articulation of awareness aconsciousness indicates that one is

searching for the organ which is the subject of the sensations. The organ is 'après coup' (in French) or 'nachträglich' (in German) or ('efterlods' in Danish), as a deferred action identified and named 'the brain': It was the brain which sensed!

The point is not that the mind is unconscious in the psychoanalytical sense, nor even that it is subconscious or pre-conscious: it is not-yet-conscious or never-ever-conscious. Other traditions of wisdom have tangled with this – in the Buddhist tradition for instance it signifies the state of enlightenment called Buddha.

This approach means though that in so far as you are interested in investigating into awareness it won't help to focus on the senses, their local representatives or the consciousness. You will have to construe 'a theoretical object' like the one which over the years I have chosen to name 'sensuality' ("sansenlighed" in Danish)¹⁰ – and this object has its order, not to be mistaken for the neo-phrenological *geography*. It concerns the social coincidence between the orders we usually describe as inner and outer, the endless meeting point we name awareness and ascribe to the mind as distinct from the brain. Mind ("sind" in Danish) must be regarded as a philosophical category. There is no subject to the mind but the exercise of mind – a being you might try to become the subject of (the process of subjectivation)! But this does not occur in freedom and the activity is not contingent. Mental structures occur and define restrictions (necessary, inescapable guidelines, the process of subjection). And to these

¹⁰ This is not the adequate notion in English, no question about that. Another choice could be 'sensualism' but this notion carries a heavy philosophical burden. What I am targeting is a euphemism: There is a resemblance to the senses in a physiological sense but it is not in representation of a correlation. In German you may distinguish between "Sinn, Sinnen und Sinnlichkeit" without losing the play with language. English and French are less fortunate. The Scandinavian expression dealing with the phenomenon uses 'var' (to take care, cura in Latin, to be careful and so on) which also relates to 'sand' meaning 'true'.

one must count the structure of the unconscious as taught by psychoanalysis. In accordance with the perspective suggested here, one must change focus and concentrate on the not-yet-directedness of awareness. The mental structures do not reside in the brain. Recalling a metaphor I used earlier, some might say that they construe ‘the field of the body’.¹¹

The secret passages of the mind

In short, the thesis is that the mind has passages and may be described as or by the passages. There are certain openings to go by. To examine this understanding more closely, we might find some help in the philosophy of the German American thinker Hannah Arendt, who made a very personal transcription, not to say transformation, of Kant’s conception of intellectual faculties. Her work is an inspiration.

She proposes to translate the distinction in Kant between ‘reason’ (“Vernunft” in German) and ‘intellect’ (“Verstand” in German) by relating them respectively to meaning and cognition. Intellect and hereby cognition merely seek to record what the senses tell is evidently at hand; driven by evidence they register that something is, whereas the reason seeks to understand the meaning of the fact that something is there; to reason it is not enough to register the being of something.¹² If we now relate this distinction to the one we quoted from Nietzsche earlier between the smaller and the larger reason we now are able to connect the distinctions to the way we have tried to distinguish the path between mind (from awareness to mind) and brain (from consciousness to brain) – and we have a new vocabulary. The question is none the less whether mind in the shape of awareness must at the same time be considered meaningful. At least it is not a way of cognitively recording ‘the being’ from ‘to

¹¹ Se evt. *Kroppen i focus*; Kbh. 2000 (1984)

¹² Jf. Hannah Arendt op.cit. p. 57

be' ('the ontocal' as separated from 'the ontological' – using Nietzsche's and thereby Martin Heidegger's categories)! The point is that 'being' ("Sein" as distinguished from "Seiendes" in German) is meaning *as* exercised – i.e. in praxis.

Allow me to take the full consequence of this demarcation. The constellation presented here allows me to conclude that meaning lies out there, which in the next step signifies that the mental structures are disposed meaningfully, and dispositioned so as to be meaningful. It is not up to me then, as a hermeneutical subject laying out my world, to give sense to, to give meaning to the occurrences. They find me but I might want to become the subject of predispositioned meaning.

Following up on this proposition one might look into the problem of whether, in the attempt to grasp the predispositioned meaning by way of the cognition by consciousness, I am not just reintroducing the classical subject-object *problematique* of German idealism. To some extent yes, but only with regard to smaller reasons at the cognitive level, where one is not looking for meaning but for correspondence. Consciousness steps per definition back from the World and self-consciousness steps back from the Self. My exercise, my acting, my handling does not stem from this, since precisely that would be a re-rationalization and a grounding procedure which the philosophical traditions assign to the category of Metaphysics.

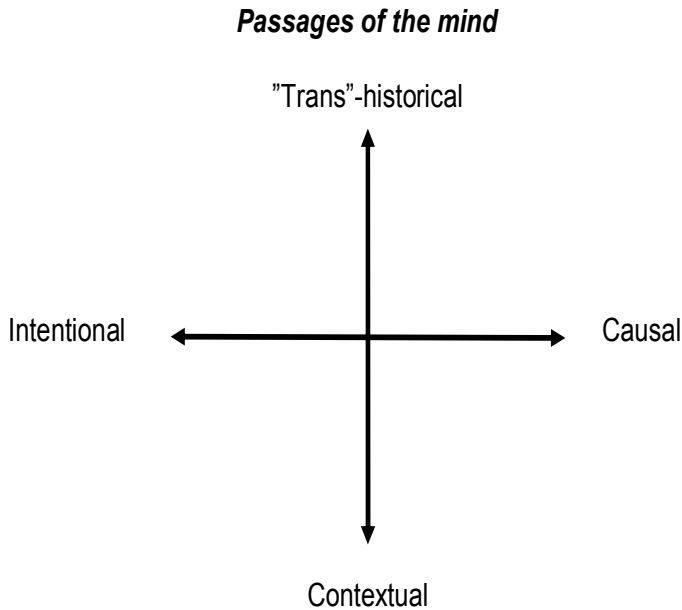
Let me try to outline on a small scale a sketch mapping the structured acting abilities, the mental structures, the dispositions ruling the exercises of the mind - i.e. the life of the mind, using Hannah Arendt's wording. I shall draw a map considering vital mental activities which represents the stream we behold ourselves in without being able to locate the sites either in relation to a subject (a cause) or to an object (an intention). The map only shows structures. It maps the correlations configured.

In philosophical language one might say that the mind has its forms of action which may be ordered. But presumably these may never be identified as specific causes in a scanning procedure. The mind is much too complex, plastic and interactive to yield to a hypothesis about localization as the stronghold of new psychobiology.¹³ Brain activity cannot be localized, and the activity of the mind doesn't really take place; it is pure action and at one with the action. On the other hand, it reacts rather stereotypically and philosophers have studied the life of the mind for centuries. I am not saying that there is nothing new to learn or rejecting unknown evidence, simply that if the localization hypothesis is given up classical philosophical insight still has something to offer.

Let me put it boldly. The thesis goes like this: Neither physiological nor psychological descriptions can capture the life of the mind. It has its strange passages. I anticipate (hopefully with no reason) a critique stating that I am referring to pure speculation without hard evidence. But different fields of knowledge bend to different forms of evidence. This being said, no one wishes to argue against solid evidence. But our teaching down the centuries has an impact on the learning brain. Our teaching interferes with the mental structures and the activities they allow.

¹³ See William R. Uttal: *The New Phrenology*, MIT 2001

Figure 4



Lars-Henrik Schmidt, 2008

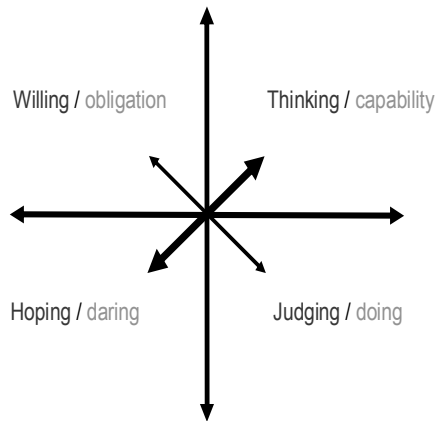
The major distinction drawn repeatedly from Empedocles to Freud tries to distinguish between going back (regarding what has been) and going forward (regarding what is yet to come). And then there is another distinction regarding ways of augmenting for the interest in causality and intentionality. Some put their hat on the Transhistorical (in anthropology the so called natural) features in man, the view that man has become that which transcends history, whilst others bid for the social condition, on the contextual features. These are open possibilities and most philosophers have chosen not to choose between causality and intentionality and between transcendentalism and empirical being. But the mental structures and orientations may be summarized like this; and so I propose to map them and the battlefield.

The figuration gives rise to the domains articulating differences as oppositions. It is rather easy to identify three of the domains and their form of mental activity since they are part of Kant's reformulation of the whole tradition, whereby it gives meaning to distinguish between thinking, willing and judging. Hannah Arendt repeats Kant's separation of intellectual capacities by talking about mental activities. However it seems that the experiences of the 20th century complete the map with a fourth domain, and a pretty good candidate would be awareness of the heretic, non-traditional, non-liberalistic traditions born in the 20th century in such different authors as Ernst Bloch¹⁴ and Jean Paul Sartre¹⁵. Seen in the perspective of the history of ideas they may represent a radical renewal and not just a historical renewal of the great themes of philosophy by authors already mentioned above. The radicals' belief in 'the possible', in the "noch nicht" (in German), in what has not been manifested, not yet at least, provides us with a convincing poetical meaning calling for approval.

¹⁴ See "Die antizipierte Realität" (1965)

¹⁵ See "L'espoir maintenant (1980)

Figure 5



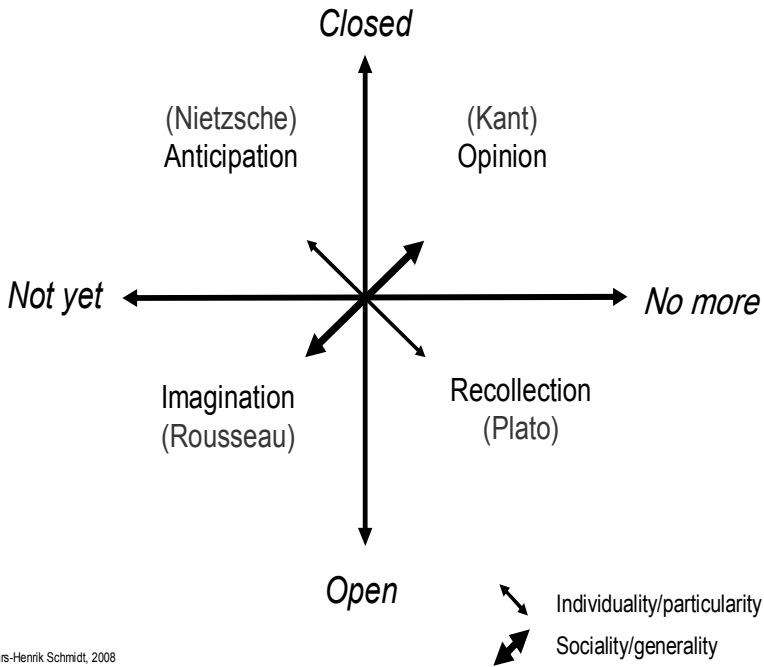
Lars-Henrik Schmidt, 2008

It is however important that the mental activities mentioned and mapped are all circumscribed and limited by certain restraints. What you should do restrains willing, what you can do restrains thinking, what you may try restrains judging and what you dare to do restrains hoping. The thesis is therefore that the immediate mental activity is always already restrained and that the restriction structures the activity. It is in no way free or contingent. On the other hand, necessity has taken on another character. In consequence of this line of arguing one must admit that ‘what-is-not-to-be-said’, ‘not-to-be-put-into-words’ appeals more to awareness than what is formulated and outspoken. The mental structures are dispositional frameworks, but they frame nothing, surround No thing. Kant spoke of frameworks like this when he mentioned the epistemological schema surrounding and circumscribing ‘das Ding an Sich’; such a metaphor for limitation is no

longer needed when we accept that the world we are confronted with is not in front of us (“Gegenstand” in German) since we are being and acting in a world of appearances.

The domain structured by willing and obligating between the poles of intentionality and anthropology is characterized by the capacity named anticipation. The domain structured by thinking and ability between the poles of anthropology and causality is characterized as opinion; the domain of judging and doing, closing or trying is characterized by recollection, and the domain of hoping and daring is characterized by imagination. These differences are articulated as oppositions, i.e. between anticipation and recollection (“anamnesis” in Greek), since the collective (‘historical block’ and consenting ‘hegemony’) deals with the social or general features. This is the secondary line of conflict. The primary conflict is articulated between opinion and imagination since it deals with the individual and the particular. For what it is worth as a rhetorical or stylistic illustration, we could pay our dues to the great philosophers by naming the domains respectively Nietzsche, Kant, Plato and Rousseau.

Figure 6

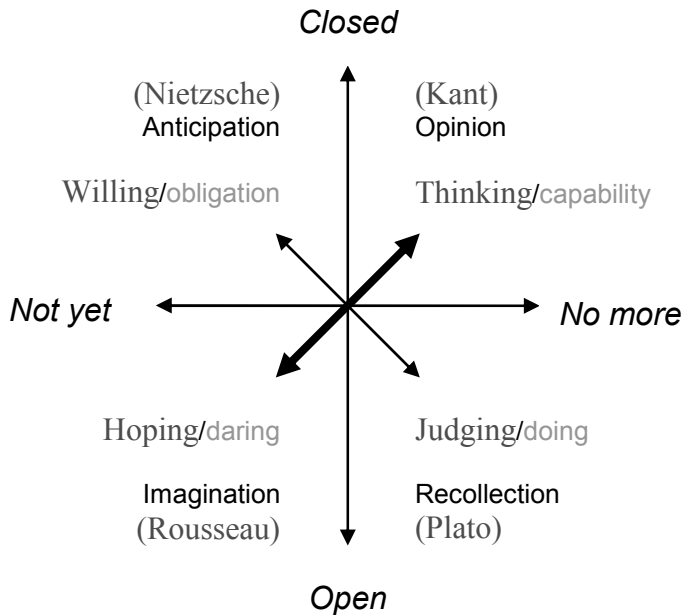


Lars-Henrik Schmidt, 2008

The point being that these capacities, these exercises, these forms of mental action may never be identified in a scanner. The scanner technology, however refined it may be or become, cannot touch upon them and deliver the evidence. One has to admit though that this alternative way of describing mental activity, the so-called life of the mind, is not without proof. History and usage are not arguments in themselves, synonyms are not arguments as such, but these data reflect the way we have learned to think. And if this is the way we have learned to think, the mind followed by the brain will adjust. The brain will accommodate mental structures. Our ways of thinking are not apt to adjust to the brain and the knights of neurosciences. But it goes without saying that there is a learning process ahead. For my part I stick

to learning processes and it would take me some time to understand that feelings are the new issue.

Figure 7



Lars-Henrik Schmidt, 2008

Great expectations

In conclusion, I would like to pose a final question about philosophy – and I insist on ending my paper by emphasizing and repeating that no professor of philosophy is entitled to talk about Philosophy (I am merely pointing to my own learning). Is it possible that the Research center Gnosis may contribute to the CCC-family? The question is whether or not Gnosis is capable of demonstrating a philosophy effect.

It goes without saying that time will show. We only began our work at the start of the year and there is a lot to read (interpretation I), a lot to learn. But maybe the simple insistence on the phenomenon ‘thinking’ could be of some inspiration to my honored colleagues. The insistence on upright awareness regarding opinion, anticipation, recollection and imagination and their conflictual structure in the scientific praxis is a start.

I thank you for your attention. Gnosis is not an offer you cannot refuse. I hope we can give you reason to respect our approach or at least our efforts. It is certainly our ambition.

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Neuroscience may be a challenge
to philosophical traditions but
philosophy will continue to be a
challenge to the neurosciences.

