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Articles

Invited paper

METAPHYSICS BETWEEN *SCYLLA* AND *CHARYBDIS* AN ANALYTICAL PERSPECTIVE

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Abstract:
Seemingly, metaphysics is trapped between the *Scylla* of being superfluous, on the one hand, and the *Charybdis* of being esoteric, on the other. Is there a way out? In discussing two large-scale metaphysical projects that are very different in character, the article analyses one of the roots of this impasse – the *ontological paradigm.* The author tries, further, to argue for another stance towards the theoretical task metaphysics has to submit itself to: the *paradigm of transcendentals*. The *structural-systematic philosophy* will be a point in case.

Key words: weak metaphysics, liberal naturalism, ontological paradigm, paradigm of transcendentals, structural-systematic philosophy.

Prologue

> I can't wait for the first metaphysician to come out and defend that everything is water. Not to be confused with aquaism: the view that everything is water. That is clearly false. Rather, its priority aquaism: everything is ultimately water. Water is the most fundamental of all things. Of course, water is H2O, and so made up from other stuff, but that is the wrong sense of priority. Water is metaphysically more basic than both H and O, though physically H and O might well be more basic. Our ontology contains only water. It nicely goes with a process metaphysics. It supports our intuitive judgement that water is an especially important liquid. It is perfectly understandable: I mean it in Tales' sense! Maybe it even gives rise to the final explanation why time flows. And the next one will defend priority aeroism: the view that everything is ultimately air. (The final explanation of why time flies!) A new golden era, or the dark ages all over again.

So far, Thomas Hofweber in his contribution "Ambitious, Yet Modest, Metaphysics" to the book Metametaphysics (Chalmers (2009), pp. 273). It is a harsh and polemical critique of a way to do metaphysics. The polemic is a provocation, not least because similarities with real pieces of philosophy that are called "metaphysics" are rather visible. If this should be true, "What's wrong with Contemporary Philosophy?", to cite the title of a 2006 paper of K. Mulligan, P. Simons and B. Smith, who took contemporary metaphysics and ontology as a basis for their analysis of the state of the art (Mulligan/Simons/Smith (2006)). They summarize the attitude of contemporary philosphers/ metaphycicians – as they came to see it – as follows:

> [First], it [philosophy, metaphysics, ontology, C.S.] is cultivated with every appearance of theoretical rigour. [Second], its participants do not, by and large, believe that philosophy is or can be a science, i.e., they do not believe that it can add to the stock of positive human knowledge.

The second clause expresses what the authors call *horror mundi*. By this, metaphysics degenerates

to an esoteric endeavour, somehow backed up by some formal tools and some sophistication in arguing, most obviously in "thought experiments" - the notorious Mary and the notorious zombies are a point in case. It degenerates to playing with words, transparent to insiders only, irrelevant for scientific as well as practical purposes. Further, it is a game that is, even under the perspective from within, not devoid of triviality. Hofweber's polemic may be seen in the same way.

Concerning the *horror mundi*, it may be asked, whether, after all, this is not the right attitude? Isn't it the case that metaphysics, once the most important part of philosophy, has lost its scope and been made superfluous by "scientific progress"? Is it not the case that the empirical sciences are much better off in saying "what there is", how it is and how all the various "things" fit?

If this should be the case, is there anything left for metaphysics beyond constructing parallel-universes, endowed with "metaphysical water"? Are there "substitutes" that deserve - one way or another - the name "metaphysics"? Or should it be buried altogether at the beginning of the 21st century? Is metaphysics trapped between the *Scylla* of being superfluous and the *Charybdis* of being esoteric? May there be a way out?

"The death of metaphysics" has been a constant topos in meta-philosophical reflections, at least since Hume and Kant. On the one hand, it cumulated in the first half of the last century by the suspicions of the members of the *Vienna Circle*, leading to the anti-metaphysical heritage of (early) analytic philosophy. On the other hand, the rejection of classical metaphysics is associated with Husserl and Heidegger. But, even during this time, there have been great philosophical works that deserve the name "metaphysics". A. N. Whitehead's *Process and Reality* may be a point in case. Be that as it may, at least within the so called "analytic tradition", metaphysics has been revived.

Polemics aside, if one takes the above mentioned stances towards contemporary metaphysics - exaggerated as they may be - seriously, one may ask, among other things, whether there is a common reason for the theoretical impasse - being trapped between *Scylla* and *Charybdis* - and, if there is, whether there is an escape. This will be done in the contribution to follow. Due to restrictions of space, much of what follows will be thetical in character. It is hoped, however, that the overall stance expressed in this contribution will become clear. First, however, some clarifications seem appropriate as to how the word "metaphysics" is understood in this article.

1. Metaphysics - Some Clarifications

At the beginning of *Process and Reality*, Whitehead characterizes his *speculative philosophy*. It is a fine characterization of what is understood by "metaphysics" in this contribution:

> Speculative Philosophy is the endeavour to frame a coherent, logical, necessary system of general ideas in terms of which every element of our experience can be interpreted. By this notion of `interpretation' I mean that everything of which we are conscious, as enjoyed, perceived, willed, or thought, shall have the character of a particular instance of the general scheme. (Whitehead (1978), p. 3):

With this, "metaphysics" is characterized 1) as a theoretical endeavor (viz: "coherent, logical, necessary system of general ideas"). It is, 2) a theoretical endeavor that has to respect data ("everything of which we are conscious, as enjoyed, perceived, willed, or thought"). Its theoretical task is 3) unifying these data, albeit in a general way ("general ideas", "particular instance of the general scheme"). And, 4) metaphysics, as a unifying system of general ideas, is unrestricted in scope. This characterization will serve as a working platform in what follows. It is an ambitious characterization, not least because it characterizes metaphysics as being unrestricted in scope. There are, obviously, other, more specific, philosophical topics that are called "metaphysical". Due to the restriction of length an article has to obey, these are not dealt with in this article.

1.1. Coherence and Adequacy

As a theoretical endeavor, metaphysics has to obey formal (in a wide sense of the word) and methodological criteria as well as external ones; it has an internal as well as external aspect. Whitehead calls these aspects the rational side and the empirical side, respectively.

The most important internal criterion is "coherence". It means for Whitehead that "everything of which we are conscious, as enjoyed, perceived, willed, or thought", the data, must not only be embedded in one theory, but the theory must

also exhibit the interplay of these data. Moreover, it is this interplay expressed by the theory that gives the respective ideas or notions their meaning:

> 'Coherence', as here employed, means that the fundamental ideas, in terms of which the scheme is developed, presuppose each other so that in isolation they are meaningless. This requirement does not mean that they are definable in terms of each other; it means that what is indefinable in one such notion cannot be abstracted from its relevance to the other notions. It is the ideal of speculative philosophy that its fundamental notions shall not seem capable of abstraction from each other. In other words, it is presupposed that no entity can be conceived in complete abstraction from the system of the universe, and it is the business of speculative philosophy to exhibit this truth. This character is its coherence. (Whitehead (1978), S. 3)

In this, a metaphysical theory is a "theory of everything" and "coherence" expresses its being a unifying theory, unrestricted in scope. In this contribution, the word "coherence" is used in the sense indicated by the citation above and is an internal criterion whose importance cannot be esteemed high enough.

A metaphysical theory, moreover, has to respect data. This is the most important extrinsic criterion: adequacy. These data are not exclusively "empirical" in a narrow sense. They play their role in "theory building" at the beginning of the theoretical metaphysical endeavor as well as at the "end" of this endeavo, to serve as "instances for testing" the theory. A citation of Whitehead's nicely illustrates this interplay:

> The true method of discovery is like the flight of an aeroplane. It starts from the ground of particular observations; it makes its flight in the thin air of imaginative generalizations, and it again lands for renewed observations rendered acute by rational interpretation. (Whitehead (1978), p. 5)

This shields metaphysical theorizing from triviality.

A metaphysical theory should respond to all these criteria: no restriction in scope, respecting the data - the huge supply of them -, being coherent and adequate. All these criteria host important problems, and it may well be doubted that these problems may be solved or overcome.

The characterizing citation, however, gives a first hint how to avoid the trap between *Scylla* and *Charybdis*: it speaks of general ideas - and not of "building blocks" or "constituents". To exhibit the methodological importance of this difference is the task of a great part of the rest of this contribution.

1.2. Metaphysics and Paradigms of Theories

Presupposing that metaphysics is a theoretical endeavor, the question arises as to what sort of theory it is. It is not the place here to give a "theory of theories", rather it is assumed that there are undertakings that are theories and they mainly come in two paradigms: physics, or natural sciences in general, but also, e.g., sociology or psychology - for short: *empirical theories*, on the one hand and logic and mathematics, *formal theories*, on the other hand. The last ones are with respect to methodological constraints rather unproblematic. In short: formal theories have their "proofs" and meta-theories, while empirical theories have their data that are - of course - not independent from the relevant theory. Further, empirical sciences developed and refined their methodologies during their respective histories and within their respective frameworks of scientific culture. This, the data embedded in theories according to methodological constraints, may be the reason why, as Mulligan, Simons and Smith (2006) say, "the real world will soon put them [the scientists, C.S.] to rights if they diverge too far from reality." For metaphysics, things are not so easy and simple, again Mulligan, Simons and Smith: "Philosophers, on the other hand, cannot confront their ideas with reality in the same direct way."

Metaphysical theories are not formal theories, as are logic or mathematics. There is, however, some similarity between metaphysical theories and formal theories. This similarity has to do with the criterion of coherence. If one conceives of the dimension of formal theories, including logic and mathematics, their interplay, the meta-theories, and so on, one sees that one never gets outside the "formal dimension". The formal theoretical framework exhibits a semantic self-sufficiency of sorts and any sub-dimension has its connections to "the rest" and it must fit - according to standards, formulated within the formal framework. This is coherence at its best. But, meta-

physics is not a formal theory, albeit it may avail itself of formal tools.

If, however, metaphysical theories claim, as they should in abandoning the *horror mundi*, to say something about the "world", they are in need of an empirical aspect. But they are not empirical theories in the usual sense of the word: metaphysical theories have and should have their data - that is the criterion of adequacy - but the data are somehow second hand: there is no metaphysical experiment to be invented, nor are there specific metaphysical and metaphysically regimented observations to test metaphysical findings. In this respect, metaphysics must, among other things, rely on other sciences. It is, somehow, passive, with respect to the data it should respect. Finally, metaphysics neither fits the empirical paradigm nor the formal paradigm.

2. The Trap

This section presents two metaphysical theories: one caught by the *Scylla* of being superfluous: Ladyman (2007), and the other by the *Charybdis* of being esoteric: Rosenberg (2004). The main purpose, however, is not to supply evidence that this impasse is present in contemporary metaphysics; this may also be seen elsewhere. The main purpose is to demonstrate that both problems, different as they are, are rooted - albeit with a different strength of emphasis - in the same tacit assumption of what a metaphysical theory should (also) supply. The two examples are, further, exploited here because they are both general theories - at least conceived of that way by the authors - and formulated with high standards of rigor. Both are structurally metaphysical theories - not pieces of theories - akin to the characterization of Whitehead's. Let's start with the *Charybdis* of being esoteric.

2.1. The Charybdis of Being Esoteric – Rosenberg's Theory

In his book *A Place for Consciousness - Probing the Deep Structure of the Natural World* (Rosenberg (2004)), Gregg Rosenberg wants to find a place for the phenomenon, or the datum, of consciousness within an otherwise "physical" environment. This place should be coherently connected to those aspects of the "world" that are usually within the scope of natural sciences ("physics", for short). Because he explicitly aims at a theory coherently connecting consciousness to an otherwise "physical environment", he calls his position *Liberal Naturalism*, to distinguish it from other brands of "physicalism".

His book presents "great metaphysics", especially concerning its unrestricted scope, his careful motivations for his theoretical assumptions and consequences, and his respect for other theories, especially those found in history. In making his insights explicit, Rosenberg avails himself also of formal models, mostly taken from the discipline of computer sciences.

The "phenomenon of consciousness" is both a fact in need of explication and a datum of most importance. He argues the last point at great length (Rosenberg (2004), pp. 18), so that his claim that it does not fit the usual scientific standards of objectivity that are to be obeyed within the empirical sciences is well corroborated.

For Rosenberg, the most important difference concerning the facts that are expressed by empirical scientific or physical theories and the facts about consciousness is the following: "Physical" theories are only "relational" in character, each "fact" expressed by such a theory is explained by the others and vice versa; the facts mutually explain and somehow determine each other. Therefore Rosenberg calls theories of this sort "circular". According to Whitehead's criterion of coherence, that is just what metaphysical theories should be. Rosenberg's stance, however, is quite different: Due to circularity, these theories do not deal with "contents". To be ontologically or metaphysically meaningful a theory must not only express "relational facts" or "properties", but also "intrinsic properties" or qualitative content. These intrinsic or qualitative "properties" or facts stand somehow in themselves. "Relational facts", in contrast, are in need of an external carrier that somehow shows self-sufficiency. Moreover: "Facts about bare differences ("relational facts", C.S.) cannot entail facts about qualitative content." So, facts about qualitative content are not provided for by scientific theories. It is, according to Rosenberg, the task of a metaphysical theory to express facts of qualitative content and to express the interplay of facts of qualitative content with the relational facts. Within such a theory certain facts of qualitative content provide the external carrier for relational theories. Phenomenally conscious properties, facts of (phenomenal consciousness) phenomenal qualities, as Rosenberg calls them, are the paradigm for prop-

erties or facts of content a theory should exhibit (cf. (Rosenberg (2004), p. 22).

Moreover, the facts of (phenomenal) consciousness and "physical" facts should be different aspects of an all including or "founding" metaphysical basic structure. In this, the search for, the formulation of, and the theoretical elaboration of these fundamental structures or facts has the character of formulating a *prima philosophia* (*deep structure* is Rosenberg's expression).

The theory is formulated with the help of two categories: natural individuals and properties. Properties come in two sorts: effective and receptive properties. Natural individuals are either primitive effective or receptive properties, or a web thereof.

The architectonic of his metaphysical scheme comes in layers: the individuals of each layer are built by individuals of the lower level (by the receptive properties of these individuals, see, Rosenberg (2004), p. 219).

The theory is also algorithmic in character, starting with a first layer and building up successively, "step by step", higher level layers. Somewhere, at a very high level, individuals, humans, e.g., should show up. There is, due to this architecture and presupposition, an ultimate layer/level that carries the "whole building".

Given that Rosenberg's theory is coherent, what is there to say about its adequacy? What about the items and structures at the ultimate level that are, also for Rosenberg, not accessible to "physical" or "empirical" theories? They function as ultimate carriers for the whole universe. Rosenberg (Rosenberg (2004), p. 237) asks what these ultimate carriers are. After a lengthy reflection, he proposes "phenomenal qualities" of consciousness: "The phenomenal qualities of phenomenal consciousness are perfect candidates" (Rosenberg (2004), p. 238). But they are not "phenomenal qualities" of which we humans have experience. Conscious phenomenal qualities, as they are experienced by humans, are only paradigms that model these "ultimate" phenomenal qualities that serve as carriers. Only very abstract and general features of conscious phenomenal qualities as they are experienced by humans should be attributed to the "ultimate" phenomenal qualities. Here he (Rosenberg (2004), p. 240) should be cited in full length:

> The abstract sense that the alien qualities would be like the qualities of our consciousness would come to precisely this: They would be intrinsic tout court; they would be determinables and belong to families of determinables (terms of art, C. S.); [...].
>
> The ways they would be different from the qualities of our consciousness would be these: Their specific characters presumably would be entirely different from those of our own qualia; [...]; and they presumably would not be appropriate vehicles for representation and thought.

What could indicate the adequacy of this theory? Implicitly, Rosenberg gives an answer to this question by admitting that his considerations do not prove that his fundamental laws have some important feature they should, according to him, have. For him, the acceptability of his approach "rests on convictions concerning the simplicity, clarity, objectivity, and elegance of fundamental laws. They are convincing only to the extent that one shares these convictions about nature" (Rosenberg (2004), p. 113).

This means, criteria for a metaphysical theory are internal, at best aesthetic in nature. The bedrock of the universe are "entities" that are not expressible by empirical sciences, they are not consciously experienceable by humans, nor may they ever be experienced by humans. That is esoteric as its best.

2.2. Ontological Structural Realism – the Scylla of Being Superfluous

In their book *Every Thing Must Go* (Ladyman (2007)), Ladyman, Ross and Spurritt present a theory which they call *weak metaphysics*. They call their theory "weak" to express that they reject empirically inert speculations and to set it apart from what they call neo-scholastic metaphysics. The root of avoiding these speculations consists in their extremely strong and verbatim respect of scientific theories as these are formulated within the respective sciences.

The task of weak metaphysics is the unification of (special) scientific theories or hypotheses, based on what they call *fundamental physics*. The methodological constraints this task faces are laid down by the institutionally accepted norms of the *scientific community* of either the special sciences or of fundamental physics. More explicitly, Ladyman, Ross and Spurritt as well as their co-authors understand the task of metaphysics as *unifying* scientific theo-

ries or hypotheses: The sciences submitted to unification are all those sciences that may be called "empirical," sciences that have to do in a wider or narrower sense with measuring data. So, not only natural sciences are to be respected, but also sociology, psychology, economy or history, for example.

The task of unifying is meaningful, so the authors' hypothesis, since the universe is one and not a mere "sum" of somehow independent parts. They argue this hypothesis by an insightful interpretation of the history of the sciences. Further, the authors are well aware of the fact that other sciences themselves tackle (and solve) problems of unification. Concerning the special metaphysical task of unifying they avail themselves of what they call fundamental physics.

To make the special status of a metaphysical unification explicit, the authors dwell on the difference of, on the one hand, special sciences which tackle unifying tasks that are not metaphysical, and, on the other hand, fundamental physics. This last mentioned science is a sub-field of "institutionalized physics" and deals with, e.g. cosmological theories, quantum field theories, string theories or M-theories. Using theories or hypotheses that belong to *fundamental physics* for the unifying task distinguishes *metaphysical* theories from others.

Moreover, fundamental physics provides those structures that a metaphysical unification must respect, positively as well as negatively. This means, among other things, that a metaphysical theory of unification should be neutral with respect to theoretical gaps not yet closed by fundamental physics.

Within fundamental physics, the task of unification is solely up to the scientists working in that physical field. Fundamental physics is for Ladyman, Ross, Spurritt and co-authors their *prima philosophia*.

Their own theorizing is based on two principles. The first principle – *Principle of Naturalistic Closure* (PNC) – is as follows:

> Any new metaphysical claim that is to be taken seriously at time t should be motivated by, and only by, the service it would perform, if true, in showing how two or more specific scientific hypotheses, at least one of which is drawn from fundamental physics, jointly explain more than the sum of what is explained by the two hypotheses taken separately, [...]. (Ladyman (2007), p.37)

Concerning the phrase "to be taken seriously", the authors take a pragmatic and institutional stance: It is the relevant scientific community, which – based on its contemporary state of the art – decides whether a metaphysical position is "to be taken seriously": "[...] science is, according to us, demarcated from non-science solely by institutional norms: [...] With respect to anything that is a putative fact about the world, scientific institutional processes are absolutely and exclusively authoritative (Ladyman (2007), p. 28).

The second principle – *Primacy of Physics* Constraint (PPC) – is as follows:

> Special science hypotheses that conflict with fundamental physics, or such consensus as there is in fundamental physics, should be rejected for that reason alone. Fundamental physical hypotheses are not symmetrically hostage to the conclusions of the special sciences. (Ladyman (2007), p.44)

Both principles reveal *fundamental physics* as *prima philosophia*. This means: Fundamental physics detects, formulates and approves with respect to its scientific standard the most general structures that pervade the whole universe. All other structures, supplied by special sciences or formulated in doing its unifying task by weak metaphysics, must respect these structures and at least one of these structures must play a role in each unification to be acceptable at all. Moreover, the structures used for unifying by weak metaphysics are not "inventions" of *weak metaphysics*, they are supplied by formal theories (viz. *information theory*).

Concerning an independent status of metaphysical theorizing, they claim that *weak metaphysics* is a theoretical undertaking that has neither a genuine scope nor a genuine methodology. To regard it as a special theory is due to an institutional division of labor: "Why should radical methodological naturalists suppose that there is any 'responsible and significant' job for metaphysics to do? [...] However, evaluating the global consilience network is not a task assigned to any particular science, partly because important efficiency considerations recommend specialization" (Ladyman (2007), pp. 27).

Weak metaphysics is a philosophical position that has a certain task that in principle other sciences could do, but, according to a pragmatic stance, it is a hopefully fruitful division of labor that there are

specialists who tackle the task of unifying the sciences. The methodology as well as the basic unifications and structures that are to be respected and preserved are found and formulated by fundamental physics. The "tool kit" is provided by formal sciences. Material fundamental questions and answers concerning the unifying tasks are not the obligation of *weak metaphysics*. *Weak metaphysics* has found its *prima philosophia*, i.e. fundamental physics, as it is formulated and as far as it is approved by the respective scientific community. By this, *weak metaphysics* is caught by the *Scylla* of being, beyond pragmatics, superfluous.

2.3. The Ontological Paradigm – a Common Stance

The *ontological paradigm* may be characterized by Campbell's *Axiom of Uniformity* – a methodological principle (Campbell (1990), p. 1):

> Fundamental to the ontological impulse is what we might call the *Axiom of Uniformity*, the conviction that some one basic pattern pervades the universe; the proper ontological assay of any one region or subpart of the whole will mirror the assay elsewhere. There are pervasive basic constituents and pervasive basic structures in which they play always the same roles. At the ultimate level, the universe has a common structure throughout. The pervasive elements, the constantly recurring items in ontological assays, are the categories.

The ontological impulse leads to two sorts of metaphysical theories: One sort may be called "top down". This means that the theory proceeds by carving out the basic constituents and their relevant interplay to make the uniform character of its unrestricted scope explicit. Hereby it conceives of the unrestricted scope of the metaphysical endeavor as somehow pre-theoretically given. It faces the task of showing that it's "carving out" meets the scope at the right joints.

The other sort may be called "bottom up". The task here is to explicate the unrestricted scope of the metaphysical endeavor by "rebuilding" it. To this end, the theory may "invent" categories and their interplay not found at the outset and has therefore the task of showing whether these "inventions" do lead to an adequate architectonic. For both versions, the unrestricted scope of the metaphysical endeavor, as it is theoretically revealed by the respective theories, will not be left as it was found.

In any case, the ontological impulse leads to what may be called the "ontological paradigm": It is the main task of a metaphysical theory to make explicit what the "pervasive basic (or most general) constituents and pervasive basic (or most general) structures in which they play always the same roles" are and how they relate to each other. Moreover, if a metaphysical theory fails in this respect, it fails altogether. In short: Doing metaphysics within the "ontological paradigm" leads to formulating a metaphysical – in contrast to a local – *ontology*.

Rosenberg's theory is certainly of the second kind – he explicitly presents a constitutional theory and a hierarchical architectonic. The "natural individuals", especially those at the basic layer, may well be called "inventions".

Weak metaphysics is also in search for an "ontological model": "We seek an ontological model according to which science is unifiable, and which explains the basis for such unity as it can produce. This, we claim, is the point of naturalistic metaphysics" (Ladyman (2007), p. 53).

This model is based on the methodological restrictions formulated by the "Principle of Naturalistic Closure" and the "Principle of Physics Constraint". These restrictions, however, have consequences for the "ontology", the "categories", *weak metaphysics* provides. It leads to the ontological model that is called *ontic structural realism. Ontic Structural Realism* may be characterized, *in nuce*, by the claim that structures – paradigmatic are mathematical structures, as they play an important role in theoretical physics – are ontological, which means they are 1) "real" and 2) there is nothing else but structures. This position is rooted in the observation that fundamental physics avails itself of mathematical models or structures, and successfully so:

> Objective modalities (lawful connections – cum grano salis, C.S.) in the material mode are represented by logical and mathematical modalities in the formal mode. All legitimate metaphysical hypotheses are, according to us, claims of this kind. A metaphysical hypothesis is to be motivated in every case by empirical hypotheses that one or more particular empirical substructures are embedded in (homomorphic to) particular theoretical structures in the formal mode that represent particular inten-

> sional/modal relations among measurements of real patterns (Ladyman (2007), p. 119).

The methodological constraints weak metaphysics submits itself to are in service of an ontology to be formulated. And the relevant ontological theory is "top down": The fundamental structures are found within fundamental physics and the structures explicating the interplay of the structures of special sciences and fundamental physics are "found" also within formal sciences. This, however, means that "ontology" is left to other sciences and *weak metaphysics* is up to coordinate these different ontological frameworks so found. One may interpret the overall stance of *weak metaphysics* as saying that the sciences are better off in doing ontology and that fundamental physics formulates the most fundamental ontology – exhibits "the pervasive basic structures".

2.4. Some General Analysis

In sum, one may say that the problem of an *esoteric metaphysics* is a methodological one whereas the problem of *weak metaphysics* is an ideological one. Both, however, have in common that they conceive of a metaphysical ontology as being an important integral part of metaphysical theorizing. Moreover, both search for unification. But the scope of what is to be submitted to unification is different: *weak metaphysics* is restricted in scope, only empirical scientific theories are at stake.

The ideology of *weak metaphysics* may be summarized as follows:

1. Special empirical sciences – in the wider sense of the word – have there own ontologies. They say within their respective domains "what there is"".

2. Along their histories, empirical sciences have developed their methodologies for testing or exhibiting the adequacy of their ontological hypotheses concerning "what there is". This testing is empirical in character.

3. Last and not least, due to their methodologies, empirical sciences are the only theoretical endeavors that say anything respectable about "what there is".

4. As a consequence the "pervasive structures" are to be found within at least one empirical science. Structures and items of empirical theories that are not "pervasive" must relate to the "pervasive structures".

If, further, the task of metaphysics is *unifying*, then the task will be – more precise – unifying empirical sciences. There may be, of course, different ways of unifying empirical theories; the way presented in the example above is only one of various possible ones. If a metaphysical theory – in the spirit of *weak metaphysics* – conceives of itself as having the task of "justifying" its way of unification, i.e., exhibiting its adequacy, then this justification is neither empirical in character nor to be found in empirical sciences. So, even for *weak metaphysics*, there is a notion of adequacy at work that is not empirical in character.

Anyhow, there seems something to be learned from the ideology of *weak metaphysics*, even if one does not endorse its over-all stance: Just omit point 3 of the enumeration above. Then, the consequence (point 4) is blocked.

Is it therefore possible to assign a more ambitious task to metaphysics: Saying "what there is", formulating an ontology, without taking it over from one or another empirical science and without being trapped by the *Charybdis* of being esoteric? Some considerations concerning adequacy may be helpful.

2.5. Adequacy and the Ontological Paradigm

A glance at the task for "testing adequacy" – Whitehead's landing – may reveal that it is the "ontological paradigm" that is the "culprit" for being trapped between *Scylla* and *Charybdis*: Other theories, especially empirical theories, may serve for judging the adequacy of a metaphysical ontology. Here, one faces the problem that other theories, especially empirical theories, have their own ontology (explicitly accepted by *weak metaphysics*). And so – as the two extreme examples above reveal – the metaphysical ontologies are either inherited or "invented". Comparing an "invented" ontology with another ontology – formulated explicitly or implicitly by some other nonphilosophical theory – results, exaggeratedly formulated, in the impasse to follow: If there is another (scientific or empirical) theory that corroborates within its own scope and due to its own methodology a metaphysical ontology, then this shows that the metaphysical ontology is – besides, perhaps, a fruitful division of labor – superfluous. If there is no corroborating "external" theory, then a metaphysical theory may be genuine but for sure esoteric in character.

Of course, "testing" a metaphysical theory with respect to all other relevant theories is pragmatically

overambitious. But the "testing" should work at least for some *important* (scientific or empirical) theories, those which play an important and crucial role within the concert of sciences or theories. "Fundamental physics" may be a point in case. If a metaphysical theory that fares bad with respect to such a theory should be abandoned. It may be the case that "testing" presupposes some conceptual adaptions or "translation" to be "testable" at all. Here, seemingly, a certain dialectic shows up: the better the "translation" – the fit – the more superfluous the theory turns out to be.

One methodological consequence thereof could be (in the spirit of an esoteric metaphysics): Conceiving of other (empirical or scientific) theories as only very weakly relevant for adequacy: there should be no contradiction – what ever that may be. This is too weak for exhibiting coherence: metaphysical theories and "external theories" somehow would live side-by-side. It could further result in a meta-metaphysical characterization of adequacy that is "non-empirical" in character. The esoteric character remains.

The other consequence of the impasse would be (in the spirit of *weak metaphysics*): Look at the sciences to find a most general, metaphysical, ontology and show how that ontology so found *is* most general and how it relates to the other sciences.

If it is the "ontological paradigm" that leads to an esoteric metaphysics, by trivializing adequacy, on the one hand, and to loosing a genuine field for metaphysics by taking adequacy with respect to other (empirical or scientific) theories seriously, on the other hand, an advice would be: give up the "ontological paradigm". But, what else could be a task for metaphysics?

3. Beyond the Trap

Being trapped between Scylla and Charybdis is not an unavoidable feature of a metaphysical theory. Whitehead's remark, cited above, gives a hint: He characterizes his speculative philosophy – metaphysics – as the "endeavour to frame a coherent, logical, necessary *system of general ideas*". By this, he points to a methodological paradigm different from the ontological paradigm.

3.1 The Paradigm of Transcendentals

Again, Whitehead's characterization of the metaphysical task:

> Speculative Philosophy is the endeavour to frame a coherent, logical, necessary system of general ideas in terms of which every element of our experience can be interpreted. By this notion of 'interpretation' I mean that everything of which we are conscious, as enjoyed, perceived, willed, or thought, shall have the character of a particular instance of the general scheme (Whitehead (1978), p. 3).

He does not speak of "building blocks", basic "constituents" or "fundamental structures" that serve as constituents of all the rest. Nor is he in search of a "basic glue" that makes all these basic constituents holding tight. He speaks of "general ideas in terms of which every element of our experience can be interpreted". "General ideas" are not "building-blocks".

The citation above may be paraphrased and slightly altered as follows:

Metaphysics is the endeavor to embed all those most general "ideas", "concepts", "notions" or "propositions", etc. into *one theoretical framework* that is *presupposed* by anything that is found within the *unrestricted universe of discourse* and whose working "concepts", "notions" and "propositions" can "truly" be attributed to anything that is found within the unrestricted universe of discourse.

These most general "ideas", "notions", "concepts" or "propositions" and the role they should play in formulating a theory may be called – for better or worse – *transcendentals* and the metaphysical working-paradigm the "*paradigm of transcendentals*". The expression "*transcendentals*" should hint at both features: generality and the character of being universally presupposed.

Beyond "generality", there are two key-words in the characterization above: "truly" and "presupposed". Concerning the second word: Admittedly, other theories have their theoretical frameworks, some of them are very general. They may play a fundamental and "leading" role with respect to other theories. Some theories have their associated meta-theories that exhibit what is presupposed by the respective theory. But none of these is about the presupposition of any (scientific or empirical) theory, not to speak of formal theories or other things "of which we are conscious as enjoyed, perceived, [...]." This shields metaphysics from being superfluous.

This characterization of a metaphysical theory, however, is not without problems. The first has to do with both the high generality of the "transcendentals", on the one hand, and the unrestrictedness of the scope of their application, on the other. "Generality" hosts the danger of triviality. Must it not be the case that an ensuing theory "speaks" of everything but says nothing? And, due to the unrestrictedness of scope, must it not be the case that there is nothing left to serve as a non-trivial and not yet presupposed instance for testing adequacy?

The second problem is indicated by the word "true". How is "true" to be understood? This however is more of a task than a problem: A metaphysical theory that works within the *paradigm of transcendentals* has to co-formulate its theory of truth. Or, it has to presuppose a theory of truth. But, the metaphysical theory will not leave the theory of truth as it was found. There are, consequently, always at least two transcendentals to be coordinated by a theory: "Truth" and one (or more) X(es).

That triviality is not a necessary consequence may best be shown by a non-trivial theory working within the paradigm of transcendentals. This will be done in the next section. It is the "Structural-Systematic Philosophy" of von L. B. Puntel as it is formulated in *Structure and Being* (Puntel (2008)) (in German: *Struktur und Sein* (Puntel (2006)). This example shows, among other things, how "truth" may play a role within such a theory, gives a hint at how to "build" such a theory and how it relates to other theoretical endeavors. The question concerning adequacy will be addressed in the subsequent section.

3.2. Structural-Systematic Philosophy

It is important to note that L.B. Puntel's theory was not formulated to exploit the vices and virtues of working within the *paradigm of transcendentals*. He does not even use the word. The theory is not intended to be a meta-metaphysical theory at all.

Before analyzing why this systematic metaphysics may be conceived of as working within the *paradigm of transcendentals* and why it escapes the impasse, the theoretical framework must – as far as it is necessary for the present purpose – be presented. This presentation focusses on exhibiting the most important "transcendental" that is at work in formulating Puntel's structural-systematic philosophy. For an elaborate exposition, cf. A. White (White (2014), forthcoming).

3.2.1 The Theory

Puntel characterizes – in a first step – his *structural-systematic philosophy* as a "theory of the most general and universal structures of the unrestricted universe of discourse" (Puntel (2008), p. 10, p. 26). As it stands, it has strong similarities with Whitehead's characterization of his *speculative philosophy*, as Puntel himself recognizes (Puntel (2008), p.10). Making this preliminary characterization explicit – Puntel calls it "quasi-definition" – is the theme of his book *Structure and Being. A Theoretical framework for a Systematic Philosophy* (Puntel (2008), henceforth: SaB).

The explication has to address several interwoven sub-tasks: [1] explicating "explicating" and "theories", [2] explicating the interplay of "theories" and the "*unrestricted universe of discourse*", [3] explicating "structures" – universal and particular or specific ones -, and [4] explicating, based on the first three explications, the interplay of "theories", "structures" and the *unrestricted universe of discourse*. That there is the fourth task and that this task is not trivial, is indicated by the word "systematic" in the phrase "structural-systematic philosophy". The first two points may be seen as being meta-philosophical in character – at least at the outset.

Ad [1] For Puntel "making explicit" means giving a theoretical framework or theory within which the problematic phrase or sentence is situated. With this, an important meta-metaphysical stance is formulated: Theories, especially philosophical theories, are framework dependent. To put it otherwise: Only within a theoretical framework, within a theory, do expressions, phrases or sentences have a semantic value. This insight is an extrapolation of his initially presupposed theory of truth – a theory of truth that is based on the context-principle.

Different philosophical theories usually have different theoretical frameworks, to exhibit their systematic connection a further theoretical framework is needed, one with respect to which different philosophical theories, different theoretical frameworks, figure as particular frameworks. The philosophical theoretical framework that expresses the *universe of discourse* as *unrestricted in scope* in an explicit and complete manner is the complete systematic theoretical framework:

> Any philosophical theoretical framework is highly complex; taken as a whole, each consists of numerous particular frame-

> works that are to be understood as stages in the process of the development of the complete systematic theoretical framework (SaB, pp. 9).

Here, a word of caution is appropriate: Theories or theoretical frameworks are not conceived of as being the up-shot of "subjects"; they are not the product of members of a scientific or philosophical community. Of course, as a matter of the *conditio humana*, theories do not come without scientists or philosophers. But these only play the role of a medium, they are not "message-makers" of sorts. If theories "are there", only truth, adequacy and intelligibility matters. Theories express "how it is" ("what is the case") and not "how the philosopher or scientist XY believes that it is". This is explicated in 5.1 of SaB, (pp. 267). Further, there may be, and usually are, different theoretical frameworks with respect to the unrestricted universe of discourse. To judge which one is the "best" is the question of adequacy (see SaB, pp. 481). Anyhow, without problematizing this issue, the theory is not intended to be the final word, as is convincingly argued.

Ad [2] At the "beginning" of the theoretical endeavor, the expression "*unrestricted universe of discourse*" simply indicates the unrestricted datum that a philosophical theory should explicate. In this, it is situated within a rather coarse grained theoretical framework, a framework that has to be refined, to some extend altered, without being lost completely (Puntel alludes to the Hegelian word "*aufheben*") in any more concrete framework that shows up during the process of concretization and systematic explication of the complete framework. The process of theory-building is at once the process of self-explication and self-expression of the unrestricted universe of discourse.

Theories are expressed by a philosophical or scientific language – a theoretical language. It is not a natural language. Its sentences have the general theoretical form "it is the case that ...". That there is an expressing tool, a theoretical language, that meets what it expresses, is rooted in the important thesis (SaB, p.371):

Thesis 3: Expressibility is a factor fundamental to the structurality of Beings and Being.

In this, expressibility is an ontological feature of Beings and Being. For Puntel, leaning on a dictum of Wittgenstein's, the world is the totality of the expressible (primary) structures. This is formulated by the thesis above. A theoretical language is the semiotic and semantic correlate thereof. Puntel conceives of it as a language with uncountably infinite expressions (SaB, pp. 374).

It is more than a correlate. This is due to the theory of truth that Puntel presupposes and explicates in chapter 3, pp. 297. The theoretical language, of course, contains declarative sentences. These are not only syntactic unities, but they have a semantic value, Puntel calls it proposition. The theoretical language, further, contains sentences, *S*, prefixed with the phrase "it is the case that": "it is the case that *S*" ("it is the case that *it rains*"). "It is the case that..." is regarded as an operator – the *theoretical operator*. The sentence "it is the case that *S*" is called a theoretical sentence. Prefixing a theoretical sentence with the further operator "it is true that" indicates that the sentence is a self-expression of the relevant area of the *universe of discourse*. This, *in nuce* is the core of the "identity thesis of truth", argued for and exploited in chapter 3 of SaB (especially pp. 231). It is, moreover, a theoretical embedding of his theory of truth (as it was formulated in Puntel (1990)), initially presupposed, by making the identity-thesis of his theory of truth explicit within the theoretical framework of the *structural-systematic philosophy*.

Ad [3] In a first step, "structure" is a name of anything a theory makes explicit: "Conceptualizing and explaining are characterized most concisely as the discovery and presentation, respectively, of the structure(s) of what is conceptualized or explained (i.e. the data)" (SaB, p. 11). For Puntel, there are three kinds of structures: formal structures, semantic structures and ontological structures. The last ones are the most important for his theory. In the end, they turn out to be the most general self-expressions of anything "there is". Further, due to the above mentioned thesis, whatever there is, is expressible. Moreover, "whatever there is" is truly expressible and by this self-expressing. This, again, is an embedding of his theory of truth in the framework of *expressing, expressibility and being expressed*. The name for these self-expressions is "structures". Or, structures are the self-expressions of whatever there is.

Ad [4] There is, according to the structural-systematic philosophy, a plurality of different theoretical frameworks. They are different manifestations of the self-expressibility of the world. They are different in particularity and universality, they are different in granularity (coarse grained vs. fine

grained), and all these differences come "continuously" in degrees. As different self-expressions of different degrees, they manifest structures belonging to different structural "layers" of the world. There are surface structures and deep structures. The first ones are those that articulate portions of the world from a "particular" perspective, as are structures expressed by a theoretical framework "about the lifeworld". "Deep structures" are those that manifest themselves within increasingly universal theoretical frameworks (SaB pp. 405).

If, however, different theoretical frameworks manifest different layers of structures, the task ensues to determine how they "belong" to one world. Due to coherence, they cannot simply live side by side without any connection whatsoever. It is the final theoretical task to formulate this interplay and it leads to a universal theory (German: Gesamttheorie) of the unrestricted universe of discourse. This universal theory, as the final step of the theoretical philosophical endeavor, is a *Theory of Being as Such and as a Whole*, as Puntel calls it. This final theory – theoretical framework – is the final stage that the process of self-explication results in. According to Puntel, it may be called metaphysics, more precise "metaphysica generalis" (SaB, p. 477); Puntel's expression is *primordial metaphysics*.

3.2.2. Structural-Systematic Philosophy and the Paradigm of Transcendentals

Conceived of as a coherent whole, Puntel's theoretical framework exhibits itself as the interplay of different particular theoretical frameworks, each being the self-expression of an aspect of the unrestricted universe of discourse, contributing to and superseded by the most universal, most definite and most complete theoretical framework: the most general structures, i.e. the self-expression of Being as such and as a whole. In this, albeit it is not Puntel's term, his theory may be called metaphysics in the Whiteheadian sense presupposed in this contribution.

Is it working within the *paradigm of transcendentals*? What are or is the relevant transcendental(s)? Obviously, "expressibility" with its variants "expressing" and "self-expression" is the most central transcendental. "Expressibility" is presupposed by any theoretical endeavor, even by those weak ones as theories that express the structures of the "lifeworld". "Structure" is a name for certain aspects thereof and "co-concepts" are made explicit as the theory proceeds. The theory presupposes, initially, a theory of truth that is made more explicit as the unfolding of the theory ensues.

The unfolding of the theory proceeds by initially starting with a weaker framework leading to more and more refined frameworks, each superseding the predecessors without abandoning them altogether. It is in chapter 4, when the framework reaches a certain stage of completeness, where by "applying" the theory developed so far to other philosophical fields, themes, disciplines and problems – contemporary as well as historical. The same may be said of section 5.3 with respect to the "final" theory of *Being as Such and as a Whole*. This reveals that the theory elaborated so far leads to new and important insights with respect to these philosophical theories that would not be available or at least not as coherent as they are beyond the theory developed so far. This demonstrates two things: albeit working within the *paradigm of transcendentals*, the theory is not trivial and the "testing" for adequacy is with respect to other philosophical disciplines and takes place during theory-building.

This may give some insight concerning "adequacy" with respect to the *paradigm of transcendentals*.

3.3. Adequacy and the Paradigm of Transcendentals

At the beginning of this article, two important criteria for evaluating metaphysical theories have been mentioned: coherence and adequacy. Working within the *paradigm of transcendentals*, the problem concerning adequacy presents itself in a way different from the problem raised by the *ontological paradigm*. The problem is rooted in the tacit assumption that adequacy is an external criterion and respectable "test-cases" are to be found in areas "outside" of philosophy or metaphysics. This assumption, however, is appropriate only for metaphysical theories working within the *ontological paradigm* – not least because "external theories" have their own ontologies.

"Transcendentals" are those "most general ideas" or presuppositions that should be at work in any theoretical undertaking, whether they are explicitly dealt with or only implicitly – as it is, perhaps, in most cases. Due to this, any theory could serve as a test-case. But, if one should succeed in testing, one has not gained anything important: due to the high

generality of transcendentals, any positive result with respect to any test-case is rather trivial.

On the other hand, should it turn out that a metaphysical theory works with a "transcendental" that does not pass the test of adequacy in a special case, the theory must not necessarily be abandoned. The following example should illustrate this: Concerning the transcendental of "expressibility", it is obvious that any theoretical endeavor, any endeavor that pretends to be saying "something true" about any domain, presupposes the "expressibility" of that domain. But, so it seems, the transcendental "expressibility" does not fit in with other things "of which we are conscious, as enjoyed, perceived, willed, ...": e.g., experiences "actually had" by one specific human, "what-it-is-like-ness", "feelings", performances of art. All these are not theoretical in character and not prone to "expressibility" in the sense exploited above. Things of that sort belong to the unrestricted universe of discourse, and so, a theory working within the *paradigm of transcendentals* must take care of them. But, this does not diminish the generality and its being presupposed by theorizing "expressibility". Findings of that sort, rather, indicate that the theory formulated so far is not trivial. They may indicate also how to expand the "initial" theory, maybe with the help of a further transcendental: both together, then, exhausting the unrestricted universe of discourse. This, in turn would lead to modifying or adapting one's theory of truth so far exploited, while the interplay of the "old" and the "new" transcendental must be made explicit – not leaving the "old" as it was found. This sketchy example is to show that metaphysical theories are not "final" words. It may further be seen that being expandable is a criterion of adequacy.

A most important criterion of adequacy, relevant for the *paradigm of transcendentals*, may be given the name "intelligibility". "Intelligibility" for this purpose is associated with the question of whether the theory may be refined, whether the theory expresses something new, whether the theory is able to integrate other relevant theories or findings, whether it is apt for revisions, whether it may contribute to solve or resolve longstanding problems. These are criteria that address mainly other philosophical theories, concurring theories as well as more special theories. To find problematic philosophical discussions and positions, to situate – and to some extend re-express them – within a new metaphysical framework and to show a possibility to resolve those problems belongs to what it means to test for adequacy.

Due to its being unrestricted in scope, a metaphysical theory working within *the paradigm of transcendentals* should be able to incorporate, on a very general level, other more special philosophical theories as well as other branches of the philosophical discourse, such as ethics, aesthetics, philosophy of mind or philosophy of mathematics, to cite only some of them. It should have, general as it may and must be, a definite stance towards other philosophical fields. Concerning the exposition of these inner-philosophical relations, L.B. Puntel's book *Structure and Being* is a point in case. Exploiting these relations is a test for adequacy.

A metaphysical theory should be, on the one hand, revisionary to a certain extent and, on the other hand, able to revise and modify itself. This shows that a metaphysical theory is not intended to express a final state of affairs. Claiming to be the final and revisable state of the art, it would set itself apart from any theoretical discourse and it would degenerate to ideology. How it fares with revisions, of course, will be visible only during the course of history.

The criteria formulated above are not meant to present a complete and undisputable catalogue; there may well be other criteria. It is, however, a methodological task to look for criteria, to make them explicit and to exploit them once a piece of metaphysical theory is formulated. This task ensues not before a theory has reached some elaborated state. Further, if a metaphysical theory is about the unrestricted universe of discourse, then methodological questions of any sort are within its scope – at least at a level of high generality. This, however, indicates new tasks and problems to be rethought and should be left for another day.

4. Finally

The reflections above do not claim that the *paradigm of transcendentals* is a new metaphysical stance. The theories of Whitehead or Hegel may be seen, at least to a certain degree, in this way – but, to judge this issue may be left to interpreters with more expertise in these matters. The *structural-systematic philosophy* of Puntel is certainly a point in case. It is hoped that the argument presented here for abandoning a common stance concerning what is conceived of as the main task of metaphysics during the 20th

century – the *ontological paradigm* – may yield an escape from the trap set between the *Scylla and Charybdis* of metaphysical speculation. It is further hoped that this has successfully argued that working within the *paradigm of transcendentals* leads beyond the trap. Working within this paradigm of metaphysical theorizing may be regarded as being over-ambitious. But grand scale metaphysics is either over-ambitious or not worth its salt – *tertium non datur*.

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