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The Recent Engagement between Analytic Philosophy and Heideggerian Thought: Metaphysics and Mind

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Abstract

Martin Heidegger is a towering figure in the history of continental philosophy, but his work has recently been brought into productive engagement with analytic philosophy. This paper introduces and explores two channels along which such engagement has been taking place. The first is in metaphysics, where Heideggerian thought has been interpreted either as making the metaphysical concept of being literally senseless or as mandating a revision to classical logic. The second is in philosophy of mind, and more particularly in philosophy of cognitive science, where Heideggerian thought has been used to mount a challenge to representational theories of mind.

Keywords

Heidegger, background, being, dialetheia, internal representation

1. Introduction

According to one, over-simplistic but remarkably resilient, image of contemporary Western philosophy, the discipline is characterized by an entrenched divide between two great intellectual edifices, the analytic and the continental traditions. These traditions are held to be separated by methodology (analysis versus synthesis), goals (the solving of well-delineated problems versus the development of a historical and political consciousness) and much more besides. It is an understatement to say that Martin Heidegger is a towering figure in the history of continental philosophy. His magnum opus *Being and Time*, first published in 1927, which combined transcendental phenomenology with a hermeneutic perspective, is, without doubt, one of the landmark texts in that tradition, while his later thought is the occasion for an entangling of philosophy and art that, in its distance from anything that one could justifiably call analysis, seems itself to be a mark of the alleged inter-tradition rift. Given that Heidegger is woven into the very fabric of continental thought, it might strike some readers as profoundly unlikely that his work could ever be brought into productive engagement with analytic philosophy, but in this paper we shall introduce and explore two channels along which, against the odds perhaps, such engagement has recently been taking place. The first is in metaphysics. The second is in philosophy of mind.

2. Metaphysics

Every day, when we wake up, there is a world around us. And this world is full of entities, including the laptop that is being used to write this sentence, the books that adorn office shelves, the Eiffel Tower in Paris and Malevich's *Black Square* in Moscow. However, what makes all these entities *something and not nothing*? Why *are* all these entities in the first place? What makes them *be*? In short, *what is the being of beings*? Heidegger tried to answer these questions. At the very beginning of *Being and Time*, he declares his intention to 'work out the question of the meaning of Being' (19) and, faithful to this idea, he spent his whole philosophical life trying to carry out that task.

According to Heidegger (*Being and Time* 25), being 'determines entities as entities'.[1] The being of an entity is what makes that entity intelligible as an entity. It is the *quidditas* of a *quid*, the *objecthood* of an object. Some philosophers, such as Kris McDaniel ('Ways of Being'), think that, for Heidegger, being is an analogical term and that, as such, 'it has a generic sense which, roughly, applies to objects of different sorts in virtue of those objects exemplifying very different features' (295). For instance, even though the predicate *being healthy* has different meanings (indeed, the relationship with my girlfriend is healthy in a different way than broccoli), *being healthy* still has a common understanding, namely being something that contributes (physically or psychologically) to the flourishing of an organism. In the same way, Heidegger's notion of being may be analogical because, even though all entities *are* something, some entities *are* in different ways than others. For instance, a human being *is* in a different way than a hammer. On the one hand, human beings *are* in the sense that they exist: since, according to Heidegger, something exists if and only if something can ask the question of being, and since only human beings can ask the question of being, only human beings exist. On the other hand, hammers *are* in the sense that they are items of equipment: since everything that is meant to be used for a specific task is an item of equipment, and since a hammer is meant to be used for the specific task of hammering, a hammer is an item of equipment. Thus both a human being and a hammer *are*; however, they are in different ways. Against this interpretation, some other philosophers have defended the idea that, for Heidegger, being is not an analogical, but a univocal, term. For example, Adrian Moore ('Being, Univocity and Logical Syntax'), following the Deleuzian interpretation, thinks that Heidegger 'can be considered a champion of the univocity of being' (p.16). In opposition to McDaniel, both Deleuze and Moore seem to suggest that, from the fact that there are many different entities, it does not follow that there are also different kinds of being. Being is always and only the metaphysical ground, which simply makes all entities entities, regardless of what kind of entities entities *are*.

Now, even though there is disagreement concerning the analogical and the univocal interpretation of being, there is general agreement on the fact that, on Heidegger's view, being is not an entity. On the one hand, being is what makes entities entities; on the other, ''being' [itself] cannot… be conceived as an entity' (*Being and Time* 23).[2] At this point, a problem arises. In order to answer the question of being, it seems necessary to say what

being is. But when we try to answer the question of being by saying what being is, we already treat being as something that *is*. However, since being is not an entity, it does not have any being. Being cannot be. Thus, 'the concept of 'Being' is indefinable' (Heidegger, *Being and Time* 23). Any attempt to say what being *is* implies a reification of it.

Recently, some analytic philosophers have realized that Heidegger's problem of being has a lot in common with some logical paradoxes. Moore, in his *The Evolution of Modern Metaphysics* (hereafter *EMM*), takes Heidegger's philosophy to be one of 'the most general attempt[s] to make sense of things' (1). The issue, according to Moore, is that 'to make sense of things at the highest level of generality (…) is to make sense of things in terms of *what it is to make sense of things*' (*EMM* 7). The self-conscious nature of metaphysics is thus a self-referential one and this makes metaphysics dangerously paradoxical.[3] Heidegger's problem of being is an example. Being is the metaphysical reason in virtue of which everything is. If metaphysics is the 'most general attempt to make sense of things', it is legitimate to make sense of what makes sense; in Heidegger's case, being itself. Nonetheless, exactly this self-referential attempt to make sense of what it is to make sense of things triggers the problem because, as we have anticipated, in talking about being as something that is not an entity, we actually refer to being as that entity which *is* not an entity at all – a clear contradiction.

The paradoxical nature of Heidegger's metaphysics is even clearer in Priest's interpretation ('The Answer to the Question of Being'). In this case, the problem of being is spelt out as a denotational paradox. As we have seen before, being cannot have any name because it cannot be said. Nevertheless, we speak about it, don't we? Don't we speak about being when we say that 'being cannot be said'? Even though nothing can be said about being, the very sentence 'nothing can be said about being' says something about being, namely that it is ineffable. Using Priest's words: 'One cannot say anything about the being of an object (even though one can!). (…) The very same situation occurs in some paradoxes of self-reference' ('The Answer to the Question of Being' 250).

These ways of framing Heidegger's problem may strike one as unfaithful to his original intentions, but this is not true. Indeed, not only is Heidegger concerned with logic, but he is also aware that talking about being inevitably leads to contradictions. If logic is 'a set of rules grounded on the principle of non-contradiction' (Heidegger, *Logic as the Question Concerning the Essence of Language* 8), then being 'is contradictory and, therefore, senseless' (Heidegger, *Introduction to Metaphysics* 27) because 'self-contradictory speech is an offense against the fundamental rule of speech' (Heidegger, *Introduction to Metaphysics* 25). So, Heidegger faces a dilemma: either classical logic is preserved, turning being (and more generally contradictions) into something senseless, or being (and maybe some other contradictions) do make sense, but logic has to be revised. Contemporary analytic philosophers have explored both sides of this dilemma.

Let's start by examining the first side, namely the idea that contradictions are senseless. As we have seen, Moore agrees with Heidegger that being is ineffable and that its ineffability is paradoxical. From the antinomic nature of being, Moore also infers that being itself is senseless. More precisely, Moore claims that being is *propositionally* senseless, exactly in virtue of its being contradictory. The paradox of being, as with all the other paradoxes implied by Moore's conception of metaphysics (namely, 'the most general attempt to make sense of things'), is beyond the limit of propositional expressibility. If this is true, then the only way to express being is to 'allow for conceptions of metaphysics in which the input is sense-making of a non-propositional kind' (Moore, *EMM* 583). Moore opens up the possibility of a 'non-propositional conception of metaphysics' (*EMM* 583). According to him, the assumption that metaphysics must be fastened on propositions is only a scientific prejudice and he thinks that another kind of language is necessary to express being – a language which is free from any commitment to propositional sense. Moore himself does not give any hint about what a non-propositional metaphysics should look like, but, in his later work, Heidegger himself presents two ideas that 'involve the wrenching of language from the norms and structures that allow it to be used in the formulation of propositions' (Moore, *EMM* 480). The first idea tries to develop a new metaphysical language using poetry or, more generally, art. According to Heidegger, the work of art opens up in its own way the being of beings (cf. 'Origin of the Work of Art') because it can show the being of beings without actually talking about it.[4] The second idea is to write 'being' under erasure (~~being~~). In this way, being is not said nor expressed (indeed, it is crossed out) but, at the same time, it is shown. 'The crossing out of this word [namely, ~~being~~] has only a preventive role, namely, that of preventing the almost ineradicable habit of representing 'being' as something standing somewhere on its own [that is, as a being]' (Heidegger, *Pathmarks* 309-311). From *EMM*, it remains unclear if Moore would follow Heidegger in treating these examples as possible ways of developing a non-propositional metaphysics, but it is clear that for him the solution is to stop making propositional sense of being. Being is the limit of our metaphysical expressibility. Beyond this limit, everything becomes propositionally senseless.

Such a solution faces an issue. In *EMM*, Moore claims that being does not make *propositional* sense but, in order to show this, he talks about being propositionally. According to him, since being is ineffable, it cannot be expressed using propositions, but 'being cannot be expressed using propositions' is a proposition which expresses something about being and it does make perfect sense. As Priest comments: '[Moore's work] is not poetry where we have to 'catch on'. It involves serious philosophical arguments' ('Stop Making Sense'). These arguments are expressed by perfectly understandable propositions. The problem is that those meaningful propositions concern being which is supposed to be propositionally meaningless.

Sharing Moore's idea that contradictions are senseless, Oliver and Smiley ('Zilch') have proposed an alternative solution which involves a modification of the language. Although they do not talk directly about being, they are concerned with nothingness which,

according to Heidegger, leads to the same paradoxical situation. Since nothingness is not an entity, nothingness is ineffable. In order to be able to use the term 'nothingness' without denoting anything (and preserving the idea that nothingness is not an entity you can refer to), they claim that Heidegger's 'nothingness' is an empty term, a term that fails to refer to anything. Thus it is possible to say something true by using the term 'nothingness' without there occurring any reification of nothingness itself, because the term 'nothingness' denotes no *thing*. The same could be said about being as well. However, as Casati and Fujikawa point out ('Better than Zilch?'), even though using the notion of an empty term could be a good strategy to solve the problem of being (and nothingness), it is hard to believe that it can also be a correct interpretation of Heidegger's metaphysics. Indeed, Heidegger himself clearly claims that an object is what is represented (*Pathmarks* 28). Every time we refer to something with an intentional act (for example, in thinking, imagining or speaking about something), then this something is an object. Following Heidegger's example, just as the name 'rose' refers to the rose in the garden, the 'redness' of the rose refers to something as well, because, while 'I am mentioning [the redness of the rose], I think about it and I represent it' (Heidegger, *Pathmarks* 29). Given this framework, Oliver and Smiley's proposal must be inaccurate as an interpretation of Heidegger, because, according to Heidegger's philosophy, it is impossible to have empty terms: all words and all thoughts refer to objects (Heidegger, *Being and Time*, *Logic as the Question Concerning the Essence of Language*).

Let's now examine the second side of the dilemma, namely the idea that the contradictory nature of being does make sense and that it requires a revision of (classical) logic. Graham Priest has defended this view. Like Moore, he thinks that being is an example of the limit of expressibility. He also believes that, since the argument concerning the ineffability of being is a valid one, we should simply accept its conclusion: being is expressible and, at the same time, it is not. According to Priest, metaphysics has boundaries and these 'boundaries are the sites of *dialetheias*, true contradictions' (*Beyond the Limits of Thought* 245). Even though 'the boundaries in question are of several kinds (the limits of expression, iteration, cognition, conception\description)', he claims that, in all these different cases, 'a certain object must be within a fixed totality [this is what he calls the 'Closure Condition'], but must also be without it [this is what he calls the 'Transcendental Condition']' (*Beyond the Limits of Thought* 245). Heidegger's concept of being fits this description. The 'Closure Condition' is represented by the fact that being is within the totality of everything that is expressible. The 'Transcendental Condition' is represented by the fact that being is ineffable – it is beyond the boundary of the expressible. Being is exactly this contradictory object which is inside the set of everything that is effable and is outside it as well. Being is effable and ineffable. It is a *dialetheia*.[5] 'The ineffability of being is required by Logic; and, specifically, the law of non-contradiction. (…) [However, in this case,] Logic is simply mistaken about the principle of non-contradiction' (Priest, *Beyond the Limits of Thought* 248). This is why Heidegger's being requires us to abandon classical logic in favour of a paraconsistent one. In classical logic, contradictions cannot be tolerated because, from an arbitrary contradiction, anything follows. For instance, according to

classical logic, 'if it is true that I am a PhD student and I am not a PhD student, then my mum is the pope' is a valid inference. In this framework, a contradiction is enough to make the whole logical system '*explode*' and, of course, a logical system in which it is possible to infer anything from anything (namely a trivial system) is useless. Paraconsistent logics are those logics in which this principle of explosion does not hold, which is why it is possible to accept some contradictions without being able to infer anything from them.[6] If Heidegger is right that being is contradictory, a logic that can deal with contradictions without any explosion is necessary. According to Priest, 'it is an irony that a thinker of the acuity of Heidegger (…) should have been blind to the possibility that people had got Logic wrong' (*Beyond the Limits of Thought* 248), but Priest is confident that, with a full knowledge of the recent developments in paraconsistent logic, Heidegger would have been happy to claim that being is a *dialetheia*.

Now, even if we assume that being is a true contradiction, we still don't know how being makes entities entities. Priest ('The Answer to the Question of Being') suggests that, since an entity is something that has a unity, being itself can be interpreted as the unity of an entity. Relying on Aristotle (*Complete Works* 1003^{b} 23-31) and Plotinus (*Enneades* 535-536), he thinks that *being an entity* is *being a unity*. However, the unity of an object represents a major problem in philosophy. To see why, let's assume that there is an object *o*, which has only two parts (call them *a* and *b*). In order to 'glue' *a* and *b* together obtaining the unified object *o*, we could insert something that 'glues' *a* and *b* (call this third element a 'gluon' or *g*). In Priest's account of unity, a gluon is simply what delivers the unity of an object – the thing in virtue of which two or more parts are unified into a whole. Nevertheless, if *g* is different from *a* and *b*, we need to insert something else (let's say a fourth and fifth gluon g^{I} and g^{II}) which would glue *a* with *g* and *b* with *g*. If we always insert a new element between the parts of the object *o* and the gaps between them, we end up in an infinite regress of gluons and '*hyper*-gluons' (g^{I}) and '*hyper-hyper*-gluons' (g^{II}) and so on. Priest avoids the infinite regress by proposing a theory according to which the gluon, *g*, of an object, *o*, is 'identical to all and only the parts of' *o* (*One* 20). This means that *g* is identical to each of the parts that *g* glues together. Indeed, if the gluon of *o* is identical to each of its parts (if, in our case, *g* is identical to *a* and *g* is identical to *b*), there is no gap which needs to be filled and the infinite regress is blocked.

Priest's solution has a price to pay, though, namely that identity is not transitive. Indeed, even though the gluon of *o* is identical to both *a* and *b* ($g = a$ and $g = b$), *a* is not identical to *b* because, by definition, *a* and *b* are two different parts of *o*.[7] Moreover, the gluon *g* is self-identical and not self-identical. On the one hand, Priest takes self-identity ($x = x$) to be a logical truth and this means that everything is self-identical including the gluon *g*. On the other hand, the gluon cannot be self-identical for the following reason: once again, consider the object *o*, which is composed of two parts (*a* and *b*). Since *a* is not identical to *b*, *a* has some properties that *b* does not have. However, it is also the case that, since *g* is identical to *a*, *g* has all the properties of *a* and that, since *g* is also identical to *b*, *g* has all the properties

of *b*. It follows that *g* has and does not have certain properties. Thus, *g* is also not self-identical.[8]

At this point, it is important to recall that Priest claims that *being an object* is *having a unity* and that *having a unity* is *being self-identical* ('*Sein* Language'). This means that being itself is an object (indeed, it is self-identical) and it is not an object (indeed, it is not self-identical).[9] This observation is consistent with the idea that being is both effable and ineffable: *X* is expressible if and only if, in expressing *X*, we express a *thing*. Since being is expressible, being is a thing. Moreover, *X* is inexpressible if and only if there is no *thing* called '*X*' to be expressed. Since being is inexpressible, being is not a *thing*.

3. Mind

It is time to shift attention to a second debate within which ideas sourced from Heidegger's philosophy have made a significant recent contribution. This debate concerns the question, What role does the notion of internal representation play in our best conceptualizations and explanations of the mental? One venerable position (with a long history in philosophy and a mandate from mainstream cognitive science – see below) is that the concept of internal representation has a privileged status with regard to such conceptualizations and explanations, because perception, memory, thought, reasoning and other psychological phenomena are essentially a matter of building, storing, retrieving and transforming internal representations. On this view, mind, *at its most fundamental level*, has a representational ontology. This is a view that, as we shall see, Heidegger rejects, but before we see why, and before we track the way in which that rejection has been played out in a particular area of analytic philosophy of mind, let's get some bearings.

For present purposes, internal representations are inner states that carry content, where for a state to carry content is for it to have correctness conditions, conditions under which it is correct or incorrect, accurate or inaccurate, satisfied or not satisfied. The appeal to correctness conditions is one way to make sense of the commonplace idea that to represent the world is to *take the world to be a certain way*, while the innerness component is tied up with the equally routine thought that the function of representational elements is to *stand in for* the world in our cognitive processing. Here is an example: you know that Martyn desires a beer, and, given this, you explain his visiting the bar by announcing that 'Martyn believes that beer may be purchased at the bar'. In this example, Martyn's psychological state is specified as a propositional attitude, that is, as an attitude (believes that) toward a proposition ('beer may be purchased at the bar'). For the moment, let's just say we all agree that, in some suitable sense of 'inner', beliefs are inner states. On the representationalist picture, as played out in terms of propositional attitudes, if an inner state has content (is a representation), then that content is given by the proposition that figures in the appropriate propositional attitude specification, a proposition which may, or may not, be correct. So the content of Martyn's belief is 'beer may be purchased at the bar', and that content may be correct or incorrect, depending on whether beer may indeed be purchased at the bar.

The principal site for the Heideggerian challenge to representationalism may come as a surprise to the uninitiated. For it is the interdisciplinary interface where philosophy of mind meets empirical cognitive science.[10] To explain: Orthodox cognitive science adopts a specific version of the representationalist framework sketched above, a version in which 'internal' means 'in the brain' (so representations are neural states) and where the representation-manipulating processes in play are held to be computations (so the brain is some sort of computational machine). True, some camps within orthodox cognitive science have rejected the idea that representations are necessarily propositional in structure. A model of representation based on language (e.g. Fodor, *The Language of Thought*) has thus been joined by one based on mathematical vectors (e.g. Churchland and Sejnowski, 'Neural Representation and Neural Computation'), but this is a proposed variation in the form that psychological representational content ought to take, not a challenge to the privileged status of the concept of internal representation in our understanding of the mental. Since the early 1990s, however, that purported privileged status has come under critical pressure from within cognitive science. Indeed, there have been a staggering number of offensive and defensive volleys in a sometimes bad-tempered debate (too many to reference, but chapters 6 and 7 of Clark's *Mindware* give a sense of the issues). Given our interests here, we need only note that, according to some prominent thinkers, Heideggerian philosophy is one source of antirepresentationalism.

Let's begin by recalling Heidegger's phenomenological analysis of everyday experience in which he identifies three modes of being (intelligibility) realized by entities – readiness-to-hand, un-readiness-to-hand, and presence-at-hand (Heidegger, *Being and Time*). Entities are encountered as ready-to-hand when they are skilfully manipulated in a hitch-free fashion during practical activity. Where this mode of being is operative, entities are not represented in conscious experience. Thus, when a skilled typist is producing a document in a smooth and unhindered manner, both keyboard and monitor disappear from (become transparent to) his consciousness. Hubert Dreyfus ('Why Heideggerian AI Failed')[11] calls such activity *absorbed coping*. Sometimes, absorbed coping is disturbed by breakdowns or malfunctions in which the entities in question present the agent with context-specific problems to be solved (think of a coffee-soaked keyboard). Entities are then revealed in the mode of being of un-readiness-to-hand and will be represented by the agent in terms of the context-dependent factors to which practical problem solving is directed (for example, as a hindrance to delivering an academic paper). The mode of being of presence-at-hand is revealed when entities are phenomenologically removed altogether from the action-oriented settings of everyday practical activity and are represented as the bearers of certain determinate, context-independent properties (e.g. size in metres, weight in kilos).

From what has just been said, one might think that the Heideggerian challenge to representationalism must be restricted to the domain of readiness-to-hand and so will fail to touch core psychological phenomena such as reasoning, planning, or visually scrutinizing a scene, since these phenomena plausibly occur in the domains of un-

readiness-to-hand and presence-at-hand, domains that, even on Heidegger's account, are plausibly populated by representational states and processes. More fundamentally, one might wonder why any 'mere' phenomenological analysis should have any consequences for the status of representational explanation, as that is conceived by a *naturalistic* (and so science-regulated) philosophy of mind, given the scepticism about first-person reports that has become deeply entrenched within psychology as a result of a whole series of compelling experiments which seem to demonstrate that we have unreliable access to our own cognitive processes (for this kind of worry directed at phenomenology, together with descriptions of some of the relevant experiments, see e.g. Rupert, *Cognitive Systems and the Extended Mind* chapter 8). If such scepticism is grounded, then it is not obvious that even the restricted challenge just highlighted has any momentum.

As it happens, it's by seeing what's wrong with the second of these worries that we get to see what's wrong with the first. Phenomenology, as conceived by Heidegger and others (such as Merleau-Ponty) in the continental tradition, is not equivalent to the first-person reporting of experience. Phenomenology, as Heidegger practises it, is a theoretical enterprise that, through a disciplined examination of ordinary experience, aims to uncover the *transcendental yet historical* conditions which give that experience its form. (It is also a hermeneutic enterprise whose results remain ceaselessly open to revision, enhancement and replacement, but that is another story.) It is a crucial feature of Heidegger's position that the transcendental conditions for human sense-making cannot simply be read off from the surface of ordinary experience via pre-theoretical introspection. Indeed, if Heidegger is right, those conditions are standardly concealed from any such untrained inward glance (see e.g. *Being and Time* 96), which is why a disciplined and careful analysis of experience is needed to reveal them, and why phenomenology is not equivalent to routine introspection. But now if phenomenology is not simply the first-person reporting of how experience strikes us, then the unreliability of such reports with regard to our cognitive processing is not obviously a source of concern. Indeed, if the phenomenological wisdom is that those reports are destined to obscure the very transcendental structures that are the targets of its analysis, then phenomenology seems to encompass its own unreliability claim regarding such reports. This thinking through of phenomenology helps with our other worry too. For Heidegger's tripartite analysis of our everyday encounters with entities is only the first stage in his unearthing of the transcendental structures underpinning experience. The real Heideggerian challenge to representationalism occurs not during this preliminary stage of his investigation, but at the point where the focus is on a phenomenon known as *the background*.

According to Charles Taylor, the background is 'an unexplicated horizon' providing 'the vantage point from out of which' every experience matters to one in certain way ('Engaged Agency and Background in Heidegger' 325). It is a vast, holistic, indeterminate network of (for Heidegger, socio-cultural) semantic structures that collectively constitute one's world and that are implicitly presupposed by concrete sense-making events. The background is thus an integrated mesh of what John Haugeland, another philosopher of mind who

adopts a Heideggerian perspective, calls 'webs of significance' ('Mind Embodied and Embedded'). To use an example from Cappuccio and Wheeler ('Ground-Level Intelligence'), consider the innumerable sense-making preconditions which were in play when King George VI walked into a BBC studio and experienced it as the setting not only for a historically momentous public announcement that the United Kingdom was entering the Second World War, but also for a tremendous personal ordeal resulting from his need to overcome his relentless stutter, the fact that he had recently become King in dramatic circumstances, and so on. In some ways, the King's speech is an unusually fraught example, since it identifies the background as preventing, rather than as promoting, successful action, which is why George resorted to using furiously repeated tongue twisters to address his context as a problem, and to reconfigure the background in advance in order to disclose new opportunities for action. What this tells us is that the background is not 'simply' massively holistic, it also shifts dynamically. Nevertheless, the fact is that human beings navigate its webs of significance on a daily basis, and often (unlike George) do so in a fluid, flexible and seemingly effortless manner. Dreyfus ('Why Heideggerian AI Failed') calls this ability *background coping*.

It is at the level of background coping that the real Heideggerian challenge to representationalism comes into view. Dreyfus claims that, as Heidegger conceives of background coping, it *cannot* be understood as the building, storage, retrieval and transformation of internal representations. Dreyfus (*Being-in-the-World* chapter 6) argues as follows: First, the massively holistic character of the background renders it resistant to specification in terms of determinate representational content. Secondly, background coping is a kind of knowing-how-to-navigate-one's-world, while representations paradigmatically realize a form of knowledge-that-something-is-the-case, and, since knowledge-how cannot be reduced to knowledge-that, representations cannot be the explanation for background coping. Thirdly, representations are intrinsically context-independent (present-at-hand) structures to which context-dependent significance must somehow be added, so any attempt to specify such significance by representational means must result in an infinite regress, since the additional representations will themselves need to have significance added by yet further representations (and so on). It is here that Dreyfus's critique of representationalism connects up with the general metaphysical question of being discussed earlier. The background is that in virtue of which entities are made intelligible as entities but, in line with Heidegger's claim that the being of entities is not itself an entity, the holistic, indeterminate and dynamic structure of the background means that the background is not itself an entity with determinate properties that may be fully represented in thought.

On the face of things, it seems open to the represenationalist to deny the force of each of the three Dreyfusian sub-arguments. She might claim that holism makes representing the world hard, but not impossible, that knowing-how can be reduced to knowledge-that (as argued by Stanley and Williamson, 'Knowing How'), and that the regress of putatively context-fixing representations can be blocked by a set of context-independent rules whose

adaptive function is to model and manage the relationships between contexts (for discussion, see Wheeler, *Reconstructing the Cognitive World* 185-6). It might seem, then, that we are heading for a stand-off. However, Dreyfus responds by shifting the terms of the debate. He argues that orthodox cognitive science, and more specifically one of its sub-fields, orthodox artificial intelligence (AI), provides an empirical test arena for the representationalist project. The idea is that since orthodox AI embraces representationalism, the success or failure of orthodox AI should, given a suitable diagnosis, be taken as evidence for the truth or otherwise of representationalism. Here Dreyfus argues that a difficulty which is commonly (although, one should record, not universally) acknowledged as a major barrier to orthodox AI, namely the *frame problem* (for an introduction, see Shanahan, 'The Frame Problem'), is an artefact of representationalism, a fact which becomes visible once one views the issue from a Heideggerian perspective. To explain: In its most general form, the frame problem is the problem of building a naturalistically discharged system (for example, a computational machine) that is adaptively sensitive to what is relevant in a particular context of action. Now consider a representation-guided agent. Faced with the challenge of determining which of its internal representations are relevant in the present context, such an agent will naturally be led to deploy second-order representations that determine first-order contextual relevance. But this strategy succeeds only in pushing the issue of relevance one stage back, for the system then needs to decide which of its second-order representations are currently relevant, a challenge which requires a further, higher-order set of representations, and so on into the jaws of an infinite regress that doesn't yet seem to have been successfully blocked in practice by any context-independent logic of context management. This widely recognized manifestation of the frame problem clearly has the shape of the Heideggerian challenge to representationalism that is posed by the background. Put another way, given the Heideggerian analysis of background coping, it is unsurprising both why the frame problem takes the form it does and why artificial intelligence has (allegedly) struggled in vain to solve it.

The implication is that even if representations do play a part in our dealings with un-ready-to-hand and present-at-hand entities, such representational cognition must depend on (or bottom out in) a more fundamental, nonrepresentational capacity to navigate the background. Haugeland puts a similar point as follows: 'The world can't be representations "all the way down". But that's not to say that it can't be meaningful, because there are more kinds of significance than representational content' ('Mind Embodied and Embedded' 233). And Dreyfus himself concludes that 'all coping, including unready-to-hand coping, takes place on the background of [a] basic nonrepresentational, holistic, absorbed, kind of intentionality, which Heidegger calls being-in-the-world' ('Why Heideggerian AI Failed' 345-6). Notice that Dreyfus describes background coping (being-in-the-world) as a 'kind of intentionality'. If this is right, and given that intentionality (understood as nonderived aboutness) is standardly identified as a (if not 'the') mark of the mental, it is not open to the defender of representationalism to hold that background coping is in fact not a psychological phenomenon at all, and thus that all the genuinely

psychological phenomena here remain representational in character. If background coping is a kind of intentionality, albeit not of a traditional kind, then, *at its most fundamental level*, mind has a nonrepresentational ontology.

Beyond the claim that mind is not fundamentally representational in character, what kind of understanding of psychological phenomena does the Heideggerian perspective give us? Capturing its intentional character, nonrepresentational background coping is understood by Dreyfus, Haugeland and others as a kind of 'embodied being-toward' in which the inner-outer distinction itself becomes suspect, since it is far from obvious that it makes any sense at all to ask whether my coping, as an embodied being-toward, is in me or in the world. It is tempting to hear this claim as striking a harmonious chord with a prominent position in contemporary analytic philosophy of mind, namely the *extended mind hypothesis* (Clark and Chalmers, 'The Extended Mind'), according to which the machinery of mind sometimes extends beyond the skull and skin. However, unlike Haugeland ('Mind Embodied and Embedded') who, in effect, succumbs to the temptation here and develops extended-mind-style arguments alongside a Heideggerian account of basic intentionality, Dreyfus attacks the plausibility of the extended mind and does so on Heideggerian grounds. He notes that the most common arguments for the extended mind appeal to the idea that external representational structures, such as notebooks or mobile phones, may play functionally equivalent roles to neural representations in the production of thought and action, and thus qualify as cognitive on the same grounds as those neural elements. In so doing, such arguments preserve the idea that mind, even though extended, has a representational ontology. But if we take heed of the nonrepresentational character of background coping, then, from a Heideggerian perspective, any representational form of externalism can only be, at best, a derivative phenomenon. As Dreyfus puts it, 'for a Heideggerian, all forms of cognitivist [representationalist] externalism presuppose a more basic existential externalism where even to speak of "externalism" is misleading since such talk presupposes a contrast with the internal' ('Why Heideggerian AI Failed' 342). Aside from this opening blow by Dreyfus, the debate between the extended mind and Heideggerian existential 'externalism' is one that is still waiting to happen.

Finally, given that our chosen site for exploring the Heideggerian engagement with contemporary analytic philosophy of mind has been the interface with cognitive science, one might wonder what kind of cognitive science might conceivably satisfy the Heideggerian. Indeed, Wheeler (*Reconstructing the Cognitive World*) argues that once the ground has been shifted to allow cognitive science to bear on the issues we care about, then, unless one wants to give up on cognitive science altogether, a Heideggerian diagnosis of the problems faced by orthodox cognitive science is no longer enough to mandate a shift in the conceptual foundations of the field; we also need a replacement cognitive science – a recognizably Heideggerian one. At this point in the proceedings, there is something of a split in the ranks. Dreyfus (e.g. 'Why Heideggerian AI Failed') has cited with approval the neurodynamical framework developed by Walter Freeman (*How Brains Make up their Minds*), in which the brain is conceptualized as a nonrepresentational dynamical system

primed by past experience to actively pick up and enrich significance. By contrast, Wheeler ('Cognition in Context') argues that background coping has the dual character of Freeman-style dynamics and (what he calls) situated special-purpose adaptive couplings, that is, task-dedicated mechanisms that are triggered by specific stimuli and which combine neural processes, non-neural bodily factors, and environmental elements, as 'equal partners' in their behaviour-generating strategies. Cappuccio and Wheeler ('Ground-Level Intelligence') build on this latter picture to argue that our access to the background is often mediated and articulated by embodied preparatory routines, such as King George's tongue twisters, that may themselves be understood as minimally representational structures (although not, of course, as *internal* representations). The dispute over what a genuinely Heideggerian cognitive science ought to look like remains to be settled.

But perhaps we have already taken a step too far. Indeed, some readers will have been itching to complain that if one interprets Heidegger as a card-carrying anti-naturalist (and many of his interpreters do), and if one also holds that any philosophy of mind that travels alongside cognitive science will inevitably be naturalistic in character (where naturalism essentially involves some sort of regulation by natural science), then the basic idea of a Heideggerian cognitive science is at risk of being incoherent. At the very least, any attempt to use Heideggerian phenomenology productively in cognitive science will ultimately have to face up to an apparent tension between the transcendentalism of that phenomenology and the naturalism that plausibly accompanies cognitive science. Some thinkers have argued that this tension is unresolvable. For example, Matthew Ratcliffe ('There can be no Cognitive Science of Dasein') claims, on what he advances as Heideggerian grounds, that the distinctive manner in which empirical science, and so cognitive science in particular, reveals entities as the targets and the outcomes of its investigations, tacitly presupposes a sense of (what he calls) *belonging to the world* on the part of the human scientist. According to Ratcliffe, this sense of belonging to the world – which is tantamount to Dreyfusian background coping – is a transcendental condition of the distinctive mode of sense-making that is characteristic of cognitive science, and so cannot be brought within the explanatory reach of that science. Relatedly, Andrea Rehberg ('Heidegger and Cognitive Science – Aporetic Reflections') claims that whereas a genuinely Heideggerian perspective is committed to the principle, established by transcendental phenomenology, that human being-in-the-world may be understood only if we refrain from reducing such being to a mere object (see again the section on metaphysics above), an objectifying mode of sense-making is an essential characteristic of modern science and thus of cognitive science. So any cognitive 'science' that adopted the required non-objectifying mode of sense-making, in order to make human being-in-the-world intelligible, would thereby cease to be a science. In response to these sorts of considerations, Wheeler ('Naturalizing Dasein', 'Science Friction') suggests that what Heideggerian cognitive science needs is the combination of a *domesticated transcendentalism* and a *minimal naturalism*. A domesticated transcendentalism is a transcendentalism that embraces the full implications of the Heideggerian view that the transcendental conditions of possibility of specific enactments of human sense-making are located within human

cultures and histories – cultures and histories that include science as a practice. A minimal naturalism is a naturalism animated not by any stripe of reductionism, but rather by the methodological principle that where there is a genuine clash between philosophy and some empirically well-supported science, there is good reason for the philosopher, but not the scientist, to at least revisit her claims, with a view to withdrawal or revision. If there are devils here, then they are in the details, but if, as Wheeler thinks, Heidegger's own form of transcendentalism is indeed compatible with a robust (albeit minimal) form of naturalism, then a Heideggerian cognitive science remains a live option.

4. Concluding Remark

Just as it would be a distortion to say that there is an unscaleable wall dividing analytic philosophy from Heideggerian thought, it would be equally inaccurate to claim that the wall that is there is already tumbling down. However, the two border crossings that we have described in this paper provide good evidence that there are interesting questions and new perspectives that offer themselves up for investigation, once that wall is breached.

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[1] Two remarks: First, Heidegger uses different terms to talk about beings (for instance, entity [*Seiendes*], thing [*Ding*] and object [*Objectum*]) and these terms have different (phenomenological) meanings. Nevertheless, for simplicity, the present paper uses all these terms as synonyms.

[2] The distinction between being and beings is what is known as the *ontological difference*. For the purposes of this paper, it is enough to assume the ontological difference. However, it is interesting to point out that it is not easy to find arguments for the claim in Heidegger's corpus (although see, for instance, Heidegger, *The Principle of Reason* 51). Recently, some philosophers have tried to justify the ontological difference with original arguments. For relevant discussions, see Priest, *Beyond the Limits of Thought* chapter 15 and 240, and Haugeland, *Dasein Disclosed* chapter 2.

[3] Markus Gabriel has used a similar argument to show that ontology leads to a paradox. In his *Fields of Sense*, ontology is defined as the study of 'fields of sense', and everything exists in an appropriate field of this sort (for instance, Sherlock Holmes exists in the field of sense of Doyle's story). Now consider the field of all fields. This field gives existence to everything that belongs to it, but it does not give existence to itself. So, in order to exist, the field of all fields needs to belong to another field. However, this is not possible because, if the field of all fields belongs to another field, then this means that it is both the field of all fields and not the field of all fields. Indeed, there would be another field 'containing' the field of all fields. To avoid this contradiction, Gabriel claims that there is no field of all fields (in his terminology, there is no world [*Welt*]).

[4] As an example, consider Van Gogh's '*Pair of Shoes*'. According to Heidegger ('The Origin of the Work of Art'), beside the banal pair of clogs, this masterpiece represents something else: for instance, the loneliness of the path in the field during the sunset or the silent gift of the land as a crop. Of course, such things are not explicitly said in the painting. There is no representation of a sunset and there is no crop either. It is 'just' a pair of shoes. Van Gogh's work of art does not *say* all these things, it *reveals* them. By analogy, metaphysics should express being in a similar way: it should *reveal* it without directly saying / representing it.

[5] Priest (*Beyond the Limits of Thought* 245) gives a formal description of the paradox of being using the so-called Inclosure Schema: φ(y) is 'y can be expressed in language', so that Ω is the totality of things that can be expressed; ψ(x) is 'x = Ω'; δ(Ω) is a claim about being, say that being is what it is that makes entities be. Then, by Heidegger's arguments, we have $\neg\varphi(\delta(\Omega))$: this fact about being cannot be expressed; but Heidegger himself shows that $\varphi(\delta(\Omega))$ by expressing this fact.

[6] For an introduction to paraconsistent logic, see Priest, *Beyond the Limits of Thought*.

[7] Formally, non-transitive identity is obtained by a standard definition of identity and a paraconsistent interpretation of the material biconditional. According to Priest, the identity of objects is defined by Leibniz's identity of indiscernibles according to which $x = y := \forall P(Px \equiv Py)$ where A ≡ B is the material biconditional, i.e., $(\neg A \vee B) \wedge (\neg B \vee A)$). The material biconditional is interpreted by the paraconsistent logic LP (Priest 1979) and LP invalidates the inference from A ≡ B and B ≡ C to A ≡ C. Non-transitive identity follows from here.

[8] Put formally: Since *a* and *b* are two different parts of *o*, then for some *P*, Pa and $\neg Pb$. Moreover, since $g = a$ and $g = b$, then $Pg \wedge \neg Pg$. From $Pg \wedge \neg Pg$, it also follows $Pg \equiv \neg Pg$, and $\exists X \neg(Xg \equiv Xg)$ and $\neg\forall X(Xg \equiv Xg)$. Finally, $g \neq g$. However, since $\forall\, x\, (x = x)$ is a logical truth, it is also the case that $g = g$.

[9] Priest uses the idea that what is not an entity (in the Heideggerian framework, being and nothingness) is also not self-identical in his 'Much Ado About Nothing', where nothingness is defined as the mereological sum of everything contained in the empty set. What is contained in the empty set are the non-self-identical elements.

[10] This is not the only place where Heideggerian thought and analytic philosophy of mind are finding themselves in conversation. The recent debate between McDowell and Dreyfus over the place of conceptual rationality in our dealings with the world provides another example. See Schear's *Mind, Reason and Being-in-the-World* for a collection of essays on this debate, including key papers by Dreyfus and McDowell.

[11] Dreyfus was arguably the first thinker to bring Heideggerian ideas into contact with cognitive science. In this piece we concentrate mainly on his most recent arguments (e.g. in 'Why Heideggerian AI Failed'), but the engagement is long-standing (see e.g. *What Computers Can't Do*, *Being-in-the-World* chapter 6, *What Computers Still Can't Do*).