# Determinism: Philosophical and Theological Objections

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# 1. A Telling Prefix

In the second half of the 19th century, something peculiar happened to the English language. In an almost epidemical fashion, countless words were given the prefix "electro." Electromagnetic waves had just been discovered, and hence everyone who sought to create a name for himself and wanted to be state-of-the-art would talk of "electro"-this and "electro"-that until this new and fascinating technology became commonplace and, therefore, uninteresting. Something very similar has been going on with the prefix "neuro" for some time now, although this time the backgrounds are probably far more precarious. Neurosurgery and neurobiology certainly designate a perfectly normal segment in science and research. The same holds true for neurophilosophy, I would say, as a sector of a special theory of science. Still, the case is already different when it comes to neurolinguistics, neuroinformatics and, particularly, neuropedagogy and neurojurisprudence. All these have long since become common terms, designating processes and programmes which have a profound bearing on man's self-understanding and whose ethical, social and political implications are far-reaching in practical life. Thus, in the case of neurojurisprudence, the concepts of guilt and responsibility that used to be taken for granted are dissolved, as, according to neurojurisprudence, it is not mind and will which determine human actions, but neuronal dispositions. At the same time jurisdiction is being shifted towards prevention policy, since future culprits may be identified neuronally. Yet, we have to wonder, who determines how many pieces of evidence there must be for a prevention measure to be a legitimate one? (Wenzel 2008)<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> See Becht (2008: 13).

<sup>&</sup>lt;sup>2</sup> http://www.nzz.ch/nachrichten/kultur/aktuell/freiheitsmuedigkeit\_1.664121.html.

There are entire other fields as well that have long since been occupied by the neuro boom: even historians are thinking about the "Neurocultural foundations of historical science," (Fried 2004: 80)<sup>3</sup> and – I might have said: naturally – theologians do not want to lag behind either, and so they, too, have something to say about neurotheology.

These neologisms are far from harmless. They mark the cultural dominion that the paradigm of "naturalization" is having on man, his individual life and his social contexts. "Naturalization" refers to the attempt to reduce the emotional and mental, including the religious and everything connected with it, to processes that can be analysed in a biological way and that may be optimized artificially or even reproduced. The idea itself is far from new: Socrates appears to have found his own highly characteristic way to philosophy by distancing himself from an all-explaining natural philosophy (Platon: *Phaidon* 96a). In the 18<sup>th</sup> century, it were, above all, French materialists who adopted this endeavour and were harshly censured for that by idealistic philosophers. This may be well studied with regard to Friedrich Schiller who, in the course of one of his three medicinal dissertations in his time as a military doctor, converted from a strict naturalist into an ardent philosopher of freedom (Safransky 2004). There also was a highly controversial debate on naturalism from the second third of the 19<sup>th</sup> century onwards, and it is happening again at the present time. To my mind, this once again confirms an older observation by Odo Marquard that the reference to nature – and, indeed, the refuge sought with the term - always experiences a boom whenever there is a widespread disappointment with historical, political and social programmes, as the hopes associated with them are not fulfilled (Marguard 1991).

In any case, it is undeniable that the interest in anthropology and, particularly, in man's biological constitution increased strikingly in the time right after the French Revolution and right after the First and the Second World War, and it is happening again nowadays, following the demise of the great ideologies. And this fact may account for the widespread naivety which, further nourished by the fascination exerted by the image-guided procedures in modern medicinal technology, disregards the fact that naturalism itself is neither a branch of research nor a science, but rather, to put it pointedly, a special kind of metaphysics. As such, it is prone to cross the line of demarcation separating it from worldviews with a rigid semantic exterior, i.e. ideologies, whenever it refuses to engage in a critical self-reflection. This strikes me as the larger

This is a title of a chapter.

background against which current neuro-debates must be understood if we seek to grasp them adequately. The most direct approach is to look at the focal points in which the problem of naturalization attempts finds its densest expression. I am referring to the phenomena of consciousness and freedom. In the following, I shall restrict myself to the latter, as it also pertains to our present concern with determinism.

## 2. The Focal Point of Freedom

That which is commonly called free will is deemed illusory by many of those participating in the discussion, since present decisions to do something may be experimentally proven to occur unconsciously (Roth 1996; Bieri 2001; Pauen 2004).<sup>4</sup> The famous Libet experiments and their recent re-enactments in Leipzig and Berlin (Soon, Brass, Heinze, Haynes)<sup>5</sup> function as the basis of the relevant positions (Libet 2004). In brief, they all purport to have furnished experimental proof that we do not do what we want, but that we, in a kind of subsequent self-ascription, want what we do from non-voluntary motives, i.e. determinations. However, Libet's test arrangement and his interpretation of the results have long since been subjected to critical scrutiny. It is especially unclear what these experiments measure and, in particular, what is to be measured at all. The fact that conclusions as to the constitution and inner workings of free actions and their usually highly complex embeddedness in coordinates and life situations are drawn from completely de-contextualized corporeal movements makes Libet and his successors' inferences highly questionable (Habermas 2007a: 102-104).

Nevertheless, the view that declares the phenomenon of free will to be a pure illusion (Geyer 2004) has gained wide acceptance even in public debates. I quote Gerhard Rothe as a case in point:

[T]here must be specific patterns of reward that have developed in the limbic system that makes the attainment of specific goals appear very pleasurable. It is completely immaterial what these aims are, whether the Nobel Prize or an ascetic monastic life. Very strong-willed people are not free at all, but driven by

See also the summary given in Libet (2004).

<sup>&</sup>lt;sup>5</sup> See "Studie nährt Zweifel an freiem Willen," *Spiegel online*, 14.04.2008, http://www.spiegel.de/wissenschaft/mensch/0,1518,547074,00.html; "Das Gehirn weiß vorher Bescheid," *Netzeitung.de*, 13 April 2008, http://www.netzeitung.de/wissenschaft/971137.html.

their aims, as they seek to reward themselves by attaining them. It is the prospect of this specific reward, not free will that elicits from men the highest performances (Roth 1996: 311).

Such suppositions of neurobiology tend to lead to some sort of nervousness in theological quarters. These worries, however, are unnecessary. For where but in philosophical and theological discourses have the patterns of reward been negotiated that determine what "free will" means, naive though this term may be according to the above view? Thus, if this is so, one cannot but raise the follow-up question about what criteria govern this negotiation. In so doing, we must also inquire whether and in how far the pleasure of attaining aims is a viable category (and not merely a quasi-Freudian pseudo-explanation). Naturally, the negotiating process and its results can once again be explained according to the scheme of reward patterns. Still, in this case, it is to be discussed what we exactly mean when we speak of reason, as the construction of reward parameters, because naming motives or reasons comes very close to argumentation and reason. Reasons are not causes, after all, for reasons have the form of so-called propositional attitudes, i.e. attitudes towards facts that can be articulated in sentences. These sentences are abstract, however, i.e. they cannot be localized in space or time. Moreover, they are capable of truth as they emerge in the context of justifications and they need to be appropriated by a subject. None of these characteristics applies to causes, i.e. neuronal activities, for instance. Naturally, the latter are the basis of psychic processes, which, in turn, provide the space for reasons, as it were. Nevertheless, for the reasons just mentioned, these causes cannot be identified with reasons (Pauen 2007). If they were, having an opinion, as it becomes apparent in reasons, would be a brain process. Hence follows, however, that the opinion that having an opinion is not a brain process, would be identical with a brain process, which is absurd (Schöndorf 1999: 267).

If there were evidence that reason cannot trust itself with regard to its most imminent concern of a consciously-lived life, then it should not attempt to do so in other fields either. Rather, it should be consistent in bracketing its epistemic claims altogether. In this case, it would not be tasked either with (a) knowing itself to have a relationship with itself that, in turn, forms the basis of its relatedness with the world and (b) living a conscious life in a world so grasped which does not obviate the questions that come up at its boundaries. However, astonishingly enough, even hardcore naturalists shy away from this consequence. For instance, Roth, in reducing everything mental to the deterministic inter-

actions between the brain and the environment, also warns against viewing the awareness of the "I" and freedom as mere epiphenomena, i.e. as concomitant secondary phenomena of neuronal processes (Roth 2001: 397, 512-513). This inconsistency is presumably due to the fact that Roth, at the same time, has to account for the evolution, in biological terms, of the development of consciousness etc.: Indeed, if this lavish equipment of man were devoid of any adaptive function in life and survival, it would not have persisted through time and across generations. Evolution must begin at the physical level. If, then, psychic processes were without influence upon the physical, their occurrence and, especially, their complexity would become incomprehensible particularly in terms of evolutionary biology (Searle 2004; Thurm 2005).

The case with Thomas Metzinger is similarly ambiguos. For one thing, he deems subjectivity to be a self-model, i.e. as pure fiction or, more precisely, a "neurocomputational weapon" (Metzinger 2005: 153) instrumental for the survival of a species in an environment that has produced the "mindless, merciless self-organization" that is called evolution (Metzinger 2005: 154). However, at the same time, he is afraid that a crude materialism might attach itself to the neuroscientific progress, stripping human society of solidarity and thus rendering concepts of self-understanding such as dignity, reason and responsibility obsolete) (Metzinger 2005: 156-158). Other models which are committed to a less pessimistic anthropology attribute the development of such luxurious equipment as the mental, including its volitional aspect (and, incidentally, the emergence of religion), to the paradigm of the handicap principle: in the context of choosing and courting a sexual partner, such luxurious equipment as consciousness signals a higher degree of biological fitness (Uhl, Voland 2002). To put it quickly, knowledge and faith make us sexy. However, in the case of religion, such attempts at a biology based on cognitive science do not even come close to providing a satisfactory explanation for the development of abstract notions of God, i.e. of socalled "doctrinal religions," (Boyer 2001; Whitehouse 2004) let alone possible alternatives derived from the resources provided by a theory of subjectivity (Müller 2006: 209-249). Moreover, while it regards mental phenomena and their explanation as "mindless self-organisation," the prefix "self" contains the same explosive potential as popular figures of speech like those that my brain thinks or that every unit within the decentralized action centres of the brain knows how to react to a certain stimulus. The worst example is the title of Gerhard Roth's book From the Perspective of the Brain (2003) – as though the brain had a perspective! All this constitutes an attempt to shield the living environment from cognitive dissonances, to use a phrase of Jürgen Habermas (2007a: 102): Neither does a constellation of synapses "know," nor does a brain "think." Furthermore, a self-organized being cannot be "mindless," as there must be an aspect of "self"-structure to the apparent self-reference, which a being first requires to be aware of the fact that there is something out there besides itself. Moreover, it is necessary, first of all, so that it does not digest itself (Stoerig 2006: 219-220). Hence, the discussion provided us with reasons to think that the question of the will cannot be done away with biologically.

As for those who do not adopt this kind of naturalization tendency of the volitional, one may schematically distinguish between three kinds of theoretical hypothesising. They differ in the way in which they deal with the relationship between determinism and freedom.

- (a) The first position we will consider is often called incompatibilism. It is the thesis that, in principle, freedom cannot co-exist with a causally complete world, a background assumption widely shared in modern physical science. Those who do not wish to declare freedom to be an illusion in an incomptabilist fashion must search for indeterministic gaps or niches in the fabric of the world. This has been done from Schiller to the present day. Today, it is generally the reference to the principal indeterminacy of quantum-physical processes that plays a crucial role. However, elaborate suggestions do not follow this idea with regard to the possible indeterminacy of physiological processes. Rather, they incorporate quantum physics into a random experiment in which a future action is made dependent upon the possibility of observing the radioactive decay at a certain point of time. In that, not even the most precise analysis of the universe may provide any information on whether a process of decay may be observable or not at the point of time looked at (Saint-Mont 2007).
- (b) Compatibilism, on the other hand, holds that freedom may be reconciled with determinism. Michael Pauen has repeatedly made a case for it, construing freedom not as the highest degree of unconditional possibility for decision, but as self-determination instead. The minimal precondition for this concept of freedom is the distinction between compulsion and coincidence. For freedom so conceived it is not decisive

whether an action is determined. Rather, it is decisive whereby it is determined: is it determined by the acting person themselves? In this case, it is self-determined and, therefore, free. If, on the other hand, it depends on exterior influences or on accidents, then it is not self-determined and, therefore, not free either (Metzinger 2005: 17-18).

The punch line of this concept of freedom is that a minimization of determination does not add to freedom at all, but rather does away with the authorship of an action by which this action is distinguished from compulsion and coincidence (Metzinger 2005: 60). Hence, for an action to be free, there always must be, as Pauen puts it graphically, "a sufficiently vigorous connection between the acting person and the action" (Metzinger 2005: 96).

However, some crucial part of this process are the corporeal, material and historical dimensions. An action could be self-determined even if the events preceding the birth of the acting person made the action predictable, as long as the criterion of self-determination was fulfilled, namely that the prediction included the acting person's preferences. Still, it is clear that this conception implies a strong notion of self and subject, which, however, has not been sufficiently elaborated upon, especially by Pauen.

(c) A third position which comes into play at this point does not have a succinct title yet. However, there is an all the more prominent representative to champion it: Jürgen Habermas. Certainly, he does not opt for incompatibilism, but neither does he adopt compatibilism, as it has been discussed with regard to Pauen. He cannot agree to the latter's scientistic thesis that the universe "as the sum of objects of the sciences and their nomological procedures is sufficiently determined" (Habermas 2007b: 281).

According to Habermas, Pauen's concept and similar ones like that of Peter Bieri, for instance, are flawed, because they imperceptibly shift between the observer's and the participant's perspectives, i.e. between the neurological-empiristical and the mental-rational language games, thereby insinuating "that the motivation of action by rational reasons builds a bridge to the determination of actions by observable causes" (Habermas 2007a: 106).

Thereby the fact is obscured that from the perspective of the acting person, one description cannot be exchanged for the other (Habermas 2007b: 283) – i.e. the first person perspective is blurred, to use a technical concept from the theory of science. Moreover, in so doing, it is disregarded that the stance of the ultimate observer, who describes the universe from far outside and who, in that, attempts to declare the individual's consciousness of freedom a fiction, is a fiction itself, because it passes over the fact that there can be no such thing as cognition without the participant's perspective (in the guise of justification, for instance) (Habermas 2007b: 287).

It is against this perspective that Habermas argues for an epistemic (and not ontological!) dualism of the description perspectives as being irreducible. Moreover, he tries to embed it in a "'soft' naturalism," (Habermas 2007a: 111) "soft" meaning that the ontology used to that end must allow for something like an interaction between nature and spirit. In particular Habermas tries to substantiate this claim by attributing the emergence of this methodological dualism to an evolutionary learning process (Habermas 2007a: 114). This is the first trait of what Habermas, in his critique of Kant, likes to call the "detranscendentalization" (Habermas 2007a: 111; Habermas 2007b: 298-304) of epistemology. The second brunch of his argument attacks the problem of mental causation, which logically arises from epistemic dualism. Thus, his starting point is the possibility of brains being programmed by an so called "objective spirit," which, however, "exists only thanks to its embodiment in material sign substrates that are acoustically or optically perceptible, i.e. as observable actions and communicative expressions, as symbolic objects and artefacts" (Habermas 2007a: 116).

In this way, the idea of an immaterial entity interacting with material processes, which naturalists like to present as a caricature, is ruled out. Instead, the "I" is conceived of as a social construct arising from the interaction of the participant's and the observer's perspectives. It is not an illusion, but an intersubjectively tangible entity, in whose self-consciousness "the attachment of the individual brain to cultural programmes is, as it were, reflected, which reproduce themselves only via social communication, i.e. as assigned, in turn, to the communication roles of speakers, addressees and observers" (Habermas 2007a: 120).

Indeed, by that, a strong intuition of consciousness and freedom is defended from the attempts at naturalization. However, as I will show, it is not strong enough. A first sign of a rather far-reaching deficit I perceive lies in the fact that within this "I" as a social construct, the "self," this aspect of self-referentiality, appears once again. However, it is only assumed without it being either deduced or explained. The fact that the knowledge about oneself cannot be explained exclusively by means of intersubjective processes, but must rather be deemed irreducible, is at the root of a dispute between Habermas and his friend and colleague Dieter Henrich. In my view, Henrich has always had good arguments. Only very recently, he has put them forth in a compelling way in his major work *Denken und Selbstsein* (*Thinking and Being Oneself*) – with particular regard to the issue of freedom (Henrich 2007: ch. 5).

The instability which results from Habermas' insufficient explanation

of the subject's position is particularly manifest where he eventually tries to give the "soft" naturalism or, as one might also say, monism an identifiable character. It is telling that he introduces it by delineating a position which is indebted both to a memory of Kant's transcendental turn (including an additional pragmatic aspect) and to a sceptical misgiving about transcendental idealism (Habermas 2007b: 295). "Idealism" designates (a) the conviction of the fundamental intelligibility and rationality of the whole of reality. And this implies the assumption that (b) the whole of reality is ultimately something intellectual, as from first to last it is really only ourselves and our intellectual life that we grasp. For only in this respect do we have a direct grasp of the object comprehended (Kutschera 2006: 252-261), which implies that the natural sciences lose their realistic claim to knowledge. Thus, Habermas' orientation attempt makes it clear that the ontology searched for must be anchored between Kant (enriched by aspects of language and action theory), on the one hand, and the avoidance of a strong idealism, on the other, which still retains something like the outlines of an idealistic intuition. This rather formal orientation becomes intelligible when it is translated into of the problem of freedom: "Naturalism explains the appearance of increasing levels of freedom as the artefact of observers who have greater difficulty predicting biological systems, the more complex they grow" (Habermas 2007b: 301).

This is exactly what "freedom" means if the participant's perspective is dispensed with altogether. However, this is still far too little.

Naturally, the critical counter-movement of a philosophy following the participant's or first person perspective, i.e. a philosophy of consciousness or its strongest version, idealism, comes in at this point. This approach takes the self-experience in the paradigm of self-referentiality as the starting point of its description of the whole of reality, as this selfexperience is the basic and full manifestation of reality. Everything living in pre-reflexive consciousness is half-way to self-referentiality and finite. Hence, contingent self-consciousness is something like a worldly image of the ground from which it is derived and which, according to the logic of the image, must be an absolute intellect that is completely present to itself. This was the perspective of Schellingian and post-Schellingian philosophy of nature, which, in this way, arrived at a concept of freedom that is replete with reality. Since everything is an image of God, this image also includes God's sovereignty which asserts itself as the independence of an entity. For Schelling, "it is specific to the absolute alone that, as well as endowing the image opposite itself with being from its own, it also furnishes it with independence. This being-in-itself, this true and genuine reality [...] of the entity contemplated is freedom."<sup>6</sup>

And this is too much for Habermas. Indeed, Habermas struggles to back away from these metaphysical and theological consequences of such a natural philosophy. While not discarding them altogether, he charges them for glossing over the irreducible duality of the double perspectives of observer and participant in favour of a hypostasized first person perspective (Habermas 2007b: 302). Still, there is no compelling reason for stopping here, at least if one accepts that self-conscious subjectivity, in the course of its own self-interpretation, must entertain final thoughts about the whole of its own being and its being-in-the-world as well as the question of the ground of its emergence that is beyond the subject itself – i.e. if one deems metaphysics, including philosophical theology, possible.

Habermas is not in favor of metaphysics (of course). Rather, he envisages a detranscendentalized natural history, which refers to the great narrative of man as a natural being embedded in the universe. It is inspired by elements of various human-scientific disciplines, but it might also include "concepts 'from above'" (Habermas 2007b: 303) as Habermas puts it. These are non-naturalistic basic concepts from the self-experience of the subject person, which might add up to a theory in which "the mind may 'catch up' on its own genealogy" (Habermas 2007b: 303). Naturally, this would be impossible without empirical insights, but the aim striven for may only be attained "if we *interpret* them in the context of their own reception history," (Habermas 2007b: 304) so that we may learn something about the emergence of the learning mind from our learning about the world.

### 3. A Viable Alternative: Retranscendentalization

Habermas' ideas still remain in the stage of a prognosis, thus, naturally, being subject to the same criticism which the sharpest rival position, i.e. eliminative materialism, attracts precisely because of its prognostic character. Nevertheless, I take the view that we must dare to harbour thoughts of similar character and intention to those of Habermas if con-

<sup>&</sup>lt;sup>6</sup> "Das ausschließend Eigenthümliche der Absolutheit ist, daß sie ihrem Gegenbild mit dem Wesen von ihr selbst auch die Selbständigkeit verleiht. Dieses in sich-selbst-Seyn, diese eigentliche und wahre Realität des […] Angeschauten, ist Freiheit" (F.W.J. Schelling 1860).

sciousness and freedom are to be relieved from the suspicion of being illusory. It has become apparent, at least, that and in what way this is possible under the ostensibly insuperable pressure of naturalization.

However, there might be an alternative which, it being a mirror image of Habermas' programme, might be termed "retranscendentalization." It designates the concept of a strong theory of the subject, as it has been put forth by Dieter Henrich who refers to Kant and includes both tenets of idealism and analytical language philosophy. At the centre of this conception (to put it very briefly) lies the notion of a self-conscious and free subjectivity, which is both shown to be irreducible and real and which also knows itself to be a contingent element of the world. It is aware, moreover, that it cannot dispose of its own emergence and that it is, hence, dependent on a ground that sets it free. What makes this alternative so attractive is the fact that, on the basis of the notion of this ground, it literally robs the naturalists of one of their sharpest weapons, namely the claim that consciousness and freedom are nothing but illusion or fiction (Wegner 2005: 256).

The culmination of this perspective is that it can be positively taken up in whole accord with Kant. Kant's contemporaries were already preoccupied with the implications of his belief that reason must necessarily
think its highest concepts – God, freedom and the universe – for the
sake of its own coherence, although it was unable to gain theoretic
knowledge about them, hence bracketing these necessary assumptions
under an "as if." When it comes to these epitome terms, Kant, in fact,
expressly speaks of "fiction" or "something made up," and this raises the
question whether such ideas are to be treated as "inevitable and, at the
same time, life-creating and, only as such, well-motivated fictions" (Henrich 2001: 60).

Alternatively, one may side with Fichte, for instance, that convictions which are so significant to life and by which, moreover, all our other convictions are made into a whole, must be considered to be true despite such a misgiving. Incidentally, it was clear for Kant, as can be seen from his doctrine of the postulates, for example, that something that must be thought of as unreal need not therefore be incapable of truth.

That this question must be raised becomes apparent from the following. Even where somebody commits themselves to reticence in dealing with such last questions at the boundaries of knowledge, they may still be asked from what life notions like that of freedom arise for them "and what it would mean to *lead* a life according to them" (Henrich 1999: 43).

The life forms from which this idea arises, by virtue of its self-con-

sciousness, cannot but be aware of its being real as well. Such an idea is something that epitomizes and embodies what moves a conscious life. Thus, it is so deeply inscribed into this mode of being oneself that this idea, in a certain way, participates in the irreducibility *and* the level of reality of the "I"s knowledge implied therein. This comes close to the way Searle describes the idea of freedom: "Refusing a free decision only works if I presuppose the freedom to refuse. The refusal to use one's free will only makes sense if one expresses one's free will in the refusal. [...] We can no longer explain our life if we have to give up the assumption of freedom" (Searle 2008: 30).

However, if this is so, a subject, being called upon to reflect on itself, may dare to harbour the thought that this made-up thing called "freedom," a fiction, is not simply a fiction serving some purpose. Rather it represents a concluding idea, which marks the continuation of a reality, bridging that which is and which is true and that which must be assumed for the sake of this truth and reality. In other words: The thinking subject and the object thought are intertwined with one another and belong together.

Naturally, this does not mean that one secretly usurps a metaphysical or even religious insight, for "such a reference to truth, of which a conscious life makes itself a part as such, may only occur if it eventually comprehends and re-orients the synthesis of all its life tendencies, which it must first accomplish and experience as its own performances, as the occurrence of an event which encompasses all its own actions" (Henrich 1999: 148).

This means that fictions (in the above sense) can be credited with truth in the framework of a holistic mindset, i.e. one that eventually recapitulates all theoretical and practical epistemic performances and, hence, all modes of knowledge in a wholeness of understanding (Henrich 1999: 61-62). It is obvious that this comes quite close to Habermas' programme of a history of nature, though arriving there from the other side, as it were. If such a programme is not a priori "sealed up" against thoughts of a wholeness, i.e. metaphysics (as is the case with Habermas), but, in a critical glance at the boundaries of reason, remains open to the idea of a final ground of everything, then it is an option that prompts to follow Henrich and set out on a way that leads to monistic ontologies of all-oneness, i.e. to conceive of the whole of reality in its reality and individuality as being part of a unity that has differentiated itself. The point of this ontology would be that it would not first have to be made "soft" so as to incorporate into it the mental as a reality *sui generis*, because it is

only in the light of the self-analysis of the irreducible inner processes of reason itself that it comes into view in the first place. In terms of theology, moreover, our reflection on freedom ends up at the same final point towards which our considerations on the notion of consciousness had already tended, i.e. the concept of a pantheistically-inclined philosophical speech of God.

As long as reason does not give up all faith in itself, the suspicion that freedom may be an illusion can in this way be countered with strong reasons. However, if you have the impression that this is pretty exhausting, then be reassured, as others have experienced the same frustration before. Elisabeth Anscombe related once how her teacher Ludwig Wittgenstein, normally a model in reticence, lost patience in a toilsome debate on these issues, lamenting: "I hate free will talk" (Searle 2008). Nevertheless, we must not eschew this toil – which is truer today than ever.

# References

- Becht, Stefan, 2008, *Es ist nicht weniger einsam als zuvor*, Süddeutsche Zeitung, 81, 7, April: 13 (Interview with William Gibson).
- Bieri, Peter, 2001, Das Handwerk der Freiheit. Über die Entdeckung des eigenen Willens, Hanser, Munich.
- Boyer, Pascal, 2001, Religion Explained: The Human Instincts That Fashion Gods, Spirits and Ancestors, Vintage, London.
- "Das Gehirn weiß vorher Bescheid", in *Netzeitung.de*, 13.04.2008, <a href="http://www.netzeitung.de/wissenschaft/971137.html">http://www.netzeitung.de/wissenschaft/971137.html</a>
- Fried, Johannes, 2004, Der Schleier der Erinnerung. Grundzüge einer historischen Memorik, C.H. Beck, Munich.
- Fuhrmans, Horst, 1954, Schellings Philosophie der Weltalter, Schwann, Dusseldorf.
- Geyer, Christian (ed.), 2004, Hirnforschung und Willensfreiheit. Zur Deutung der neuesten Experimente, Suhrkamp, Frankfurt a.M.
- Habermas, Jürgen, 2007a, "Freiheit und Determinismus", in Krüger, Hans-Peter (ed.), Hirn als Subjekt? Philosophische Grenzfragen der Neurobiologie, Oldenbourg, Berlin: 102-120.
- Habermas, Jürgen, 2007b, "Das Sprachspiel verantwortlicher Urheberschaft und das Problem der Willensfreiheit: Wie lässt sich der epistemische Dualismus mit einem ontologischen Monismus versöhnen?", in Krüger, Hans-Peter (ed.), Hirn als Subjekt? Philosophische Grenzfragen der Neurobiologie, Oldenbourg, Berlin: 263-304.

- Henrich, Dieter, 1999, Bewußtes Leben. Untersuchungen zum Verhältnis von Subjektivität und Metaphysik, Reclam, Stuttgart.
- Henrich, Dieter, 2001, Versuch über Kunst und Leben. Subjektivität Weltverstehen Kunst, Hanser, Munich.
- Henrich, Dieter, 2007, *Denken und Selbstsein. Vorlesungen über Subjektivität*, Suhrkamp, Frankfurt a.M.
- Kutschera, Franz von, 2006, Die Wege des Idealismus, Mentis, Paderborn.
- Krüger, Hans-Peter (ed.), 2007, Hirn als Subjekt? Philosophische Grenzfragen der Neurobiologie, Oldenbourg, Berlin.
- Libet, Benjamin, 2004, Mind Time: The Temporal Factor in Consciousness, Harvard University Press, Cambridge, MA.
- Marquard, Odo, 1991, "Philosophische Anthropologie", in Koslowski, Peter (ed.), Orientierung durch Philosophie. Ein Lehrbuch nach Teilgebieten, Mohr, Tübingen: 21-32.
- Metzinger, Thomas, 2005, "I Am the Content of a Transparent Self Model", in Blackmore, Susan, *Conversations on Consciousness*, Oxford University Press New York: 149-159.
- Müller, Klaus, 2006, Streit um Gott. Politik, Poetik und Philosophie im Ringen um das wahre Gottesbild, Pustet, Regensburg.
- Pauen, Michael, 2004, *Illusion Freiheit? Mögliche und unmögliche Konsequenzen der Hirnforschung*, Fischer, Frankfurt a.M.
- Pauen, Michael, 2007, "Ratio und Natur. Warum unsere Fähigkeit, nach Gründen zu handeln, auch durch reduktive Ansätze nicht in Frage gestellt werden kann", in Krüger, Hans-Peter (ed.), *Hirn als Subjekt? Philosophische Grenz-fragen der Neurobiologie*, Oldenbourg, Berlin: 417-430.
- Roth, Gerhard, 1996, Das Gehirn und seine Wirklichkeit. Kognitive Neurobiologie und ihre philosophischen Konsequenzen, 5th rev. ed., Suhrkamp, Frankfurt a.M.
- Roth, Gerhard, 2001, Fühlen, Denken, Handeln. Wie das Gehirn unser Verhalten steuert, Suhrkamp, Frankfurt a.M.
- Roth, Gerhard, 2003, Aus Sicht des Gehirns, 3rd. ed., Suhrkamp, Frankfurt a.M.
- Saint-Mont, Uwe, 2007, "Ein Argument, dass der Wille des Menschen frei ist" in *Philosophia Naturalis*, 44: 75-87.
- Safranski, Rüdiger, 2004, Schiller oder die Erfindung des Deutschen Idealismus, Hanser, Munich.
- Schelling, Friedrich Wilhelm Joseph von, 1860, *Sämmtliche Werke*, Band 6, J.G. Cotta'scher Verlag, Stuttgart and Augsburg.
- Schöndorf, Harald, 1999, "Gehirn Bewußtsein Geist. Kann das Bewußtsein naturwissenschaftlich erklärt werden?", *Herder-Korrespondenz*, 53: 264-267.
- Searle, John R., 2004, Freedom and Neurobiology: Reflections on Free Will, Lan-

- guage, and Political Power, Columbia University Press, New York.
- Searle, John R., 2008, "Wie frei sind wir wirklich? Interview", in *Frankfurter Allgemeine Sonntagszeitung*, 12, March 23, http://www.faz.net/aktuell/feuilleton/debatten/john-r-searle-im-interview-wie-frei-sind-wir-wirklich-1516047.html
- Soon, Chun Siong, Brass, Marcel, Heinze, Hans-Jochen, Haynes, John-Dylan, 2008, "Unconscious Determinants of Free Decisions in the Human Brain", in *Nature Neuroscience*, 11: 543-545.
- Stoerig, Petra, 2005, "It's Obvious that Other Animals Experience very Much Like We Do", in Blackmore, Susan, *Conversations on Consciousness*, Oxford University Press, New York: 213-220.
- "Studie nährt Zweifel an freiem Willen", in *Spiegel online*, 14.04.2008, http://www.spiegel.de/wissenschaft/mensch/0,1518,547074,00.html
- Thurm, Ulrich, 2005, Objektsein und Selbstsein eines Organismus (ein Beitrag zur Willensfreiheits-Debatte), Unp. Manuscript, Munster.
- Uhl, Matthias, Voland, Eckart, 2002, Angeber haben mehr vom Leben. Mit Zeichnungen von Silvia Debusmann, Springer, Berlin.
- Wegner, Daniel, "Don't Think about a White Bear", in Blackmore, Susan, Conversations on Consciousness, Oxford University Press, New York: 245-256.
- Wenzel, Uwe Justus, 2008, "Freiheitsmüdigkeit. Wie Hirnforscher und Juristen dem Fatalismus zuarbeiten", in *Neue Zürcher Zeitung*, 02.02.2008, http://www.nzz.ch/nachrichten/kultur/aktuell/freiheitsmuedigkeit\_1.664121.html
- Whitehouse, Harvey, 2004, Modes of Religiosity: A Cognitive Theory of Religious Transmission, Altamira Press, Walnut Creek.

