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Perception and the First Person

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Perception and the first person stand in a relation that is both close and puzzling. Here are six questions on the subject:

(1) You characteristically perceive objects and events as standing in various relations to you. Your perceptions have a first person content; their correctness conditions concern you. What does this involve, given that this feature can be present even when you perceive no part of yourself? We can call this "The puzzle of perceiving in relation to yourself".

(2) You need to keep track of objects in your environment if you are to learn in part from perception that an object that is now thus-and-so is the same as the one that was such-and-such in the past. You do not, it seems, need in any way to keep track of yourself to have such knowledge. How is this possible? ("The no-tracking puzzle.")

(3) You do perceive your own body from the inside, as when you experience pressure on the palm of your hand, experience your left arm as extended, or feel the inside of your mouth as hot. But you do not merely experience a body from the inside as having these properties: you also experience these body parts as your own. What is it to perceive something as yours? ("The puzzle of perceived ownership.".)

(4) There seems to be something in Hume's point that he can never catch himself in introspection. Even when Hume is perceiving his body, either from the inside, or as he might perceive another's body in vision, the thought "this body is mine" is potentially informative, and experiences with this content may mislead. There does not seem to be such a thing as perceiving oneself, as opposed to perceiving some body or bodily part. How can this be so? If it is so, why is it so, and how do we reconcile the fact with our answers to the earlier questions? ("The puzzle of perceiving oneself.")

(5) If our perceptual states are veridical, we both have a spatial location and are embodied. But it seems that we can conceive of first person sequences of conscious states that do not require or involve embodiment at all. Is there a tension here, and if so, how is it to be resolved? Is embodiment as given in perceptual experience, both proprioceptive and by other senses, fundamental to being a subject, or not? ("The puzzle of embodiment.")

(6) Ordinary experiences with a first person content entitle us to form first person beliefs, containing the first person concept. In a wide range of cases, such ordinary experiences lead to knowledge of a first person conceptualized content. Yet it is not at all clear that the entitling experience has a conceptualized content at all. What is the right conception of the nexus of relations between perception, the first person concept, its reference, and first person knowledge? ("The puzzle of first person content, concepts and entitlement".)

I take these questions, which vary in character from the merely puzzling to the near paradoxical, in turn. Adequate answers to them must integrate a theory of perceptual

content with the metaphysics of the self and with an account of first personal (*de se*) intentional content more generally.

1. Perceiving in Relation to Yourself

It has long been recognized that spatial content and *de se* content are, in a wide range of experiences, intimately related. Many would agree that what J.J. Gibson said about information applies to spatial perceptual content: "Information about the self accompanies information about the environment, and the two are inseparable....One perceives the environment and coperceives oneself" (1986, 126). This applies both to experience of a stationary array, and to motion. One may experience oneself as moving in relation to the environment, or experience things as moving around one. Experiences with these *de se* contents may involve perception of one's own body parts, either in proprioception or through seeing one's limbs, torso and nose. But they can also occur without any such perception of one's own body at all.

Spatial experiences represent the world around oneself as being a certain way. It is natural to capture that way by specifying it as a spatial type: the way the world around the perceiver must be filled in if the experience is to be veridical. This is sometimes called scenario content (Peacocke 1992), and it can be elaborated along several different lines. Common to such elaborations will be the notion of an origin (the point of view from which the world is perceived, in purely visual perception), axes (derived from body type), and some account of what the "filling in" is. It may be specified what properties and relations hold between the regions in the spatial type. Those who think that

perceptual content is dependent upon the identity of particular objects that the perception is about can insert objects into a notion of scenario content should they so wish. The apparatus can serve many comers.

Consider the spatial perceptual content

(1) That object is in that direction from this place

where *this place* picks out the origin of the scenario content in the perception; and consider the *de se* perceptual content

(2) That object is in that direction from me.

What is the relation between these two? They cannot be identical, for they have distinct correctness conditions. As a result of the insertion of some radio device into your optic nerve, you may temporarily be perceiving the scene around someone else, in a wholly distinct environment from your own (Dennett 1978). In such a case, it can be that (1) is true but (2) is false. "I'm not really in this place", you may truly think if you find yourself in such circumstances. Purely spatial correctness conditions are one thing; *de se* correctness conditions concerning the subject enjoying the experience are a different thing.

Different – but it seems that the two are related. It is plausible that for a spatial or material perceptual content F(me) to be true is for F to hold of my body. It is also plausible that my body is the one from which I perceive in normal circumstances, circumstances in which the scenario-origin *this place* refers to the place which is in fact the location of my body. Call the conjunction of these two plausible claims 'the normality thesis'. The normality thesis is neutral as between two radically different competing explanations of why it is true.

One proposal is that the normality thesis is explained by the fact that having a point of view on a spatial world from a body located in that world is constitutive of being a conscious subject (Strawson 1966, Evans 1982, Campbell 1994). A rival proposal does not accept that view of subjecthood, but does hold that the normality thesis is explained by what it is for a conscious subject to have a body it represents as its own (Peacocke 2008).

Some examples suggest that it is too strong to hold that any perceptual states with spatial content must also have a *de se* content. There could be an organism that perceptually represents events and objects as having properties and standing in spatial relations to the place that is the origin in its scenario contents, an organism that does not have any states with *de se* contents at all (neither conceptual nor nonconceptual). The organism could have a cognitive map of its environment, keep track of a 'here' on that map, and engage in such actions as changing its colour or the electric charge it generates, in response to threats or opportunities. The creature would not be capable of bodily movements; it may live in a fluid. This creature has a perceptual apparatus and control center that is in fact in the spatial world; but because it does not represent itself at all, a fortiori it does not represent itself as having a spatial location.

Shoemaker (1984) has argued that for any conscious subject at all, there must be an account of what it is for it to be embodied. If that is true, we have to add that for an organism of the sort just considered, any shape, size and material kind of embodiment is consistent with the contents of its representational states, provided the embodiment allows for its perceptions and its limited range of action-types. If the example is a

genuine possibility, then not all perceiving, embodied subjects have to self-represent (Peacocke 2012).

2. Absence of Self-Tracking

Suppose that yesterday you perceived yourself to be in a sunny street. If you remember being there, you can today know that you were in a sunny street. You can know this without reliance on any identity of yourself with something given in a non-first-personal way. Contrast your knowledge of "This pen [as given demonstratively in perception now] is the one I bought in the sunny street". To know this, you need either to have kept track of the pen (it has been in your pocket since the purchase); or to know some identifying marks of that pen, which you know both the purchased pen, and the one you now perceive, to possess. Nothing analogous holds in the first person case. You can know you were in a sunny street without keeping track of yourself, and without relying on any identifying marks of yourself. What explains the difference?

First person content in a mental state or event refers, *de jure*, to the subject who enjoys that state or event. Necessarily and a priori, if one and the same subject both held *I am F* in the past and now accepts *I was F*, then what he thereby accepts now will be true if what he held earlier was true. There is no need to rely on a risky identity: no risky identity is involved. By contrast, any transition by a subject to a content of the form "This [perceptually given] object is F" from an earlier acceptance of "That [perceptually given} object is F" needs further information if it is to be a rational transition. The further

information required is that it is the same object that is given in the two perceptual presentations.

The point of difference in this respect between perceptual demonstratives and the first person shows up in what would be adequate subpersonal mechanisms for registering, and as bases for knowledge, in the two kinds of case. In perceptual tracking of an object, we need to acknowledge not only perceptual object files, labeled by the egocentric locations of objects. We also need something that functions to keep track of when successive files are of the same object. This is the function for which Pylyshyn proposes his "FINSTS", subpersonal pointers which underlie the perception of identity of an object over time (Pylyshyn 2007). By contrast, we do not need a subpersonal analogue of FINSTS for *de se* contents. A subject can have subpersonal self-file, which contains representations of properties he perceives himself to possess. As time passes, what was a present tense predicate in this file merely needs to be temporally updated in the appropriate way to a past tense predication of the same notion. If the earlier representation "is F' in the subject's self-file is correct, then so will the later representation "was F" in the same file also be correct.

These points are completely independent of the metaphysical nature of subjects of consciousness. They apply whether subjects are essentially embodied and perceptible both from the inside and from the outside, or are not essentially embodied, or essentially such that embodiment makes sense for them. The point turns only on the nature of the reference rule for the *de se*, whatever the metaphysics of its referent may be. A concern is sometimes expressed about this treatment is that in a world in which there is frequent fission and fusion of conscious subjects, then one really would need to keep track of

oneself in some additional way if the transition from {I was F, I was G} to I was F and Iwas G is to be soundly made. Now if in a world of fission and fusion I was F is allowed to be true if one of the subject's ancestors was F, and I was F and I was G requires some ancestor to have been both F and G in the past, then indeed that transition fails. But on that understanding, the transition is not an application of the rule of conjunctionintroduction. It is rather an instance of the clearly fallacious form {*Something standing in* R to me was F, *Something standing in* R to me was G} / *Something standing in* R to me was F and G. In a world of repeated fission and fusion, memories of experiences may mislead a subject on whether she really has a premise needed for the application of the conjunction-introduction rule.

Given that this explanation of the difference in respect of need for a certain kind tracking between the first person and the perceptual cases holds entirely independently of the nature of subjects, the explanation is consistent with the thesis that subjects are things that can be perceived by themselves and others. A mechanism that gives genuine awareness and knowledge of identity over time, of an entity that can in fact be perceived, does not itself have to be a perceptual mechanism. Temporal updating of a subject's file on itself is precisely such a non-perceptual mechanism. On this view, then, Kant seems to make a mistake when, in his treatment of the Third Paralogism in the First Critique, he moves from the true point that certain kinds of apparent awareness of oneself do not involve an intuition of oneself (through which one is given "as object") to the conclusion that such non-perceptual awareness cannot "signify the identity of the person" (point (3) in B408, Kant (1998)). It does signify the identity of the person, but not by way of any

kind of identification or tracking that is involved in purely perceptual-demonstrative cases.

3. Experienced Ownership

For a body to be yours is for it to be the one from which you perceive, the one some of whose movements are your actions, and the one in which you experience bodily sensations as located. For a body part to be yours is for it to be part of the body so identified. Given these conditions on ownership, the nature of ownership involves a subject who perceives, acts, and senses. These conditions on ownership specify what is required for the correctness of the content of any experience in which a body or a body part is experienced as your own.

Most of us experience a particular body and certain body parts as our own, and normally these experiences are veridical. But in less common cases, there are also striking and theoretically revealing illusions of ownership. The phantom limb phenomena experienced by some of the injured, by amputees, and by some of those born without a particular limb, are well known. Almost equally well known today is the rubber hand illusion, in which tactile stimulation of a subject's unseen hand, when matched by seen touching of a rubber hand, can produced the illusion that the rubber hand is the subject's own (Botvinick and Cohen 1998). A more radical illusion can be produced to the effect that the rear of a head, seen by a subject, is that subject's own head (Lenggenhager et al. 2007). In the condition of apotemnophilia, a person may experience a healthy, undamaged, functioning limb, such as his arm or lower leg, as not belonging to him, as

intrusive, and insist that it be amputated (Ramachandran 2011). The subject suffering from apotemnophilia nonetheless experiences sensations in the limb in question, and may employ it in such actions as walking. It is widely agreed that the explanation of these illusions must involve a mental representation of the body, called the body schema. The body schema can represent there as being a body part when there is not (phantom limb). It may fail to represent as part of one's body something that really is so (apotemnophilia). The body schema is involved in a persisting representational state that concerns what kind of body the subject possesses. It is to be distinguished from what is sometimes called the body image, which represents the particular spatial properties and internal relations of the subject's body parts at any one time (Gallagher 2005). The body schema influences the conditions and character of these illusions (Costantini & Haggard 2007).

These illusions should constrain our constitutive account of the phenomenology of ownership. In a paper on the sense of ownership, Martin makes an important and convincing case that bodily sensations have a representational content concerning the subject's body (1995). But he also further argues that "we should think of apparent ownership not as being a quality additional to the other qualities of experience but as somehow already inherent within them" (278). The proposal is that "when one feels a sensation, one thereby feels as if something is occurring within one's body" (267). The subject suffering from apotemnophilia is a counterexample to this: that subject feels a sensation in what is in fact his lower arm (say), but experiences that arm as not his own. It follows that, no doubt surprisingly, that we must distinguish sharply between experiences that represent a body part indexically, from the inside, and experiences that represent that body part as one's own. It also follows from the nature of these illusions

that we cannot characterize a sense of ownership reductively in terms of the subject's body schema, if that schema is characterized only in indexical terms – not even if the schema is required functionally to have a connection with action (see de Vignemont 2007). The subject with apotemnophilia with respect to his lower leg may still use that leg in the action of walking. If, by contrast, it is supposed to be part of the representational content of the body schema that it also labels various body parts as one's own, such a body schema could then contribute to the explanation of these various pathologies. But it would do so then by taking for granted the notion of ownership by a subject, rather than by offering some kind of reductive explanation of the notion.

None of these phenomena, nor their explanations, establish that you do not perceive your own body. The contrary is argued by Metzinger: "At this point into our investigations into consciousness, it seems obvious that we are never in direct contact with our physical bodies but rather with a particular kind of representational content....What you experience is not reality but virtual reality, a possibility. Strictly speaking, and on the level of conscious experience alone, you live your life in a virtual body and not in a real one" (2009, 113-4). Metzinger's argument for this conclusion is that ordinary perception uses the same kind of representational systems as virtual reality systems that can be attached to a perceiver's head. This position is open to two objections. First, to say that you are in "direct contact" only with a certain kind of representational content is to confuse the level of intentional content with the level of reference. A perceptual state can be of an object, including one's own body, consistently with the perceptual state being a result of computations involving representation contents. (Arguably, it must so result, see Burge 2010). If Metzinger's arguments on this issue

were sound, they would equally establish that one does not perceive any physical objects at all. Second, and more generally, the states of consciousness involved in enjoying a virtual reality system have the representational content they do because they stand in certain similarity relations to ordinary perceptual states that do for the most part correctly represent objects, events, and the subject's own real body in ordinary cases. Genuine perception cannot be elucidated without circularity in terms of its relations to something whose nature is parasitic on genuine perception itself.

4. Perceiving Yourself

In one of philosophy's famous passages, Hume wrote, "when I enter most intimately into what I call *myself*, I always stumble on some particular perception or other, of heat or cold, light or shade, love or hatred, pain or pleasure. I never can catch *myself* at any time without a perception, and never can observe anything but the perception" (Hume, 2000, Book 1, Part 4, Section 6, p.165). Hume was surely well aware that he could perceive his own body and his body parts. Evidently he did not take this obvious fact as a counterexample to his intended thesis. Many have been similarly tempted by Hume's claim even if they have found it hard to say exactly what is right in it. The claim has an affinity to a thought of the young Wittgenstein, when in the *Notebooks* he wrote "I objectively confront every object. But not the I." (1979, entry for 11 August 1916, p.80e). We can learn about perception and its relation to the first person by identifying what is right in Hume's intended claim.

What Hume rightly found is that there is a sense in which he could not attend to himself. Whenever a subject attends to something, the subject attends to it as given in a certain way. When hiking, you may attend to a mountain as given in a certain distance and direction from you. That is to be distinguished from attending to the same mountain, which happens also, unobviously, to be the same one as the one presented in a different direction, some of its parts being obscured by an intervening hill. We can then formulate Hume's claim thus: there is no such thing as attending to something as given in a purely first personal way. Attending to something given as one's body, or as one's hand, is no counterexample to this formulation. In such cases, one's body and one's hand are given in perception in perceptual-demonstrative ways that are not purely first personal.

If Hume's claim, so understood, is true, what is the explanation of its truth? The explanation lies jointly in the nature of attention and the nature of *de se* content. Attention must always be to something apparently given in perception or sensation (or, perhaps, in memory or imagination). But *de se* content is arguably individuated, like any other element of intentional content, by its fundamental reference rule, which in the case of the first person is this: as a *de jure* matter, in any mental state or event in whose content the first person occurs, it refers to the subject who enjoys that state. This rule does not require that the subject of the state with first person content also be presented in any other way, in perception or by any other conscious state or event. There are mental states and events with first person content in which the subject is not presented in any other way. As we noted, you can see something as coming towards you, or as at a certain distance from you, even if you are not perceiving or sensing your body at the time at all. You experience your hand as your own, you experience a sensation as your own, but neither of these

requires that you be given in some further way non-first-personal way in these conscious events. Since anything to which you can attend must be given in a perceptual or sensational way (or in imagination or memory), it follows that there is no such thing as attending to something given purely in a first personal way, and not in any other. That was precisely Hume's claim. Since the claim seems to follow from the nature of attention and the nature of *de se* content, the claim is not a merely contingent matter.

So construed, Hume's claim concerns *de se* intentional content. No conclusions can be drawn from what is right in Hume's claim about the reference of the *de se* component, the subject or owner of conscious experiences. The argument just given for Hume's claim is consistent with the thesis that persons, Hume included, are essentially embodied. The argument is equally consistent with Shoemaker's thesis that for any given subject, there must be an account of what it is for the subject to be embodied. The argument does not involve any commitment to Hume's further view that each of his "perceptions" is an independent entity which requires nothing else for its existence. The argument outlined here for Hume's claim is equally consistent with the view that all mental events must have subjects, subjects whose existence cannot be reduced to subject-free entities. Nor is there any support in the argument for Hume's view for the younger Wittgenstein's conclusion that subjects of consciousness are not in the world. From the fact that there are veridical conscious states and events that do not present their subject as an entity in the world, it does not follow that their subject is not in the world.

5. Objective Perception as Constitutive of the Subject?

Is perceiving an objective world from a spatial standpoint a necessary part of either of what it is to be a subject, or (what is not quite the same) part of what it is to be capable of mental states with first person contents? An affirmative answer to either question results in a Kantian thesis. Both theses are endorsed by Strawson (1966).

More than one kind of argument has been offered for such Kantian theses. The argument in Strawson (1966) is built from the following elements. A subject enjoys unity of consciousness; this requires the possibility of self-ascription by the subject of the experiences enjoyed by the subject; experiences involve the recognition of entities as falling under kinds; this recognitional component requires a seems/is distinction, whose basis is present in the experiences themselves; and this in turn requires "the distinction *between* the subjective order and arrangement of a series of such experiences on the one hand and the objective order and arrangement of the items of which they are experiences on the other" (Strawson 1966, 101). The argument is meant to show that there could not be a subject with a series of experiences consisting only of states with no content about the objective world – with merely such objects as "red, round patches, brown oblongs, flashes, whistles" (ibid., 99). The links and underlying principles of Strawson's argument are not entirely clear, and this ambitious argument remains a target of identification and discussion.

It is clear that the argument would need to meet the following objections. Prima facie, ownership of an experience is more fundamental than self-ascription of that experience. Ownership explains proper self-ascriptions. That would mean that the early stages of the argument would need revision. Identity of subject over time may also be founded in identity of the subpersonal apparatus that integrates information and yields

multiple and complex states of consciousness at a given time in a given subject. Such an identity of integrating apparatus can underlie a sequence of experiences that lack objective representational content. Even when experience is as of objects and events on a path through a spatio-temporal world, the unity of such a consciousness is underlain by identity of integrating apparatus. This suggests that we can make sense of a notion of a subject of consciousness under which a subject may or may not have perceptions of, or even as of, an objective world.

Ordinary subjects need not have any conception of an integrating apparatus. That identity of subject consists in identity of integrating apparatus is a constitutive, metaphysical thesis. The ordinary subject simply enjoys or suffers states with *de se* content, such as the content that he recently experienced an acrid smell. The thesis about integrating apparatus concerns the nature of the entity that is the reference of the *de se* component in the content of a given mental state. The thesis is not meant to be something immediately obvious from the nature of *de se* intentional content.

Under the metaphysical thesis, a subject can be under an illusion that he was recently thus-and-so. Even if someone else was recently thus-and-so, an apparent memory of that event may be transmitted to a subject whose identity involves a different integrating apparatus. So seeming identity is not sufficient for genuine identity (a requirement on which Kant would also insist). But there is also no obstacle to genuine awareness of identity over time, in good cases.

To say that identity of subject is not to be explained in terms of perception of an objective world is not to imply that there are not major insights in the work of those who have endorsed these Kantian theses. The theses are also implied by the treatment in

Evans (1982). Evans's book contains accounts of why various bodily and spatial selfascriptions, made on the basis of proprioception and outer senses respectively, can be knowledge, knowledge that does not rely on any substantive belief *I am identical with m*, for some singular concept *m* other than the first person. The accounts in Evans of selfascriptive knowledge can be retained, consistently with rejection of the Kantian theses. The accounts can be seen as elaborations of the epistemology and metaphysics of bodily and spatial predications in the first person, when the subject does in fact enjoy perception of an objective world and enjoy embodiment within it. That would be consistent with admitting the possibility (denied by Evans pp.250-1) that there can be a subject whose conscious states are realized in the states of a brain permanently in a vat, a subject who cannot locate himself in the objective world, but who still succeeds in referring to a subject – himself – when he thinks "I wonder if this apparent world is real" (or even "Cogito ergo Sum"). This subject in fact has an integrating apparatus whose operations explain his complex experiences at a time and over time. The condition for an entity to be the reference of the *de se* component of the intentional content of his experiences is met, viz. the condition that it be the subject of those experience. It is met by the subject itself, a subject realized in a real integrating apparatus. We can distinguish between this subject having correct and having incorrect apparent memories of his earlier experiences. All this is consistent with a philosophical account of what it is for his experiences to have the representational content needing to be cast in terms of their environmental causes and effects when the subject's integrating apparatus is properly connected to the world, rather than being sustained in the vat.

6. De Se Content, First Person Concept, Entitlement, and Knowledge

An animal without language can see something as moving away from it, can hear something as coming towards it. These perceptions have a *de se* content, and it is very implausible that their occurrence in any way presupposes the possession of concepts in any strict use of that term. Conceptual content is content of the sort that a thinker can accept or reject for reasons. The exact nature of the connection between concepts and reasons is a matter of some disagreement. Some thinkers would write the connection immediately into the individuation of each particular concept. Under that approach, a concept is individuated by what gives reasons for making certain judgements whose content contains the concept, or is individuated by what certain judgements involving the concept in turn give reasons for judging (Brandom 1994). Other approaches to conceptual content would regard the connection between concepts and reasons for making certain judgements as derivative. Many truth-conditional approaches to the individuation of content and concepts would regard the connection between a concept and reasons for judging contents containing the concept as explicable from the concept's contribution to the truth-conditions of contents in which it occurs (Peacocke 2008). Whatever the source of the connection between reasons and concepts, it is highly plausible that it exists. But the de se perceptual states, and other de se states of some animals, such as intention, memory and action awareness, seem to lie below the level of anything essentially involved with, or individuated by, relations to reasons. Yet we nevertheless use the first person concept, as expressed by 'I' and 'me' in English, both in describing and in expressing these perceptual states with nonconceptual de se content. "It looks as if the

cyclist is moving away from me" is the entirely natural expression of the *de se* content of a visual experience we can enjoy. "It looks as if the ball is being thrown far away from him" is an entirely natural description of the dog's visual experience. That in itself is a puzzle, but it also leads to at least three other questions. What more generally is the relation between the first person concept and nonconceptual *de se* content? Can experiences with nonconceptual *de se* content entitle a thinker to make judgements with conceptual content? Can those experiences in appropriate circumstances lead not just to rational judgement, but to knowledge? I will outline a position on these issues, but readers should be alerted that I am not a neutral party in current discussions on these issues. (A very different approach, one which treats at least all human perceptual content as conceptual, is given in McDowell (1994).)

Suppose a thinker makes a first person judgement $I \ am \ F$, and suppose too he also enjoys various perceptual experiences with de se contents. Then he object he is judging to be F is identical with the object his $de \ se$ perceptual states represent to be thus-and-so when they have the nonconceptual content that he is thus-and-so. This identity is not an a posteriori truth. Rather, the identity follows from the very nature of the first person concept and the nature of $de \ se$ nonconceptual content. The first person concept is individuated by the condition that in any judgement involving it, it refers to the subject who is doing the judging. The reference of the $de \ se$ component of the intentional content of his experience is the subject enjoying the experience. That is the rule of reference that individuates the nonconceptual $de \ se$ notion. But we have already said the case is one in which the judger is enjoying the experience. It follows that in such a case, the reference of the thinker's use of the first person concept is identical with the object represented as

thus-and-so in his *de se* perceptual experiences of being thus-and-so. So the reference of the first person concept, as used by the thinker, is identical with the reference of the nonconceptual *de se* in such a case.

This identity of reference is a necessary condition for a stronger claim, the claim that nonconceptual *de se* contents of perceptual experience defeasibly entitle the thinker, in the absence of good reasons for doubt, to judge corresponding first person conceptual contents. A perceptual experience with the nonconceptual content that a tree is in a certain direction (picked out in the scenario content) from oneself can entitle a thinker to judge a corresponding conceptual content *that tree is in that direction from me*. This is structurally parallel to the way in which a perceptual experience in which something perceived nonconceptually as a four-sided equilateral figure, and as symmetrical about the bisectors of its opposite angles, can entitle a thinker to judge the conceptual content that's regular diamond-shaped (Peacocke 1992). In both this shape case, and in the de se examples, if the nonconceptual content is correct, then so too is the content of the conceptualized content to whose judgement it provides an entitlement. This conditional holds in virtue of the nature of the contents in question. It is because the conditional holds in virtue of the nature of the contents involved that the entitlement exists. The identity of the reference of the thinker's first person concept, as employed by him, with the reference of the *de se* component of his perceptual states, is also a necessary condition for the conditional to hold.

This treatment of the relations between the nonconceptual *de se* contents of perceptual experience and conceptualized first person judgements is available both to those who hold that embodiment is fundamental to subjecthood, and to those who hold

that it is not so fundamental. The latter can hold that a conscious subject may not need a bodily realization, but when the subject does, then these entitlement relations just identified are derivative from what it is for the subject to have a particular embodiment. The treatment above also contributes to an explanation of why we so naturally employ the first person concept in describing the *de se* perceptual states of creatures that do not possess concepts at all. Since our own *de se* nonconceptual perceptual states entitle us to make first person judgements about ourselves and our relations to our environment, it is natural to identify the perceptual representational states of a nonconceptual creature by the contents those states would entitle us to judge. We engage in such identification not only in the case of the first person concept, but also with many spatial, temporal and other concepts that have constitutive entitlement relations with the nonconceptual content of perception. The point applies as much to the linguistic expression of our own perceptual states as it does to the description of those of others.

Perceptual experiences with *de se* contents can lead not merely to correspondingly entitled judgements, but also to knowledge. A necessary condition for knowledge is one of the several requirements that have been called 'safety', viz., that the method by which the belief is attained leads to truth in other circumstances that could easily have obtained (Peacocke (1986), Sosa (1999)). The *de se* contents of perceptual experience exhibit the phenomenon of constancy. You perceive the door as being in the same direction from you, even if your eyes move in their sockets, or your head moves, and the result is a different pattern of local (in this case retinal) stimulation. Constancy implies that in a range of circumstances that can easily obtain, you will have an experience with the same representational content if the relevant objective features of the world remain the same.

This in turn means that if you make a judgement which a corresponding perceptual experience with a nonconceptual content entitles you to make, the resulting belief will be safe with respect at least to the range of circumstances under which constancy holds. First person beliefs appropriately based on *de se* nonconceptual contents of perception can thereby meet this necessary condition for knowledge. Though the self and the *de se* have many distinctive features, some so briefly outline in this piece, these most recent considerations show that they do share with the other contents of perception the general nature of many of their entitlement relations.

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