# Heidegger, Space, and World

Jeff Malpas – Tasmania

1. The way in which the question of world is implicated with the question of space is already indicated by Heidegger's very characterization, in *Being and Time*, of the essence of human being, *Dasein*, as being-in-the-world. Here the nature of 'being-in' is as much at issue as is the nature of 'world', and although Heidegger himself moves fairly quickly to assert, in §12 of *Being and Time*, that 'being in' as it figures in relation to world is not a matter of spatial *containment*, but of active *involvement* (see Heidegger, 1962: H53-56),[1] the analysis that follows constantly invokes the spatial at the same time as it also seeks to move away from it (Malpas, 2006: 65ff).

The rethinking of the framework of *Being and Time* that Heidegger undertakes in the late nineteen-twenties and early nineteen-thirties (the rethinking that lies at the heart of the so-called 'Turning' in his thought) involves a re-articulation of the concept of spatiality along with that of world, although it is a re-articulation that is not directly addressed nor does it come properly to fruition until the late nineteen-forties. By 1935, Heidegger had already come to recognise the mistaken character of the attempt to 'derive' existential spatiality from temporality that was a key element in the argument of the earlier work (see Heidegger, 1967: 16-17).[2] In addition, his engagement with Hölderlin, as that developed from the early and mid-nineteen-thirties onwards, was also leading him in the direction of the more complex understanding of the concepts of space and place, and so also time (itself inseparably bound to both space and place), that would come to fruition in his later thinking, especially in essays such as 'Building Dwelling Thinking' (See Malpas, 2006*:* 251-266; also Elden, 2001: 84-92).

Contemporary work in cognitive science has also come increasingly to recognise the complexity of spatiality, as well as its centrality to accounts of cognition and behaviour, and to the understanding of world. Thus, in the introduction to a groundbreaking volume published in 1993 (a volume in which Merleau-Ponty occasionally figures, but Heidegger not all), Naomi Eilan, Rosaleen McCarthy and Bill Brewer, take as their guiding question: 'What is the connection between the

capacity for spatial thought and grasp of the idea of a world out there, an external world we inhabit?'(Eilan et al, 1993: 1), and the answer evident in the essays the volume contains (an answer already, of course, adumbrated in Kant) is that the two are intimately and inextricably tied together. Yet although work in cognitive science elsewhere often draws on what are supposedly Heideggerian ideas, surprisingly little attention has been paid to the way spatiality emerges and develops in Heidegger's thinking, nor to the way in which shifts in Heidegger's understanding of spatiality might be connected with shifts elsewhere in his thought. Moreover, while Heidegger is seen by many to be especially relevant to contemporary cognitive science in virtue of his understanding of being-in-the-world as based in a mode of 'practical' rather than 'theoretical' comportment (largely as a result of Hubert Dreyfus' influential reading of Heidegger along just these lines – see esp. Dreyfus, 1991), relatively little attention has been paid to the way this connects with contemporary analyses of spatiality, or indeed to the way in which problems in Heidegger's understanding of spatiality might compromise his understanding of being-in-the-world and the supposed primacy of the practical. .

Once one inquires more closely into the interconnection of the problem of world with the problem of space, then it soon becomes apparent that one cannot understand world independently of spatiality, nor can one understand either spatiality or world on the basis of 'practical' comportment or 'involvement' alone. Indeed, an undue emphasis on practice can easily threaten the same sort of one-sidedness in thinking that is also engendered by the focus on pure theoreticity. In the discussion that follows, I will explore the way space and world appear in Heidegger's thinking, including some of the problems that accrues to Heidegger's treatment of space in *Being and Time*, in order to sketch out, first, something of the complex and non-derivative structure of spatiality (especially the way in which it cannot be treated as somehow derivative of the 'practical' or the 'involved'),[3] and, second, the way spatiality is tied to the concept of world, and especially the way in which Heidegger's own attempts to clarify the concept of world also lead inevitably to an increasingly spatialized analysis.

2. The treatment of spatiality in *Being and Time* is not some peripheral aspect of the work. If time and temporality are the focus for the second part of the book (Division,

I, Part II), it is space that is arguably the focus, even if problematically so, for the first part (Division I, Part I). Inasmuch as *Being and Time* takes up the question of being, in large measure, through the question of world, so *Being and Time* can be seen as pursuing a two-stage analysis in which world is first explored in its spatial character (and in which spatial concepts such as 'being-in' and 'being-alongside' (or 'being-amidst') play a central role, but in which spatiality is shown to be derivative of or 'founded in' the care-structure of Dasein), and then in its more primordial temporal determination (temporality being that in which both the care-structure and existential spatiality are founded – and so, one might say, in which world itself has its ground).

One of the reasons for the problematic status of spatiality in *Being and Time* is Heidegger's evident difficulty in severing the connection between the idea of spatiality and the particular understanding of space as homogenous extension that he takes to be a key element in Cartesianism (See Heidegger, 1962: H89-H101) – the consequence is that spatiality in *Being and Time* is, as I have already indicated, an entirely secondary structure. While Heidegger does advance an account of an existential mode of space that is tied to the teleological ordering of equipment and project (see esp. Heidegger, 1962: §§22-24),[4] this is not a *sui generis* mode, but one that is instead derivative of temporality – a derivation for which Heidegger argues explicitly, if not altogether successfully, in *Being and Time* §70 (it is to this that Heidegger seems implicitly to be alluding in his 1935 comment noted above – see also Heidegger, 1972: 23).[5] The derivative construal of spatiality is an expression of Heidegger's implicit methodological commitment to what I have elsewhere termed a structure of 'hierarchical dependence' (a commitment that is characteristic of the argumentative structure of *Being and Time*) according to which Dasein exhibits an ordered structure of successively derived or dependent unities themselves founded in an originary unity (Malpas, 2006*:* §3.5). As a result, Heidegger's prioritization of temporality in *Being and Time* takes the form of an assertion of temporality as the originary *foundation* for the unity of Dasein in its entirety. It is this assertion of temporality as foundational, itself evident in the teleological understanding of the structure of world that is developed through the idea of equipmentality, that gives rise to problems in the Heideggerian account of space, and that also, of course, makes for difficulties in the account of world as such.

The problematic status of spatiality is itself connected to the uncertain role of the body in Heidegger's analysis – indeed, not only is Heidegger's account of

existential spatiality in *Being and Time* developed in a way that sets it apart from (and actually opposed to) any notion of 'objective' spatiality (and we should be careful not to pre-judge what might be involved in such a notion), but it is also developed in a way that separates it from any notion of a distinctive *bodily* spatiality The claim that Heidegger ignores or neglects the body is a frequent complaint of readers of *Being and Time*. In fact, Heidegger does not quite ignore issues concerning the body, but instead, while explicitly acknowledging the importance of the problems that are raised by it, sets those problems deliberately to one side.[6] There is good reason for this – at least within the structure of Heidegger's thinking in *Being and Time*: given the interconnection of the bodily with the spatial, and given also Heidegger's derivative construal of spatiality, he has no option but to regard the issue of the body as already encompassed, inasmuch as it is relevant, by the treatment of spatiality, and so also by the account of temporality. This approach is also to some extent reinforced by the way in which Heidegger, quite correctly given the nature of his analysis, sees our being embodied as a consequence of our character as existing rather than as determining the character of our existence – in much the same the same way that our having sense organs is, as Heidegger points out in his 1929 *Kantbuch*, a consequence of our finitude rather than itself being determinative of it (Heidegger, 1997: 18-19.).

Significantly, the issue of the body has emerged as an increasingly important theme in contemporary cognitive scientific approaches to the question of space – although usually drawing on the ideas of Merleau-Ponty rather than Heidegger.[7] This is not always without its own problems, however, since the body cannot be simply assumed – what the body *is* must be acknowledged to be itself in question here. Moreover, this is a point that Heidegger himself seems implicitly to recognise – it may partly contribute to the uncertain treatment of the body in *Being and Time*, and undoubtedly emerges as an element in Heidegger's later thinking. An indication of the latter is given in the Le Thor Seminar, in 1969, in which Heidegger argues for a difference between what he there terms 'body' and 'lived body':

> … when we step on a scale, we do not weigh our 'lived-body' but merely the weight of our 'body.' Or further, the limit of the 'lived-body' is not the limit of the 'body.' The limit of the body is the skin. The limit of the 'lived-body' is more difficult to determine. It is not 'world', but it is perhaps just as little 'environment' (Heidegger, 2004: 32; see also Heidegger, 2001: 86-7)[8]

The body cannot then simply be appealed to as an alternative foundation for spatiality – nor, indeed, as a 'foundation' for anything else – since, quite apart from the problems that attach to the very notion of 'foundation', the body is part of the larger structure (which we may refer to as being-in-the-world) the nature of which is itself at issue. The way spatiality emerges as an issue in Heidegger is thus not a result of Heidegger's supposed neglect of the body alone nor is it resolved simply by re-introducing the body. Certainly, once the question of space is re-opened, then the question of the body also re-emerges. It does so, however, not in terms of some re-assertion of corporeality, but rather through the way in which the body itself serves to re-focus the question of spatiality, and so also to refocus the question of world.

3. One of the main features in Heidegger's account of spatiality in the first part of *Being and Time* is that, as I noted briefly above, it attempts to construe spatiality in terms of Dasein's practical situatedness as that is teleologically understood (in a way that ultimately founds it in temporality), and, more particularly, as it is given through Dasein's involvement within a particular equipmental structure – so Dasein's own spatiality is understood as founded in Dasein's worldly 'involvement' rather than *vice versa*. Quite apart from any methodological issues that might arise here, there is also a substantive problem in any such derivative construal of spatiality. Any such equipmental array presupposes an extended and unitary dimensionality within which each item of equipment can be juxtaposed alongside other such items. Such a dimensionality can only be understood as spatial (which does not mean that it is therefore to be understood in the terms supplied by the physical sciences alone) – we might say, in fact, that the dimension that enables such juxtaposition is just what space itself is.[9]

The way in which spatiality is implicated in the very possibility of *differentiation*, which is actually the point that emerges here, is something to which I shall return shortly, but for the moment I want to remain focused on the role of spatiality in the structure of equipmentality. That structure requires the spatial *ordering* of items of equipment (and the emphasis on the idea of 'ordering' here is significant, since it is indeed the character of spatiality as a certain sort of unity that is at issue). It also requires that any such ordering be an ordering that relates the things themselves, and at the same time allows them to stand in a relation to each and any

individual Dasein for whom that equipmental structure can be accessible as ready-to-hand (or, indeed, as present-at-hand).[10] The structure of equipment thus requires a complex space that belongs to equipment as such (it is a space in which each item of equipment stands in relation to other items), and that also belongs to Dasein both individually (it is a space in which each Dasein finds itself) and 'collectively' (it is also a common, 'public' space in which Dasein encounters others, and within which Dasein can act with others) – a space that is 'objective', 'subjective', and 'intersubjective' (see Malpas, 2006: §3.3.).

What this means is that, contrary to the direction of argument that Heidegger pursues, the unity of the equipmental cannot *explain* the unity of the spatial (at least not in any unqualified fashion) since the unity of the spatial is already presupposed by the unity of the equipmental. The fact that this point is not immediately evident in Heidegger's account in *Being and Time* is partly due to Heidegger's own lack of clarity in the deployment of spatial and topographic concepts in that work, and partly by the almost exclusive concentration of attention on the teleological (and so, ultimately, temporal) ordering of the equipmental as developed within the structure of hierarchical dependence that he assumes.[11] Significantly, Heidegger is himself aware of the some of the difficulty here, and in particular, of the extent to which spatial concepts seem constantly to intrude into his analysis. As a result, he has frequently to reiterate his assertions concerning the secondary and derivative character of space, and in §70, in which he sets out the argument for the supposed derivation of space from time, he claims that the "the well-known phenomenon that both Dasein's interpretations of itself and the whole stock of significations which belong to language are dominated through and through by 'spatial representations'" (Heidegger, 1969: H369) is a consequence of Dasein's inevitable tendency towards 'Falling', and so towards the covering-up of its essential being.

The way in which the spatial ordering of equipmentality includes a spatial ordering that relates to Dasein itself – something indicated, as I noted above, in the very idea of the 'ready-to-hand' – is a particularly salient point that immediately relates back to the brief discussion of the body above. For Dasein to be able to engage with some equipmental structure, it must be able to locate itself in respect of that structure, and so with respect to the spatial ordering that belongs to it. For this to be possible, Dasein must already have a sense of the spatial ordering of that equipmental structure as its appears in relation to Dasein's own spatiality, which means, to

Dasein's own body and sphere of action. This is crucial to the understanding of spatiality as it relates, not only to practical activity, but to any form of self-locatedness, and it indicates why the emphasis on 'involvement' *as opposed to* spatial containment is not sufficient to achieve the shift in the understanding of being-in that *Being and Time* attempts.[12] 'Involvement' itself presupposes some sense of containment, just as the equipmental array presupposes a sense of spatial extendedness – which is not to say that containment supersedes the notion of 'involvement', but rather that 'involvement 'cannot be construed in a way that over-rides or takes precedence over the sense of spatiality as that is expressed, in one very important form, in the very idea of containment as well as that of extendedness.

Heidegger claims that things that are merely 'in' space cannot stand in any relation to one another (which is another way of saying that spatiality alone cannot unify or 'order') (See Heidegger, 1962: H55). But this claim already depends on construing space in a way that begs the questions at issue, and treats 'involvement' in a way removed from spatial containment or extendedness. Being 'in' space means being connected, and in the case of Dasein, being able to connect oneself, to that which surrounds. This is where the Aristotelian analysis of *topos* becomes relevant, since what it emphasises is precisely the character of the space (and also place) as a matter of containment by an enclosing body, thereby understanding space as essentially tied to form of horizonality.[13] As should already be evident, in order for Dasein to have a sense of its own 'being-in', Dasein must also possess an ability to locate and to *orient* itself. In its original sense, the ability to orient oneself means being to identify the direction that is east, and so to identify the other cardinal directions also, but more generally involves an ability to grasp the differences between the regions that make up that space, or the directions within it, and to do so in such a way that those differences can be related back to one's own bodily differentiation – so, if we were to employ the sense of orientation to the cardinal points, east is over there, to my right as I now stand, west is to my left, north ahead of me and south behind (see Kant, 1991: 238-239).[14]

The essential tie between the sense of space in general and the sense of spatiality that one has in one's own body, or better, in one's own sphere of action, is a matter on which Kant is especially clear (see, eg, Kant, 1992: 361-372 – he is perhaps the first philosopher to give explicit attention to this point). In *Being and Time*, however, Heidegger misconstrues the way in which Kant's ties orientation to the body

in this way as *subjectivist* (Heidegger, 1962: H109-10). It is only subjectivist, however, if one takes the differences in space that are at issue here to be reducible to differences in the body *alone* so that bodily differentiation becomes the fundamental ground on which spatial differentiation rests – and one can see why this would be especially problematic within the framework of *Being and Time*, not in virtue of the problematic character of the very attempt at such a foundation, but because it would constitute a competing foundation to that given by temporality.

In fact, the relation between bodily differentiation and spatial differentiation is complex. Spatial differentiation is not *produced by* bodily differentiation, but instead bodily differentiation is what *enables* spatial differentiation to become relevant in behaviour and cognition, in action and perception (see Malpas and Zöller, forthcoming). This is a simple, but crucial point, since the space that is opened up through one's being able to connect regions and directions in that space with one's own bodily orientation is not subjective, but *objective* – as it must be if action and perception is to be effective in our engagement with *things*.[15] Not only is the Kantian point at issue here often misunderstood, and not only by Heidegger, as implying some form of subjective foundation for spatiality (as well as being assumed to be associated with a view of space as essentially Newtonian[16]), but what is also often missed is precisely the way in which subjective and 'objective' elements are inextricably bound together in this way, as well as the fundamental role spatiality must play for *any* mode of engagement, and not only for the 'involved' or the 'practical'.

We can only locate ourselves inasmuch as we can also orient ourselves, and such orientation requires having a sense of the space in which one finds oneself as it relates to oneself and to one's own spatiality – the latter being necessarily the spatiality of one's body, and so also the spatiality of action. To be oriented is therefore to be capable of action (or at least to have a sense of the possibility of such action), but this does not mean that our capacity for action can be taken as the foundation for our other capacities nor for our being in the world as such. If that were so then it might appear as if 'involvement' could be, after all, the foundation for the rest, but, as we have seen, the capacity for action already implicates notions of both space and world – the capacity for action requires orientation as orientation requires a capacity for action. This point can be applied, not only to the idea of involvement or action, but also to the supposed 'primacy of practice'. It is not that our practical mode of engagement underpins other modes, but that any mode of engagement must already

be an engagement that is located and oriented – and that is, therefore, spatial and spatialized – and must be so in a way that encompasses 'subjective', 'intersubjective', and 'objective' aspects. Indeed, even supposedly 'theoretical' engagement, of the sort involved in contemplation or deliberation must be 'spatialized' in a similar way - even theory requires its own location and orientation.[17]

4. 'Subjectivity', understood in terms of the spatial ordering associated with action and so also with the body, opens out into, and already implicates, the world in its 'objectivity', that is, in terms of the spatial ordering of things and regions. The way in which these different orderings, which I have referred to as 'subjective' and 'objective' orderings, are inextricably bound together is an important idea in Heidegger's thought even though one might argue that it is not adequately or clearly addressed, at least not in spatial terms, in *Being and Time*. It is an idea that can be seen to lie at the heart of the Heideggerian insight into what might be termed the 'productive' character of finitude: our finitude does not cut off or somehow reduce our access to the world, nor to the things that appear within it, but is rather that by means of which the world is itself opened up and things are made accessible.

All too often, as should already be clear from the immediately preceding discussion, the path that is opened up from our own subjectivity to the objective ordering of things is mistakenly understood in a way that, in effect, takes such 'objectivity', as well as the idea of world itself, to be founded in subjectivity – to be founded in our 'practical' activity and 'involvement'. To some extent (although, as will be evident below, the matter is by no means straightforward), Heidegger's own attempt to present 'involvement' as more primordial than spatial 'containment' can be seen as one example of such a tendency, as can his attempt to found 'being-in-the-world' in originary temporality. While the subjectivism at issue here, both in Heidegger's case and more generally, is not the subjectivism of the individual alone, encompassing, as it does, the social context within which activity is meaningful, and so also the teleologically ordered structures of the equipmental, it is a form of subjectivism nonetheless, since, in simple terms, the foundation that it identifies is, in a certain sense, in us and *only* in us. Admittedly, this is not unambiguously so, but whether the foundation at issue here is to be found in our bodily organization or structure, habits, our conventions, our practices, our 'ways of coping', or, indeed, our essential temporality, it is nevertheless a foundation that is indeed to be found in *us*,

rather than anything else or in any larger or more encompassing structure.[18]

There should be little doubt, however, in spite of the attention given to this prioritization of the practical and the subjective, that such an approach involves a misunderstanding of the nature and direction of Heidegger's thinking – even, to some extent, of his thinking in *Being and Time*. That this is so is evident from Heidegger's own attempts to clarify the matter following the publication of the work as well as in the subsequent revision and modification of his position in the period thereafter. Although Heidegger's rethinking of the role of spatiality and its relation to the temporal is not evident until at least 1935, already, in the lectures that make up *The Fundamental Concepts of Metaphysics*, from 1929, Heidegger is at pains to emphasise the initial or preliminary nature of his characterisation of world in *Being and Time*. As he writes:

> In and through this initial characterization of the phenomenon of world the task is to press on and to point out the phenomenon of world as a problem. It never occurred to me, however, to try and claim or prove with this interpretation that the essence of man consists in the fact that he knows how to handle knives and forks or use the tram (Heidegger, 1996: 177).[19]

In fact, while on the one hand the subjectivist or 'anthropologist' reading of *Being and Time* that is implicated with the emphasis on the 'practical' went against Heidegger's intentions in the work, such a reading was also given legitimacy, as Heidegger himself recognised, by the way in which *Being and Time* gave priority to Dasein's existentiality, and so also temporality, as the foundation for being-in-the-world. This problem is one that Heidegger struggles with from the late nineteen-twenties and into at least the middle of the nineteen-thirties (See Heidegger, 2002: 55). The result is not only a switch away from the language of *Being and Time*, with its accompanying emphasis on existentiality and its structures, but also an abandonment of the very mode of analysis that was attempted there – the mode of analysis based in hierarchical dependence that underpinned the problematic prioritisation of the temporal and, to some extent, the practical, as well as the obscuring of the role and nature of spatiality.[20]

Heidegger's reworking of his position in the years after *Being and Time* leads him to a more complex account of the structure of world that is no longer based in the idea of world as constituted through the existentiality of Dasein, nor, indeed, through

Dasein's temporality alone, but increasingly looks to understand world through the notion of the 'place', the *topos*, within which things come to presence – which in the work from the nineteen-thirties and nineteen-forties is generally understood in terms of the event of unconcealment that is the happening of truth, and in the work of the late nineteen-forties and after, is articulated through the idea of the *Ereignis* or 'Event' (already present from the mid-nineteen-thirties), as well as of the Fourfold (*Das Geviert*) (see Malpas, 2006: 213-251). One of the characteristic features of this account as it develops is the way in which it treats time and space as conjoined – hence the appearance in Heidegger's thinking, already in 1935 and more so in the years thereafter, of 'timespace', *Zeitraum*. Moreover, not only does this account draw explicitly upon spatial and topological concepts and figures, but it also thematizes place or *topos* (*Ort, Ortschaft* and, to a lesser extent, *Stätte* are the German terms that emerge as significant here) as central to the task of thinking. Thus Heidegger's work comes increasingly to focus on thinking as a sort of 'return to place' – and also, therefore, as a kind of homecoming (Malpas, 2006: 305-311).

Heidegger's turn towards place, and together with this, towards a reconceptualised understanding of space, along with its relation to time, should be read as central to the overall re-orientation in his thinking that occurs under the pressure of the apparent subjectivism and anthropologism that seems, in one way or another, to create difficulties within the structure of *Being and Time*, and that is itself partly connected with both the emphasis on the 'practical' in the early work as well as its reliance on a structure of hierarchical dependence. One of the lessons to be drawn from the early work is indeed the way in which this rethinking is not only focussed around the problem of world, but also develops in a way that essentially implicates spatiality. Indeed, in some respects, Heidegger's rethinking of space and spatiality in the years after *Being and Time*, a rethinking that is undertaken in close connection with his retrieval of the concept of *topos*, leads Heidegger to an understanding of space that is much closer to that of Kant – although one that is achieved after working through Kant in a way that, ironically, never properly engages with the concepts of space or spatiality as Kant himself developed them. In particular, Heidegger comes to recognise, as Kant already had, that the possibility of the ordered structure of coming-to-presence that is the world is inextricably bound, not only to time, but also to space.

5. The essential interconnection between what we might call subjective and objective modes of spatiality or of spatial ordering (as well as the intersubjective, although I shall leave this to one side for the moment) is clearly evident in the Kantian emphasis on location as tied to orientation in one's own 'sphere of action'. The fact of this interconnection has the consequence, since action requires location and orientation, that there can be no mode of action that does not involve a grasp of both subjective and objective modes of spatiality. Moreover, the connection between subjective and objective modes also means that there can be no mode of location or orientation, no mode of spatiality, that does not also implicate both subjective and objective modes.

The necessary interconnection between 'subjectivity' and 'objectivity' within the complex structure of spatiality is something that is often overlooked – and the early Heidegger is not alone in this. Just as it is relatively common, then, to find the practical and the 'involved' being treated as the foundation for spatiality, and especially for any notion of objective spatiality, neither is it unusual to find spatiality being treated as if it could indeed be construed entirely 'subjectively (which often means, in this context, as entirely a matter of practical involvement). On such a view, a purely subjective space is not seen to present any problems for action or orientation in that space – an agent can simply react to features of a situation as they are presented to it from within the situation and as they are differentially located within a spatial field that is entirely relative to or centred on the agent (which is what subjective can be taken to mean in this context). Such a capacity for reaction, so it is sometimes supposed, does not require anything other than a capacity to distinguish spatially between those representations, a capacity to grasp those presentations as soliciting a response, and a capacity to so respond.

The idea of a purely subjective space that appears here is, however, a deeply problematic one. To begin with, it involves a misconstrual of the way in which a space may be said to be subjective. As Kant emphasises, space is essentially unitary (Kant, 1998: A25/B39)[21] and part of what this means is that, strictly speaking, there are not different spaces that are to be aligned with different modes – the subjective, inter-subjective, and objective – but instead there is but one space, and it is this space that is properly itself objective, that is also inter-subjective (and so equally accessible to all), and yet is always and only accessible subjectively (and so by means of our own individual location within it). Any agent, insofar as it is capable of action at all (that is, insofar as it is, indeed, an agent), acts in a space that is an objective space, in

which other agents also act, and yet which is always immediately configured subjectively in terms of the agent's own oriented locatedness. Moreover, as Kant also points out, for subjectivity to have any content at all – for it to be determined in any way, as opposed to a bare possibility – subjectivity *requires* objectivity.[22] In Kant, significantly, this point is developed through the way in which inner sense, the form of which is time, is only determined through outer sense, and so in space (it is also tied, as we shall see below, to the necessity of spatiality to the possibility of differentiation). Thus while Kant takes time to be the form for all representations, it is space that is necessary for representations to have content – space and time turn out, within the structure of experience, to stand in a relation of mutual priority.[23]

Although every agent stands in this same basic relation to space – such that the very idea of agency presupposes spatiality in all its complexity – there are also important differences in the way in which agents may have access to the space at issue here that are directly correlated with differences in the basic capacities of agents, both their behavioural capacities and the cognitive capacities with which such behavioural capacities are intimately connected. Thus while every agent acts *in* an objective space that is subjectively accessible *to* it, the range of action available to each agent, and by means of which that space is articulated cognitively and behaviourally, will vary between agents. The most important difference here concerns the capacity of agents to act in a way that takes the objectivity of the space as a directly thematized and determining element in cognition and behaviour. Put simply: while all agents must have some access to the space in which they act, not all agents have the access that comes from being able to represent or conceptualise that space or their access to – to recognise or acknowledge it *as such*.

It is this difference that undoubtedly underlies the tendency to think of subjective space as if it were a separate space in its own right, and that also leads to the tendency to suppose that there could indeed be a mode of spatial involvement that would be to some extent distinct from and perhaps even independent of any objective mode of spatiality – as the ready-to-hand might be thought to be independent of, as well as prior to, the present-at-hand. In contemporary discussions these ideas are sometimes further articulated through the idea of non-conceptual content. The subjective, 'involved' access to space, and to the world, is thereby supposed to be non-conceptual in character, not only in the sense that it does not rely on concepts or representations, but in a more basic sense according to which the very content of

what is grasped is not conceptual.

The idea of non-conceptual content has been the focus of much attention in recent years (and has also been deployed by Dreyfus in his own work – sometimes in ways that indicate he takes the idea to be applicable to Heidegger[24]), and the introduction of the notion here threatens to open up a large area of discussion. There are two points, however, that are worth making in relation to what is at issue here. First, not only is the idea of non-conceptual content problematic in its own right,[25] but if we take seriously the point made above about the unity of space – and I would make a similar point in relation to the unity of agency and of experience – then it is difficult to see how radically different content could belong to one and the same space. The same space, and so the same content, may well be grasped differently (so that perhaps one may talk of a 'non-conceptual' grasp), but that the content itself could differ seems an unjustified claim that also creates additional difficulties without any obvious explanatory gain.[26] Second, and perhaps more importantly, the idea of non-conceptual content has most often been introduced in the Heideggerian context, as I indicated above, as another way of elaborating upon the ideas of the 'practical' and the 'involved' that are supposed to found Dasein's being–in-the-world. Yet once the move towards such a foundation is recognised as already problematic in itself, the additional characterization of that foundation in terms of the idea of the non-conceptual can do nothing by way of alleviating the problems that are associated with such a foundation – although it may well provide additional reason to be suspicious of the move to the non-conceptual as such.

6. The difference between the two modes of access to space that emerge here, appears in Heidegger's own lectures – specifically in the lectures from 1929 to which I referred briefly above – in terms of a distinction between the modes of access to world that belong to the non-human animal and to the human. Heidegger says of non-human animals, not that they have *no* world, nor that they have a world in the same sense as the human, but rather that they are *poor* in world ("the stone is *worldless*, the animal is *poor in world*, man is *world-forming*", Heidegger, 1996: 176). "The animal does relate to something else, does therefore have access to something", writes Heidegger, "not only that, we can even say that the animal has access to beings. The nest that is sought out, the prey that is seized, is surely a being that is, and not nothing; otherwise the bird could not settle upon the nest and the catch would never

catch a mouse – if these were not beings" (Heidegger, 1996: 269).[27] The animal thus appears to stand in an ambiguous relation to world, but the difficulty for Heidegger is to say just what that relation is, and, more importantly, to distinguish the manner of that relation from the relation that obtains to world in the case of the human – the latter relation being one that Heidegger characterizes as 'world-forming'(Heidegger, 1996: 177). Much of the second half of Heidegger's lectures are given over to the attempt to clarify both what it means for the animal to be 'poor' in world and for the human to be 'world-forming'.

In considering this issue, Heidegger takes as a central example the behaviour of the honey bee, considering, among other things, the honey bee's capacity for orientation and navigation – something particularly pertinent to the discussion here. By way of a preliminary comment, Heidegger notes that:

> In the strict sense, there is orientation only where space is disclosed as such, and thus where the possibility of distinguishing different regions and identifiable locations within these regions is also given. We recognize of course that the bee flies through space as it returns home to the hive from the meadow, but the question is whether in behaving in this way the bee opens up a space as space and flies through it *as* its *spatial flight-path* (Heidegger, 1996: 243).

The honey bee has a remarkable capacity, as Heidegger acknowledges, for finding its way to and from its hive, doing so on the basis of distance and direction largely as determined by the position of the sun. Yet as certain experiments show, the bee's capacity for spatial orientation and direction is relatively inflexible in this respect. As Heidegger himself explains, if a bee is allowed to fly from its hive, is caught, and then held in a darkened box long enough so that the position of the sun has changed by the time the bee is released, then the bee will attempt to fly back to its hive according to the direction in relation to the sun that was relevant at the time of its capture. Once the bee has flown the distance originally travelled on its outward journey, it will begin looking for its hive by flying more or less randomly about until the hive is located (which it will be so long as the distance flown is not too great).

Heidegger takes the relative inflexibility in the bee's navigational capacities as showing that:

The bee is *simply given over* to the sun and to the period of its flight *without being able to grasp either of these as such*, without being able to reflect upon them as something thus grasped. The bee can only be given over to things in this way because it is driven by the fundamental drive of foraging. It is precisely because of this *drivenness*, and not on account of any recognition or reflection, that the bee can be *captivated* by what the sun occasions in its behaviour …The *captivation* of the animal therefore signifies, in the first place, essentially *having every apprehending of something as something withheld from it* (Heidegger, 1996: 247).

Given Heidegger's characterization of what it is to be oriented ("there is orientation only where space is disclosed as such"), the bee has no proper orientation in space, being largely determined in its behaviour by its 'captivation' in relation to the sun. We might say that the bee has no proper sense of space, even though it has a capacity for behavioural response that correlates to features of the bee's environment. The problem is, of course, that it can only respond in this way, having no real capacity to free its behaviour from the environmental circumstances in which it finds itself. It is because its response is so restricted, and because of the 'withholding' of any other capacity for response (which is a withholding of any capacity to grasp space or things as such), that Heidegger characterises the honey bee's, and the animal's, relation to world as 'impoverished'.

The captivation of the organism by its environmental circumstances is also addressed in Jakob von Uexküll's concept of *Umwelt* or 'environing world'. Heidegger makes explicit reference to von Uexküll in his 1929 discussion, since Heidegger takes von Uexküll's work as possibly providing a counter to Heidegger's own claim regarding the non-human animal's impoverished relation to world. Indeed, von Uexküll's work is often taken to provide a parallel to that of Heidegger – both are treated as advancing a similarly 'ecological' conception of the relation between living organisms and their world (see Agamben, 2004, but also Malpas, 2008).

Although Heidegger does not himself take up the point, it should be quite clear that von Uexküll's concept of *Umwelt* is based in the internal, biologically determined character of the animal's 'species nature'. Moreover, the concept also remains entirely subjectivist – as might be expected given the essentially neo-Kantian background against which it arises. The character of any particular *Umwelt* (and von Uexküll does not restrict the applicability of the concept, taking humans, as well as animals, to have

an *Umwelt* of their own) is always relativised to the creature whose *Umwelt* it is, constituting a sphere of sense and action that encloses the creature, and that is essentially its own. Thus, in one of his best-known passages (which although published later than Heidegger's lectures, develops in more popular form ideas already present in earlier works, notably in von Uexküll, 1921), von Uexküll requests of his readers that they:

…first blow, in fancy, a soap bubble around each creature to represent its own world, filled with the perceptions which it alone knows. When we ourselves then step into one of these bubbles, the familiar meadow is transformed. Many of its colourful features disappear; others no longer belong together but appear in new relationships. A new world comes into being. Through the bubble we see the world of the burrowing worm, of the butterfly, of the field-mouse; the world as it appears to the animals themselves, not as it appears to us. This we may call the *phenomenal world* or the *self-world* of the animal (von Uexküll 1957: 5).

The subjectivist character of von Uexküll's analysis is particular evident in his discussion of space and time. So a few pages on in the same essay he writes that:

We are easily deluded into assuming that the relationship between a foreign subject and the objects in his world exists on the same spatial and temporal plane as our own relations with the objects in our human world. This fallacy is fed by a belief in the existence of a single world, into which all living creatures are pigeonholed. This gives rise to the widespread conviction that there is only one space and one time for all living things. Only recently have physicists begun to doubt the existence of a universe with a space that is valid for all beings. That such a space cannot exist is evident from the fact that all men live in three distinct spaces [operational, visual and tactile], which penetrate and complement, but in part also contradict one another (Von Uexküll, 1957: 14).[28]

Significantly, von Uexküll also emphasises the way in which the *Umwelten* of certain animals, including humans, is structured in terms of the functional character of the objects presented within those *Umwelten*. Von Uexküll thus distinguishes between the perceptual presentation of an object (the 'receptor image') and the presentation of the object as it relates to action (the 'effector image').

To illustrate this latter point von Uexküll uses the example of "a young, very intelligent and agile Negro" who supposedly lacked any knowledge of European

tools. On von Uexküll's account, when asked to climb a ladder, the young man responded by asking how he was to do that given that he saw nothing but "rods and holes". Once shown how to use the ladder, however, his perception of the rods and holes changed, and he saw the object as something climbable, as a ladder.[29] Von Uexküll comments on this example as follows:

> This experience with the Negro indicates that we have developed an effector image for each of the functions which we perform with the objects in our specific *Umwelt*. This effector image we inevitably fuse so closely with the receptor image supplied by our sense organs, that in the process the objects acquire a new quality, which conveys their meaning to us, and which we shall briefly term their *functional tone* (Von Uexküll, 1957: 48).

In their functionally oriented character, Von Uexküll's *Umwelten* thus appear in a way that suggests obvious affinities with the equipmentally-ordered structure of world as developed in *Being and Time*. It is perhaps no surprise, then, that Heidegger was so concerned to distinguish his account of world from the sort of account evident in Von Uexküll.[30] Moreover, in distinguishing his account from von Uexküll's, Heidegger can also be seen to be looking to develop an account of the human relation to world that can be correlated with the second of the two modes of access to space that was identified in the discussion above – a mode of access that does indeed allow access to the things and to the world, not merely in terms of their 'functional' tone, as von Uexküll might put it, nor as some over-aching functional array, but in a way that allows them to appear *as things*, and *as world*; a mode of access in which it is also the case that "space is disclosed as such".

Much of the contemporary discussion of Heidegger's inquiry into the difference between the human and the animal as it arises in these 1929 lectures has focused on what is often taken to be the problematic nature of Heidegger's assertion of this difference, and its characterization in terms of a lack or privation that afflicts the animal, together with the humanistic and anthropocentric bias that this supposedly entails.[31] Yet the difference at issue in Heidegger's discussion, and the manner of its characterization, is not something that is of only secondary importance in Heidegger's thinking, but stands at its very heart. What concerns Heidegger is not the capacity merely to engage with things in the world *in some way or another*, but the particular mode of engagement that allows, as we have already seen, the 'emergence' of the

world *as world*, of things *as things*, and of space *as space* – a mode of engagement that Heidegger claims is not available to the non-human animal. It is precisely this emergence of world that is at issue in the central Heideggerian concern with the question of being, and that also implicates the being of the human – the being that is, as Heidegger emphasises, our own (see Heidegger, 1996: 281-282) – in an essential way.

As Heidegger presents matters, the human does not have an *Umwelt*, or perhaps better, does not remain captive within its *Umwelt*. Instead, the human is defined in terms of its possession of *Welt*, of world, and more specifically, in terms of its character as world-forming (see esp Heidegger, 1996: 274ff).[32] The idea of world formation is itself interpreted by Heidegger in terms of an understanding of world as "the manifestness of beings as such, of beings as beings" (Heidegger, 1996: 274; see also Heidegger, 1996:198, and Heidegger, 1996: 284). The character of human being as world-forming is presumably, then, a matter of the character of human beings as participating, in an essential way, in an opening up of world as just such a manifestness of beings.[33] In his discussion of the idea of world as "the manifestness of beings, as such, of beings as beings" Heidegger focuses on the 'as' in this phrase, noting that:

> …bound up with world is this enigmatic 'as', beings *as* such, or formulated in a formal way: 'something *as* something', a possibility which is quite closed to the animal. Only where beings are manifest as beings at all, do we find the possibility of experiencing this or that particular being as determined in this or that particular way (Heidegger, 1996: 274).

The focus on the 'as' leads Heidegger in the direction of an investigation of *statement* or *assertion* as that in and by means of which things are manifest *as* the things they are, and so are manifest *as* having a certain character, as being thus and so – "Our explication of the problem began with the 'as'. We found that it is a structural moment of the statement, or more precisely that it expresses something which is always already understood in every propositional statement" (Heidegger, 1996: 301). The question of world-formation thus seems to direct us inevitably towards the question of language and that is indeed the direction in which Heidegger himself moves.

Yet as is already indicated in the passage just quoted, the implication of

language in world-formation should not be taken to mean that world-formation is brought about *by* language, any more than world-formation is simply brought about *by* human beings. That human beings are world-forming, or even that language might be said to be world-forming, means that human beings and language participate in world formation, but not that they enable it or that they are somehow prior to it. Indeed, the human only appears *as* human and language *as* language in and through the forming of world. Such world-formation, which nevertheless stands in an intimate relation to the essence of language understood as *logos*, has its ground in the original opening-up of the world as a whole that enables the accessibility to things in order that they can be grasped as thus and so, and in order that statement and assertion about them can be possible. The argument here is a familiar one in Heidegger – it is much the same argument that also appears in Heidegger's account of truth as the original concealing/revealing that must be prior to any possibility of truth as a matter of the correspondence or *adequation* of statement to thing.[34]

7. So far it may appear as if this excursion onto the problems of world and world-formation has taken me away from what was hitherto the main theme of my discussion, namely, the question of space. It is at just this point, however, that space and spatiality re-enter the picture – although still, in 1929, the way they do so remains somewhat obscure (and continues to stand in the shadow of temporality[35]). Towards the end of his discussion of language and *logos* in *The Fundamental Concepts of Metaphysics*, Heidegger summarises the issues he has explored as follows:

> The λόγος can point out beings as they are, and in such pointing out point *toward* whatever pertains to those beings or direct *away* whatever does not pertain to them, only if it already has the possibility in general of measuring this point out and whether it suitably conforms to those beings. However, in order to be able to decide about the conformity or nonconformity of whatever the λόγος says in pointing out, or more precisely, in order to be able to comport himself in general within this 'either/or', man in his propositional discourse must have *leeway* [Spielraum] in advance for the comparative to-and-fro of the 'either/or', of *truth or falsity*. He must have leeway within which those beings that assertion is to be about are themselves manifest (Heidegger, 1996: 339).

In spite of the fact that Heidegger does not thematize the concept here, space

nevertheless forces its way into his account in terms of an essential spatiality, an openness, an extendedness, a mode even of enclosedness, that is presupposed by the very possibility of the appearing of things, and their being accessible to propositional statement. In this respect, it is significant that the idea of *Spielraum*, literally play-space, that Heidegger employs in *The Fundamental Concepts of Metaphysics* reappears later in his work as *Zeit-Spiel-Raum*, 'time-play-space' (or 'the play of time-space'), as a means to designate the essential play of time and space that constitutes the *topos* of being.[36] Indeed, this very phrase reappears in the 1966 Appendix to *The Fundamental Concepts of Metaphysics*, in which Heidegger writes "Perhaps thinking must first open the time-play-space for poetizing, so that through the poetizing word there may again be a wording world" (Heidegger, 1996: 369).

The final section of *The Fundamental Concepts of Metaphysics* attempt to inquire more closely into the character of the 'occurrence' of the original manifestness of things that has become evident through the inquiry into *logos*. That occurrence is one that Heidegger recognises as having an essentially unitary character, and yet it is a unity within which the multiplicity of beings is manifest; it is an occurrence in which we find ourselves oriented towards beings, and so bound to them, and yet at the same time beings are 'freed up' so as to be able to be revealed as the beings they are. Heidegger uses the term 'projection' to characterize that which enables this occurrence of world –"projection" he says "is world-formation." (Heidegger, 1996: 362). The idea of projection already appears in *Being and Time* where Dasein's existentiality is itself understood in terms of Dasein's projecting of possibilities. As part of the structure of human being, projection can be seen to present a problem for Heidegger's account. It can too readily be seen as something that is achieved or brought about by the human, or by the Dasein within the human, although, by the mid-1930s, Heidegger talks of the human as itself thrown or posited by being (Heidegger, 2000: 173-4). Although still associated with Dasein, as it is developed in *The Fundamental Concepts of Metaphysics*, the term 'projection' refers to the complex structure of world-formation understood as a 'unifying' and 'binding' that also 'frees-up', and that does so precisely through the opening up of possibility (thus Heidegger writes that "*In projection there occurs the letting-prevail of the being of beings in the whole of their possible binding character in each case*", Heidegger, 1996: 365).

Significantly, for the concern with spatiality, however, Heidegger attempts to

clarify the nature of such projection inevitably turns to a set of concepts that seem, once again, to be inevitably dependent upon spatiality and forms of spatialization. Even projection itself is analysed etymologically in such a way. Thus Heidegger writes that

> What is *most proper* to such activity and occurrence [of projection] is what is expressed in the prefix 'pro-' {*Ent*-}, namely that in projecting {*Entwerfen*}, this occurrence of projection *carries* whatever is projecting *out and away from themselves* in a certain way. It indeed removes them into whatever has been projected, but it does not as it were deposit and abandon them there – on the contrary: in this being removed by the projection, what occurs is precisely a peculiar *turning towards themselves on the part of whoever is projecting* [*Zukehrung des Entwerfenden*].( Heidegger, 1996: 363).

The very idea of projection as a 'throw', which is the sense carried by the original German term, *Entwerfen*, connotes a sense of space or *room* (the latter term being itself closely related to the German *Raum*) while the constant employment of ideas and images of movement and of *turning*,[37] towards and away from, provides a reiteration of the same sense of movement in space that is carried by Heidegger's employment of the term *Spielraum*.

One might object that it is a mistake to take what is surely nothing more than the employment of a set of spatial *metaphors* to licence the claim that there is an implicit emergence of space and spatiality as fundamental concepts in Heidegger's analysis of world. Indeed, one might even point to the fact that, in *Being and Time*, as I noted in the discussion above, Heidegger himself acknowledges the inevitable intrusion of spatial metaphors or images into our thinking, and warns against it. There is, however, no such warning to be found in the later Heidegger. Moreover, in the 'Letter on Humanism', in which there appears a different sort of spatial or topographic idea, that of language as the 'house of being', Heidegger explicitly objects to any simple reading of this idea in metaphoric terms (Heidegger, 1998: 272). In fact, as we have already seen, spatial and topographic concepts play key roles throughout Heidegger's later thinking: in the increasing emphasis on the 'Da', the 'There', of being; in the ideas of the clearing (die *Lichtung*) of being, and of the Open (*das Offene*) as well as of the 'between' (*das Zwischen*); in the conjoining of time with space (*Zeitraum*); in the strife of world and earth in the working of art;[38] in the

happening the Fourfold as that occurs in the thinging of the thing and the worlding of world.

The spatialized character of thinking that opens up in *The Fundamental Concepts of Metaphysics* (and which is, of course, already presaged in earlier works) thus cannot be set to one side as merely a feature of this work alone nor as an artefact of some spurious metaphoricity or stylistic idiosyncrasy. Instead, it reflects the deep-seated role that space plays in all thinking, and especially in any thinking that would inquire into world and our being *in* the world. In fact, even without looking to the emergence of the spatial in Heidegger's later thinking, one might well ask how else one is to understand the original occurrence of world-formation that Heidegger describes in *The Fundamental Concepts of Metaphysics* other than by drawing on notions of space and spatiality (which, to reiterate the point once again, does not mean on a notion of space as this may be identified with physical space alone – one of the lessons of the engagement with Heidegger, and of Heidegger's own engagement with the spatial, is the need to re-think what space itself might be). On this point it is instructive to return to the Kantian understanding of space and spatiality according to which space and time are seen both as fundamental to the possibility of experience and also as standing in a relation of mutual dependence.

As the form of inner sense, *all* representations have a temporal ordering, and yet time itself cannot be represented other than spatially. Thus Kant writes that "The possibility of things as quantities… can only be exhibited in outer intuition, and… only through the mediation of outer intuition can it be applied to inner sense"(Kant, 1998: B293), and he illustrates the point by reference to quantity as represented through the use of "fingers, in the beads of the abacus, or in strokes and points which can be placed before the eyes" (Kant, 1998: A240/B 299). This is not, moreover, just a matter of the dependence of *representation* on outer intuition, but also involves the necessity of outer experience if inner experience is even to be possible. This is a key point, of course, in the 'Refutation of Idealism' that appears in the B-Edition of the *Critique* (and in this respect, it shows how relevant the issue of spatiality is to Heidegger's own concern with subjectivism), and is tied both to the way in which subjectivity requires objectivity, and also to the way in which that tie necessarily implicates spatiality also. This is because, on the arguments Kant adduces (arguments that were also alluded to in the discussion above), objectivity and spatiality are themselves closely tied together.

What Kant provides us with, in fact, is one of the few sustained inquiries into the nature of space and spatiality in the history of philosophy – an inquiry, moreover, that does not merely assume a concept of space as it might be taken up within physical science, but rather adopts a properly *critical* approach to space and spatiality that enables them to be understood in what Kant would have thought of as their *transcendental* character, that is, in terms of the role they play in the possibility of experience, or, as Heidegger has it, in the possibility of world or world-formation.[39] Space and spatiality emerge here as having a unitary and complex structure that is not separable from time and temporality, and yet not reducible to or derivative of it either.

Earlier I mentioned the possibility that one might understand space, as distinct from time, as precisely that mode of dimensionality that enables *juxtaposition* and so also *differentiation*. One might argue that this is just what is evident in the Kantian treatment of spatiality, although it is not a conclusion that Kant himself draws (and probably, given that he holds open the possibility of a mode of intuition other than that of sensibility, it is a conclusion he could not have drawn). Such an understanding of space and spatiality, although also worked out in close connection to the concept of *place*, is one that I have explored elsewhere in a way that draws, not on Kant, but on Marcel Proust's 'phenomenological' investigations of space and time (all too seldom attended to by philosophers or cognitive scientists) as developed in his monumental *In Search of Lost Time* (Proust, 1996). There the loss that occurs in the displacement of time is overcome precisely through the juxtaposition of elements alongside one another in space (and also in relation to place), in such a way that those elements are co-present, and are thereby brought together in their difference (See Malpas, 1999: 157ff; also Poulet, 1977).[40]

The direction in which this understanding of space inevitably moves is one that, while present in late Heidegger, is perhaps even more clearly evident in the work of Jacques Derrida. Derrida's concept of *différance* as a primordial differing and deferring has an essentially spatial as well as temporal aspect. *Différence* is thus understood as tied to *spacing*.[41] Derrida famously, of course, argues for *différence* as having priority even over the ontological difference (See Derrida, 1982: 22-27). Yet if one takes Heidegger's own work seriously, attending to the increasing focus on the interplay of unity and difference in his late thought, as well as to the way in which this interplay is itself played out in the space (in the *Spielraum*, the leeway) that belongs to the essential happening of place – the *Ereignis*, the Fourfold – then one can see how

even Derrida's *différence* may be presaged in late Heidegger's own spatialized and topological mode of thinking. Indeed, it is significant that, like Derrida, Heidegger comes to see the unity and difference that is played out within the time-space (*Zeitraum*) of place as being more primordial even than the ontological difference itself (see Malpas, 2006: 311-314).

8. Space and spatiality cannot be understood as derivative of any other structure – and certainly neither of 'practice' nor of temporality. Moreover, any attempt to investigate the concept of world cannot neglect spatiality. This is not simply because the world encompasses both time and space (or better 'timespace'), but because the very structure of world can only be articulated and understood through an essential *spatialization*. The centrality of space and spatiality to the understanding of world, and so to the understanding of our own mode of being, is especially evident in Heidegger. Indeed, the development of Heidegger's thinking is such that the spatial and topographic elements that occur in such pervasive and fundamental ways throughout his thinking – and that are present even in the concept of Da-sein, of 'There-being', as well as in the idea of our essential existential and hermeneutical situatedness, as these appear in his early work – are gradually taken up in increasingly direct and self-evident fashion, with the centrality of place, and so also the importance of space, becoming ever more evident, until Heidegger is finally able explicitly to characterise his thinking as itself *topological* in character (Heidegger, 2004 – the line of development that is indicated here is the main focus of the explorations in Malpas 2006).

From the perspective of contemporary cognitive science, the considerations regarding the nature and significance of space, and its relation to world that have been explored here, are indicative of certain key aspects of the framework within which the scientific investigation of cognition and behaviour must operate, as well as of the limits of any such investigation. No investigation of the way in which organisms act in and respond to their environment can be adequate that does not attend closely to the spatial, along with the temporal, character of such action and response. Moreover, the way spatiality enters into the sort of action and response that is characteristic of human beings in their relation to the world involves a mode of conceptual and representation engagement that cannot be neglected nor ignored, and that is also itself tied to a particular mode of spatial engagement. It is for just these reasons that

Heidegger's work remains of relevance to contemporary cognitive science.

Yet if spatiality does indeed have the fundamental and primordial character that is presaged in Kant, and that is also developed in Heidegger, as well as in Derrida, and others, then the concepts of space and spatiality, as well as spatial and topographic images and modes of thought, will always remain as essential to any cognitive scientific understanding and yet also essentially resistant to any such understanding. In the end, space and spatiality belong, as does the concept of world also, not so much to the domain of strict physical science nor even of a certain 'empiricist metaphysics', as to the domain of properly *philosophical*, and perhaps also *poetic*, critique and reflection. Such a conclusion is, significantly, not one for which *Being and Time* provides an adequate basis, but rather becomes evident, at least as far as Heidegger is concerned, only through the rethinking of the project of which *Being and Time* is part, and, in particular, through the rethinking of the concepts of both world and space, as well as of time and place..

## Bibliography


Agamben, Giogio. 2004. *The Open: Man and Animal*, trans. Kevin Attell. Stanford: Stanford University Press.

Bermudez, José Luis, Anthony Marcel and Naomi Eilan (eds). 1995. *The Body and the Self*. Cambridge Mass.: MIT Press.

Darwin, Charles. 1871. *The decent of man and selection in relation to sex*, New York, D. Appleton and Company.

Jacques Derrida. 1982. 'Différance', *Margins of Philosophy*. Trans. Alan Bass, Chicago, University of Chicago Press.

Dreyfus, Hubert l, 1991. *Being-in-the-World: A Commentary on* Heidegger's Being and Time, *Division I*. Cambridge, Mass., MIT Press.

Dreyfis, Hubert L. 2005. 'Overcoming the Myth of the Mental: How Philosophers can Profit From the Phenomenology of Everyday Expertise', *Proceedings and Addresses of the American Philosophical Association* 79: 47-65.

Dreyfus, Hubert L. 2007a. 'The Return of the Myth of the Mental', *Inquiry* 50: 352-365.

Dreyfus, Hubert L. 2007b. 'Response to McDowell', *Inquiry*, 50: 371-377

Naomi Eilan, Rosaleen McCarthy and Bill Brewer (eds.). 1993. *Spatial Representation: Problems in Philosophy and Psychology*. Oxford: Blackwell.

El Bizri, Nadar. 2004. 'Ον και ξορα. Situating Heidegger between the *Sophist* and the *Timaeus'*, *Studia Phaenomonologica* 4: 73-98.

Elden, Stuart. 2001. *Mapping the Present: Heidegger, Foucault and the Project of a Spatial History*. London: Continuum.

Fell, Joseph. 1992. 'The Familiar and the Strange: On the Limits of Praxis in the early Heidegger', in Hubert L. Dreyfus and Harrison Hall (eds.), *Heidegger: A Critical Reader*. Oxford: Blackwell.

Franck, Didier. 1986. *Heidegger et la la problème de l'espace*. Paris: Éditions Minuit.

Gadamer, Hans-Georg. 1995. *Truth and Method*. Trans. Joel Weinsheimer and Donald G Marshall, New York, Continuum.

Eugene T. Gendlin. 1985. 'Time's Dependence on Space: Kant's Statements and Their Misconstrual by Heidegger'. In Thomas M. Seebohm and Joseph J. Kockelmans (eds), *Kant and Phenomenology*. Washington: University Press of America, pp.147-160.

Harrington, Anne. 1999. *Reenchanted Science: Holism in German Culture from Wilhelm II to Hitler*. Princeton: Princeton University Press.

Heidegger, Martin, 1962. *Being and Time*. Trans. John Macquarie and Edward Robinson. New York: Harper & Row.

Heidegger, Martin. 1989. *Beitägae zur Philosophie, Gesamtausgabe* 65. Frankfurt: Klostermann.

Heidegger, Martin. 1996. *The Fundamental Concepts of Metaphysics: World, Finitude, Solitude*. Trans. William McNeill and Nicholas Walker. Bloomington: Indiana University Press.

Heidegger, Martin. 2000. *Introduction to Metaphysics*. Trans Gregory Fried and Richard Polt. New Haven: Yale University Press.

Heidegger, Martin. 1997. *Kant and the Problem of Metaphysics*. Trans. Richard Taft. Bloomington: Indiana University Press, 5th edn.

Heidegger, Martin. 2002. *Off the Beaten Track*. Trans. Julian Young and Kenneth Hayes. Cambridge: Cambridge University Press.

Heidegger, Martin. 1998. 'On the Essence of Truth'. Trans. John Sallis. In *Pathmarks*,

ed. William McNeill. Cambridge: Cambridge University Press, pp.136-154

Heidegger, Martin. 1972. *On Time and Being*, trans. Joan Stambaugh. New York: Harper and Row.

Heidegger, Martin. 2004. 'Seminar in Le Thor 1969'. Trans. Andrew Mitchell and François Raffoul. In *Four Seminars*. Bloomington: Indiana University Press.

Heidegger, Martin. 1967. *What is a Thing*? Trans. W. B. Barton Jr. and Vera Deutsch. . Chicago: Henry Regnery.

Heidegger, Martin. 2002. 'Wilhelm Dilthey's Research and the Struggle for a Historical Worldview'. In *Supplements: From the Earliest Essays to* Being and Time *and Beyond,* Trans. Charles Bambach. Albany: SUNY Press, pp.163-164.

Heidegger, Martin. 2001. *Zollikon Seminars*. T rans. Franz Mayr and Richard Askay. Evanston: Northwestern University Press, pp.147-176.

Kant, Immanuel. 1998. *Critique of Pure Reason*. Trans. Paul Guyer and Allen Wood, The Cambridge Edition of the Works of Immanuel Kant in Translation. Cambridge: Cambridge University Press.

Kant, Immanuel. 1991. 'What is Orientation in Thinking?' Trans. H. B. Nisbet. In *Political Writings,* ed. Hans Reiss, Cambridge: Cambridge University Press, 2nd edn, pp.237-249.

Kant, Immanuel. 1992. 'Concerning the Ulitmate Ground of the Differentiation of Directions in Space' [1768]. Trans. David Walford and Ralf Meerbote. In *Theoretical Philosophy, 1755-1770,* The Cambridge Edition of the Works of Immanuel Kant. Cambridge: Cambridge University Press, pp.365-72

Malpas, Jeff. 2008. 'Heidegger, Geography, and Politics', *Journal of the Philosophy of History* 2: 185–213.

Malpas, Jeff. 2006. *Heidegger's Topology*. Cambridge, Mass., MIT Press.

Malpas, Jeff, and Günter Zöller. Forthcoming. 'Reading Kant Topographically: From Critical Philosophy to Empirical Geography', in Adrian W. Moore, Graham Bird and Roxana Baiasu (eds.), *Kantian Metaphysics Today: New Essays on Space and Time*. London, Palgrave Macmillan.

McDowell, John. 1994. *Mind and World*. Cambridge, Mass.: Harvard University Press.

Merleau-Ponty, Maurice. 1969. *The Visible and the Invisible*. Trans. A, Lingis. Evanston, Illinois, Northwestern University Press.

Poulet, Georges. 1977. *Proustian Space*. Baltimore: Johns Hopkins University Press.

Proust, Marcel. 1996. *In Search of Lost Time,* 6 vols. Trans C. K. Scott Moncrieff and Terence Kilmartin, rev. trans. D. J. Enright. New York: Vintage.

Anthony Quinton.1962. 'Spaces and Times,' *Philosophy* 37: 130-147.

Röska-Hardy, Louise, and Eva M. Neumann-Held (eds.). 2009. *Learning From Animals? Examining the Nature of Human Uniqueness*, Hove, East Sussex: Psychology Press.

Speaks, Jeff. 2005. 'Is There a Problem About Nonconceptual Content', *Philosophical Review* 114: 359-398.

Von Uexküll, Jakob. 1957. 'A Stroll Through the Worlds of Animals and Men' (1934). Trans. Claire H. Schiller. In. Claire H. Schiller (ed.), *Instinctive Behavior: The Development of a Modern Concept*. New York: International Universities Press, pp.5-80.

Von Uexküll, Jakob. 1921. *Umwelt und Innenwelt der Tiere*. Berlin: 2nd edn.

## Notes and References

[1] The use of the term 'involvement' in this context is taken from Hubert L. Dreyfus, (Dreyfus, 1991: 41-44). The contrast term against which Dreyfus sets 'involvement' is 'in-clusion', rather than containment, but the nature of the contrast is the same. Dreyfus comments, in a way that might be thought to pre-empt some of my own arguments below, that "Heidegger is more radical than those who point out that …without metaphors like inside/outside that are based on spatial inclusion, as for example inside and outside our bodies, we could not think about more abstract involvement relations. This still assumes that the spatial relation is the basic one from which we imaginatively project the others" (Dreyfus, 1992: 42). As will become evident in the following discussion, although the spatial is more fundamental than Heidegger allows in *Being and Time,* the ideas of space and the spatial cannot be assumed to be identical with their employment in purely physical or 'corporeal' contexts. The very nature of space and the spatial is, indeed, part of what is at issue. Moreover, the fundamental role played by spatiality is not on the basis of the ubiquity of spatial metaphor nor due to any 'imaginative projection' of spatial images and figures onto other domains.

[2] While Heidegger here acknowledges the special role that time plays in the relation between time and space (in the structure of *Zeit-Raum*), he nevertheless adds, in what seems to be an implicit reference back to *Being and Time*, that this "should not mean at all that space can be deduced from time or that it is something secondary to it".

[3] 'Derivation from', as I use it here, does not imply 'reduction to', but instead refers to a relation of 'foundation' – see the discussion of the idea of derivation (as it applies in *Being and Time*) in Malpas, 2006: 104-126.

[4] I have forgone an account of the details of Heidegger's analysis of existential space here. I address the matter more thoroughly in Malpas, 2006: Ch. 3.

[5] It is important to note that the 'derivation' at issue here does not concern the *content* of spatiality from temporality, but rather its *structural unity*.

[6] Heidegger comments that: 'Dasein's bodily nature hides a whole problematic of its own, though we shall not treat it here' – Heidegger, 1962: H108

[7] As can be seen, for instance, by the essays in Bermudez et al, 1995, in which Merleau-Ponty appears frequently, but from which Heidegger is almost entirely absent.

[8] One might argue that the difficulty in clarifying the notion of the body that appears here is itself a factor in Merleau-Ponty's adoption of the concept of the 'flesh' (*le chair*) that appears in his later writing (eg. Merleau-Ponty, 1969) – 'flesh' encompasses, but is not identical with the body as usually understood, and is perhaps closer to what Heidegger means by 'lived body'). It certainly seems to me a mistake to treat the concept of 'flesh' as unproblematically continuous with the concept of 'body' as it appears in Merleau-Ponty's earlier work. Nadar el Bizri points to Merleau-Ponty's thinking of flesh as providing a critical counter to Heidegger's account of space (el Bizri, 2004: 80 – el Bizri also cites Franck, 1986). In this essay, and elsewhere, el Bizri develops a line of argument that has parallels with my own analysis.

[9] With an eye to Heidegger's prioritization of temporality, one might be tempted to say that the notion of extended dimensionality that is at issue here already implicates time in that, as Leibniz might have said, it is a dimension of simultaneity. Consequently one might suppose that the difference between space and time itself depends on a temporal distinction, namely, between simultaneity

and succession. This would, however, be to misunderstand the structures at issue. Space and time, as we will see in the discussion below, are indeed intertwined concepts so that each is necessarily implicated in the other. The distinction between space and time can thus be captured in temporal terms, by means of the distinction between simultaneity and succession, but it can also be captured spatially in the distinction between juxtaposition and superposition. Indeed, the very idea of succession, which seems to lie at the heart of temporality, requires the notion of superposition – we can say, in fact, that the temporal dimensionality involved in succession (or even duration) presupposes a sameness of space (or literally of position) that enables difference in time just as does the idea of difference in space also presuppose sameness in time. It is curious that while the importance of time to the understanding of space is frequently noted, it is very seldom that similar note is given to the importance of space in the understanding of time – Kant is a remarkable exception in this regard.

[10] The emphasis on the idea of 'ordering' here is significant, since it is indeed the character of spatiality as a certain sort of unity that is at issue (and which is captured in the idea of such an ordering).

[11] One might say that a large part of the problem is simply a tendency already to assume that spatiality cannot be a source of unity. Spatiality is thus already taken to be such as to isolate and disperse, and it is temporality, reaching back into and encompassing spatiality, that unifies and orders it. The question is: what justifies the assumption that takes spatiality to isolate and disperse, and temporality to unify?

[12] In the absence of some preliminary characterization of spatiality, the distinction between a notion of spatial containment or inclusion and of existential involvement, even as developed by Dreyfus, does nothing to dispel the obscurity that is already present in Heidegger's treatment of space – a treatment that Dreyfus himself notes is 'fundamentally confused' (Dreyfus, 1991:129).

[13] See Aristotle, *Physics* IV. Heidegger's criticisms of the idea of containment in *Being and Time* can be construed as partly directed at the Aristotelian analysis. In fact, those criticisms seem to beg the question at issue (as does much of Heidegger's treatment of space and spatiality), by opposing involvement and containment right from the start.

[14] In *Being and Time*, Heidegger advances what seems intended to be a counter example to the Kantian position (Heidegger, 1962: H109). If one enters a darkened, but familiar room in which the usual positions of things have been altered or reversed, then one will be disconcerted and disoriented. One might conclude, therefore, that our grasp of space is not based in a grasp we have in our own person, but on our equipmental engagement. In fact, what Heidegger's example shows is that our grasp of space depends on being able to connect the sense of space in our own person with the larger space that surrounds us, and the capacity to make that connection does indeed depend on being able to relates ourselves to that space by means of things within that space and the regions in which they are located – which is precisely Kant's point.

[15] The way 'objective' is used here is thus not in the sense of what is constituted as an object for a subject (which is the sense in which it is almost always used by Heidegger), but rather the sense that involves a certain sort of independence from the subject. 'Objective space', as I use the term (and as it used in much of the existing literature on spatiality) thus refers to a space that is as the space *of things* and we might say of *regions*, rather than the space of the subject or of the subject's body. It is also important to reaffirm once again that the concept of space as objective does not imply that space so understood is therefore entirely to be understood within the framework of natural science.

[16] Kant endorses neither a Newtonian nor a Leibnizian view of space although he certainly argues against Leibniz and for Newton on the issue of the relationality of space. One might argue that he does, in fact, combine Newtonian with Leibnizian elements, treating space itself as unitary and non-relational, while our sense of orientation and location is dependent on a grasp of certain forms of relationality.

[17] The practical here appears as not prior to, but as already entangled with, the spatial, and the same is true of the relation between the practical and the *theoretical*. Rather than construe the practical and theoretical as modes of engagement and detachment, they should rather be understood as different modes of engagement in their own right, though typically also implicating one another (as the subjective is implicated with the objective). Heidegger's well-known critique of the idea that we can understand our 'being in the world' on the model of formalised, 'theoretical' modes of comportment should be viewed, not as an argument for prioritising the

practical over the theoretical, but for reconceptualising the theoretical as itself a mode of practice.

[18] Much depends, of course, on exactly how the subjective is understood here, and there is a possibility that the subjective might be taken to be a central structure and yet not be construed 'subjectively'. This is an especially important question in relation to Kant (as well as Heidegger). So far as Kant, in particular is concerned, while he does takes the structure of subjectivity to determine the structure of experience, he also seems to treat subjectivity as encompassing more than just the subject.

[19] This passage is also quoted by Joseph Fell (Fell, 1992: 66). Fell draws attention to the problem presented by the disclosure of nature in Heidegger's early thinking and the way this is actually distinct from the disclosure that occurs through practical activity. In this respect, Fell can be seen to be advancing an account that is also critical of the tendency towards an over-simplified conception of the supposed priority of practice in Heidegger's thinking.

[20] The story of the shift in Heidegger's thinking over the decade from 1927 onwards is a complex one that is explored in more detail in Malpas, 2006: 147ff. One point that is not made clear in that discussion, however, is the extent to which the subjectivism that Heidegger criticises in the earlier work, while it is indeed present in the structure of the work as such, can nevertheless be viewed as belonging more to the readings of the work than to the intentions that lay behind it. It is thus that Heidegger's own criticisms of *Being and Time* so often seem to vary between criticism of the work and criticisms of its misreadings.

[21] The unity of space also means that there cannot be multiple spaces – every putative space has to be able to be positioned in respect of every other such space. This is often thought to be a claims easily refuted – see, most famously, the argument developed by Anthony Quinton (Quinton, 1962: 130-147) – but it is only so if one treats the unity of space in a way that fails to attend to the manner in which this unity is itself tied to the unitary and interconnected nature of experience, and also action, as such. The idea of properly multiple spaces, even if understood in terms of multiple experiential spaces, makes for serious difficulties in relation to the unity that it seems must belong to experience as such.

[22] Certainly this is true for any *finite* subject, that is, for any subject reliant on the deliverances of sensibility (see Kant, 1998: A26/B42-A30/B45). I have not made this qualification explicit in my discussion above, but have assumed that it is indeed finite subjects or agents with whom we are concerned.

[23] See Eugene T. Gendlin's discussion of this point as it relates to Heidegger's own discussion of Kant (Gendlin, 1985: 147-160). It is one of the curious features of Heidegger's Kant-interpretation that Heidegger seems never to recognize the mutual dependence that obtains between time and space in Kant's work, but remains narrowly focused on the supposed prioritization of time.

[24] See especially the papers that make up Dreyfus' debate with John McDowell (Dreyfus, 2005, 2007a, 2007b). The exchange with McDowell often seems to operate at cross-purposes, and there is clearly much that unites Dreyfus with McDowell. However, what this exchange does suggest, and it is an suggestion reinforced by many of Dreyfus' other writings, is that Dreyfus's reading of Heidegger is more indebted to early Merleau-Ponty than to Heidegger himself, and, in some respects (particularly Dreyfus' rejection of the very idea of 'mindedness'), Dreyfus' position even comes to sound rather like a more sophisticated form of Rylean behaviourism (a Ryleanism inflected by Merleau-Ponty together with elements from contemporary neurophysiology). Thus, while Dreyfus has been enormously and rightly influential in opening up Heidegger to an English-speaking audience, his work has also tended to skew the reading of Heidegger in a direction that is not altogether sympathetic to the character of Heidegger's own thinking.

[25] Even apart from other considerations, there is something odd in the idea of content that cannot be given any conceptual or propositional characterization, and this alone should give us pause here. This is not, however, the only problem to which the idea of non-conceptual content gives rise (see, eg, Speaks,2005: 359-398).

[26] Much of the difficulty in relation to non-conceptual content seems to arise from a failure to recognise the nature of the conceptual or the representational as it stands in relation to that of which it is a representation or conceptualisation – a failure that is not well-recognised in the existing literature. That spatiality, for instance, does not have a 'content' that is non-conceptual should be evident from the fact that that we have no difficulty in providing conceptual or representational

characterisations of space – this is precisely what we do with maps, with written and spoken directions, and so on. Of course, those concepts and representations never exhaust the character of the spatiality at issue, but this is not because there is some content here that cannot be captured. Rather, it is the very nature of representation always to be distinct from that which it represents and, as such, representation is, one might say, never such as to capture all of the content of that which is represented (representation is not duplication). We might put this difference in terms of a difference between the conceptual and the non-conceptual, where the non-conceptual refers to that which is distinct from the concept (as the thing is distinct from the name), but such a contrast is misleading, since what is really at issue is the difference between the conceptual or the representational, and that to which the concept or representation refers. That the point at issue here is not about two different sorts of content should be evident from the fact that, in the case of maps, for instance, any map can itself be made the subject of representation (most obviously in the form of a written or spoken description), and the resulting representation will stand in the same relation to the map represented as the map does to the space it maps – in both cases, there will always be the possibility of other representations, and in no case will the 'content' of that which is represented be fully captured by any specific representation.

[27] The fact that the animal must have some access to world, and yet is somehow also, in certain key respects, an impoverished access, leads Heidegger to say at one point that "With the *animal* we find a *having of world* and a *not-having of world*" (Heidegger, 1996: 268).

[28] Uexküll's separation of these three spaces is significant, running counter to the emphasis on the unity of space that I discussed above (one indication of how different is von Uexküll's neo-Kantian phenomenalism from Kant's own position). In this respect, von Uexküll seems to make exactly the mistake of confusing different modes of spatial access or articulation with different modes of space. Von Uexküll's prioritization, in the case of the human, of the visual and the tactile is also noteworthy – he gives no significance to any notion of human auditory space.

[29] The racialized character of von Uexküll's example presents a somewhat unsettling element given von Uexküll's own racist and anti-Semitic views, as well as his close involvement with the Nazi party (an involvement that seems to have run

much deeper than Heidegger's). On von Uexküll's racial and political views see Harrington, 1999: 56-71.

[30] Heidegger is nevertheless surprisingly generous to von Uexküll, writing that: "It would be foolish if we attempted to impute or ascribe philosophical inadequacy to von Uexküll's interpretations, instead of recognizing that the engagement with concrete investigations like this is one of the most fruitful things that philosophy can learn from contemporary biology" (Heidegger, 1996: 263). On the other hand, while Heidegger notes the convergence of his analysis of the captivation of the animal with von Uexküll's approach, Heidegger is also quite clear in pointing out that "the whole [of von Uexküll's] approach does become philosophically problematic if we proceed to talk about the human world in the same manner" (Heidegger, 1996: 265). Heidegger's comments on the concept of *Umwelt* in *Being and Time* are somewhat more dismissive. Talk of *Umwelt*, he says, is "ontically trivial, but ontologically it presents a problem" (see Heidegger, 1962: H58). Heidegger does not mention von Uexküll in this connection, however, although he does refer to the biologist Karl Ernst von Bauer (1792–1876), who was acknowledged by von Uexküll as a major influence on his own work. In his 1925 Kassel Lectures on Dilthey, Heidegger also refers to the idea of the Umwelt, again without any reference to von Uexküll, but in direct connection with a discussion of spatiality (a discussion that in outline foreshadows that of *Being and Time*) (Heidegger, 2002: 163-164). In this 1925 discussion, Heidegger appears to treat human 'being-in-the-world' in a way that draws explicitly on the idea of the Umwelt (writing, for instance, that "The environing world [Umwelt] is initially given in practical circumspection [*Umsicht*]" (Heidegger, 2002: 164), but without expressing any hesitation or qualification about this usage.

[31] The difference that is at issue here is frequently asserted to be nothing more than a result of anthropocentric bias, and to have been shown to be so by the work of thinkers such as Nietzsche as well as Darwin. Darwin's own claim, in *The Descent of Man*, is that the difference of human intelligence from that of animals "great as it is, certainly is one of degree and not of kind" (although Darwin's claim was based on the same anecdotal evidence that had for centuries been cited in discussions of this issue – see Darwin, 187: 165-113). Yet while many researchers in the area of comparative cognition repeat this claim, the actual empirical

evidence seems not to bear it out (at least in the manner in which it is usually understood), but rather to show that, while animals do indeed exhibit very highly developed forms of intelligence in specific areas, none exhibit the same general capacity for 'intelligence' that is, for the most part, centered on the cognitive and behavioural differences associated with the singular linguistic capacities of humans (for an exploration of some of the issues relating to human uniqueness that are relevant here, see, eg, Röska-Hardy and Neumann-Held, 2009). It is significant that Heidegger also focuses on language as crucial in this regard, and that he emphasizes the importance of the grasp of world as such *and as a whole*. While this characterization may appear opaque, what it points to is indeed the capacity for human 'intelligence' (if that is indeed the right word in this context – and from a Heideggerian perspective one would suggest that it is misleading to say the least) to be such as to enable a capacity to recognize and articulate a unity that goes beyond that of any particular feature or aspect of things. It is this, of course, that Heidegger often refers to in terms of the 'ontological difference', but which we can also understand in terms of the more fundamental idea of the play of identity and difference that is given in the play of time-space, in the unity of *topos* or 'place'. Whether and how such a notion could enter into the contemporary discussion of comparative cognition is an interesting question, and yet what is at issue here is nothing other the essential question of the nature, and so also the uniqueness, of the mode of being that is properly associated with the human.

[32] Gadamer is quite explicit in making a distinction between the animal's *Umwelt* and the human's *Welt* (see Gadamer, 1995: 443). John McDowell cites Gadamer approvingly on just this point (McDowell, 1994: 116-117). In the light of the issues being explored here, it is interesting to reflect on the possible role and significance of 'space' in McDowell's own concept of the 'space of reasons'.

[33] In fact, as Heidegger clarifies matters (and here he is concerned to distance his position from any subjectivist reading): "world-formation is something that occurs, and only on this ground can a human being exist in the first place. Man as man is world-forming. This does not mean that the human being running around in the street as it were is world-forming, but that the *Da-sein* in man is world-forming" (Heidegger, 1996: 285).

[34] It is an argument already presaged in *Being and Time* (see Heidegger, 1962: H218-219), and developed elsewhere (see eg. Heidegger, 1998: 136-154).

[35] Thus Heidegger insists that "*The temporality of Dasein* and thus *the essence of time* itself is the *root of these three questions* [concerning world, individuation, and finitude]" that are at issue in his discussion, see Heidegger, 1996: 173.

[36] See for instance, the extended discussion in of *Zeit-Raum* and *Zeit-Spiel-Raum* in *Beitägae zur Philosophie* (Heidegger, 1989) – see especially §§267-268, and §§238-242. In fact, the idea of *Spielraum* even appears in the discussion of the supposedly derivative character of spatiality in *Being and Time*, §70, where Heidegger talks of the "here" of Dasein's factical situation as "never signifying a position in space , but …rather the leeway [*Spielraum*] of the range of that equipmental totality with which it is most closely concerned" (Heidegger, 1962: H369).

[37] It is notable that in his talk of 'turning toward', Heidegger employs the German *Zukehren*. The way in which the idea of 'turning' emerges in Heidegger's thinking in *Fundamental Concepts* (repeated in similar fashion elsewhere) suggests the intriguing possibility of a connection between the 'turning toward' (*die Zukehr*) that is at issue in this originary event of world-formation and the Turning (*die Kehre*) that comes to prominence in Heidegger's thought from the 1930s onwards (referring, somewhat equivocally, to the turning in Heidegger's own thought and the turning that is supposed to occur in the transition from 'being and time' to 'time and being'). One might well ask to what extent might the Turning already be such as to depend essentially on the spatial, and to what extent might the Turning itself be understood as the turning of and into the play of time-space.

[38] All of the aforementioned concepts are already evident in Heidegger's thinking by the mid- to late-thirties, with spatial ideas and images especially prominent in the *Beiträge zur Philosophy.*

[39] The notion of the transcendental presents some difficulties for Heidegger as he attempts to shift away from what he takes to be the problematic character of the framework of his earlier thinking – see Malpas, 2006: 155-175 – but that does not mean that the notion is not significant or that it is not able to be retrieved.

[40] The discussion in *Place and Experience* treats space alongside time as necessary elements in the structure of place as such – the focus in the present discussion, however, has been more directly on space alone.

[41] Derrida writes that difference is "(is) (simultaneously) spacing (and) temporization" (Derrida, 1982: 13).