

## International Phenomenological Society

---

Cross-Modality and the Self

Author(s): Jonardon Ganeri

Source: *Philosophy and Phenomenological Research*, Vol. 61, No. 3 (Nov., 2000), pp. 639-657

Published by: International Phenomenological Society

Stable URL: <http://www.jstor.org/stable/2653616>

Accessed: 09/06/2009 11:45

---

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at <http://www.jstor.org/page/info/about/policies/terms.jsp>. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at <http://www.jstor.org/action/showPublisher?publisherCode=ips>.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

JSTOR is a not-for-profit organization founded in 1995 to build trusted digital archives for scholarship. We work with the scholarly community to preserve their work and the materials they rely upon, and to build a common research platform that promotes the discovery and use of these resources. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).



*International Phenomenological Society* is collaborating with JSTOR to digitize, preserve and extend access to *Philosophy and Phenomenological Research*.

<http://www.jstor.org>

# Cross-Modality and the Self

JONARDON GANERI

*University of Nottingham*

The thesis of this paper is that the capacity to think of one's perceptions as cross-modally integrated is incompatible with a reductionist account of the self. In §2 I distinguish three versions of the argument from cross-modality. According to the 'unification' version of the argument, what needs to be explained is one's capacity to identify an object touched as the same as an object simultaneously seen. According to the 'recognition' version, what needs to be explained is one's capacity, having once seen an object, to reidentify that same object by touch alone. According to the 'objectivity' version, what needs to be explained is one's capacity to think of one's perceptions in different modalities as perceptions of one and the same object. The third version seems to establish that one must conceive of oneself substantially, as the numerically identical owner of one's experiences, a conclusion in agreement with recent work in developmental psychology claiming to show that an infant's cross-modal capacities are essentially implicated in their development of a sense of self. There is further work to be done if this is to be turned into an argument against reductionism: there is no swift route from the epistemology of self-consciousness to the metaphysics of the self. In the §3, I will claim that there is, nevertheless, an argument linking the two. What I propose is an argument derived, not from the token-reflexive rule for the first-person, but resting on its anaphoric behaviour spanning intensional operators.

It would surely be strange if we had several senses sitting in us, as if in a wooden horse, and it wasn't the case that all those things converged on some one kind of thing, a mind or whatever one ought to call it: something with which we perceive all the perceived things by means of the senses, as if by means of instruments (Plato, *Theaetetus* 184d1–5).

A certain object is grasped by sight, and that same object is also grasped by touch. And, it is thought, 'that which I saw with my visual sense, I now touch with my haptic sense', and 'that which I touched with my haptic sense, I now see with my visual sense.' Here two perceptions of a single object are integrated *qua* having a unitary agent; not *qua* ones whose agent is a [mere] aggregation (Vātsyāyana, commenting on *Nyāyasūtra* 3.1.1)

## §1 THE THESIS

The thesis of this paper is that the capacity to think of one's perceptions as cross-modally integrated is incompatible with a reductionist account of the self. I will call this the 'integration argument' for the self conceived as a substantial subject of experience. It is anticipated in Plato, and is the subject of a detailed discussion within classical Indian realism.<sup>1</sup>

The integration argument purports to demonstrate that the self is a substance. To be a substance is here stipulated to be the enduring common locus of multiple properties and property-tropes. The claim is that the self, as a substance, is the single substratum of many psychological properties—perceptions, beliefs, desires, aversions, positive and negative emotions. While no other type of substance can be the substratum of psychological properties, it is consistent with the substance theory that the self is the substratum of physical properties as well as psychological ones. Indeed, the self is to be thought of as both spatially located and causally active.

The substance theory is to be distinguished from two others: (1) that the self is an object but not a substance; and (2) that there are no such objects as selves. The second of these doctrines is compatible with some interpretations of the Buddhist 'no-soul' theory, as well as with Kant's claim that the transcendental self is not an object among others in the world. The integration argument, however, is to be read as directed against the first claim, that the self is an object but not a substance. The self is not to be thought of merely as a causally interconnected aggregate of psychological and/or physical events. It is not an object of the same type as heaps and streams, nations and bundles.<sup>2</sup>

The claim that the self is not a substance but an object of this latter type is one reading of the 'reductionist' theory of the self (see Parfit 1984: 225–26). Parfit's Reductionist account of persons is committed to the *impersonal description thesis*, the claim that 'though persons exist, we could give a *complete* description of reality *without* claiming that persons exist' (Parfit 1984: 212). The existence of persons is derivative, in the sense that any fact described by mentioning a person could also be described without mentioning any person. Our preferred characterization of the intended distinction, however, is in terms of the logical form of third person perceptual ascriptions: 'She is looking at the apple with her eye', 'She is touching the apple with

---

<sup>1</sup> The main Indian sources are Gautama *Nyāyasūtra* 3.1.1 (Gautama 1985: 710–14) and the commentaries thereon by Vātsyāyana, Uddyotakara and Vācaspati; and Udayana 1986: 710–19, 752, and the commentaries thereon by Śaṅkara Miśra, Bhagīratha and Raghunātha Śiromaṇi. For contemporary discussion, see Matilal 1994: 289, Taber 1990: 39–40, Halbfass 1992: 104–5, Kisor Chakrabarti 1999: 55–102, and especially Arindam Chakrabarti 1992.

<sup>2</sup> This too is apparently compatible with some interpretations of the Buddhist 'no-soul' thesis; see Uddyotakara's comments above *Nyāyasūtra* 3.1.1 (Gautama 1985: 697–709), and Duerlinger 1993.

her right hand'. Appealing to the idea of deep case or thematic role,<sup>3</sup> the perceiver is encoded here as Agent or affector, the apple as Patient or thing affected, and the sense organ as Instrument by means of which the affecting takes place. However, the thematic relation between Agent and Instrument is ambiguous at the level of logical form: it can stand either for a relation between substratum and property, or a relation between constituent and aggregate. The existence of the ambiguity has been noted before:

Is the self a mere assemblage of body, outer and inner sense-organs, thoughts and feelings, or is it something else? Why is there such a doubt? It is because both ways of using words are attested. A 'way of using words' is a reference to the relation between the Agent and the Instrument or the action. This reference is of two kinds: [first,] as between a part and a totality, as in 'A tree stays up with the help of its roots', or 'A house is supported by its pillars'. There is also a reference to a relation as between one thing and something else, as in 'One chops with an axe', or 'One sees with the help of a lamp.' In our case, there are usages like 'One sees with one's eyes', 'One thinks with one's mind', 'One ponders with one's intellect', 'One feels pain or pleasure due to one's body.' In these cases it is unclear whether the use is as between a part and the totality which is the assemblage of body and so on, or as between one thing and another different thing.<sup>4</sup>

The question then is whether third person perceptual ascriptions ought to be construed as having the form of an ascription of one thing (a property or trope) to something else (a substratum), or as describing the relation between a totality and one of its constituents. The point is that we have both an 'is' of predication and an 'is' of constitution. The substance theorist claims that the surface grammatical form of these sentences is an accurate guide to their underlying logical form. They are genuinely attributive. The rival theory accepts that the surface form ascribes a property to a subject, but claims that the underlying logical relation is between a totality and its constituents, not between a substratum and its properties. The sentences, let us say, have a *substratum-free paraphrase*. Notice the idea that statements about persons have a certain underlying logical form is not the same as Parfit's idea that there exist equivalent descriptions of a single state of affairs, one not mentioning persons. The ideas are close enough, however, for both positions to be brought under the label 'reductionist.'

My argument will proceed in two parts. I will first (§2) consider what is required of someone who has the capacity to think of their perceptions in distinct modalities as having the same *object*. That is, what does it take to find intelligible a judgement of the form 'I am touching the same object I am looking at'? I will argue that one can make sense of such judgements only if one thinks of both the objects of perception and of oneself as loci of multiple properties. There is further work to be done if this is to be turned into an argument against reductionism: there is no swift route from the epistemology

---

<sup>3</sup> For which, see Ganeri 1999a: 51–62.

<sup>4</sup> Vātsyāyana; in Gautama 1985: 697–701.

of self-consciousness to the metaphysics of the self. In the second part (§3), I will claim that there is, nevertheless, an argument linking the two.

I begin with two disclaimers. First, I shall not present the argument in a way that makes it depend on the role of memory or recognition. A common interpretation of the integration argument runs as follows: neither memory nor recognition would be possible unless there were an enduring self, because 'I cannot recollect your experiences, I cannot recognize a person whom you have seen' (Mohanty 1992: 30). According to what I shall call the 'recognition' version of the integration argument, what needs to be explained is one's capacity, having once seen an object, to reidentify that same object by touch alone. The argument in this form is said to turn on the principle that one cannot remember the contents of another's past experience. Unless it was I who had seen the pot with the strangely shaped neck and the broken handle, it would be impossible for me, holding the pot in my hands, to judge: "Ah, this is that pot—the one with the strangely shaped neck and the broken handle." One ought not object to the argument by denying the principle on which it rests: there is, of course, a constitutive link between memory, reidentification and self-identity over time.<sup>5</sup>

A first difficulty is rather that memory is too deeply implicated to be treated as if it were an isolable and unproblematic notion in terms of which reidentification and the identity of self over time can be explained. What is required is a common explanation of all three (as Strawson said about memory and experience, "From whatever obscure levels they emerge they emerge together" 1966:112).

A second objection is that the argument as it stands is invalid. The argument is that one is able to reidentify an object now touched with an object remembered-because-previously-seen only if one's memory is not a quasi-memory, an apparent memory as of having an experience, produced by someone's having the experience (Parfit 1984: 220). But why shouldn't one be able to identify a currently touched object with an object about which one has only quasi-memories, memories implanted in one of another's perceptions of it? The point is that the quasi-memory will not in general be derived from a single isolated past visual experience, but from a whole series of such experiences, in which the object is seen from a number of different points of view, as located on a table, as adjacent to other objects, and so on. Touching the object now, one perceives both the shape of the object and the spatial relations in which it stands with other objects, and recognises them as the same as those of an object albeit only quasi-remembered. The mere possibility that one's apparent memories are only quasi-memories does not undermine one's capacity to reidentify the object.

---

<sup>5</sup> Not even the 'no-self' theorist need deny this; see Ganeri 1999b.

Against this, it might be urged that what is at stake is one's capacity to discriminate between the object now touched and a qualitatively identical duplicate. Imagine that the object currently being held has a clone, that someone has seen the clone, and that an apparent memory derived from that experience is implanted in one. The moral of such an example might be that in order to be able to reidentify an object now touched with one previously seen, one's memory must represent one as having charted a path through space, in such a way that it offers one reasons for believing that it is the same object that was earlier seen and is now touched. The mere recollection of an object with the same shape as the one now being touched (and as standing in the same spatial relations with other objects) does not itself supply one with such a reason.

The problem with the argument so reconstructed is simply that it makes no essential appeal to cross-modality: it could be run equally well with reference to one's visual perceptions alone; nothing here trades on the identification of an object across sensory modalities. So if there is a good argument from cross-modality to the self, this is not it.

My second disclaimer is this. I maintain here that there is no good argument which runs directly from the fact that perceptions in different modalities can be of the same object to the existence of a substantial self, without reference to the nature of self-ascriptive judgements of the 'I touch what I see' type. According to what I shall call the 'unification argument,' the integration of a set of perceptions, made at different times and through different modalities, is said to be explained by their all being perceptions of a single perceiver. One version of the unification argument claims that, if the self is what compares and combines perceptions, it cannot be merely a collection of those perceptions. That idea fails to the obvious point that the self might be a collection of perceptions *and* 'combining' judgements and other psychological events. Taber (1990: 39–40) reads the argument as showing that the self cannot be an aggregate of sense-faculties:

There must be some one entity distinct from any sense organ which both sees and feels the object. For one sense organ cannot perceive the object of another: an eye, for example, cannot feel. Nor could the *aggregate* of faculties be responsible for these acts of cognition, for it is one thing, not a group, that perceives the object on separate occasions.

Again, at best all this shows is that there must be a faculty of integration and judgement. Bostock (1988: 153) suggests a 'direct' argument on behalf of Plato:

If it is the mind that makes judgements about its perceptions, and in particular comparisons between them, then they must all be perceptions of one and the same mind...[I]t will not do simply to reform the theory by saying that the mind is a collection, not only of perception, but also of judgements, and no doubt other things too...Mere collections do not seem to provide for the kind of unity that Socrates is pointing to. ...it is difficult to say how this unity is accounted

for if the 'one thing' in question is taken to be merely the collection of all the things which, as we say, 'it' does.'

With both Taber and Bostock, the unity of consciousness is modelled on the unity possessed by a set of properties when they all share a common substratum. And yet the appearance of an explanation is an illusion: the integration in the content of a collection of perceptions is not accounted for by the idea that the perceptions as vehicles have a common substratum. The direct argument exhibits the kind of fallacy labelled by Millikan (1991) 'content externalizing'; it projects properties of the vehicle of thought onto its content.

The original Indian formulation of the argument is likewise a unification argument from cross-modal integration to the existence of a substantial self:

[The self is a substance] because a single object is grasped by touch and sight. [If you say] 'no, for there is restriction [of each sense] to its proper object', [we reply] this is not a refutation, because the existence of the self follows too from that very restriction (*Nyāyasūtra* 3.1.1–3).

The claim is that the conclusion follows both from the assumption that different senses can have the same objects, and from the assumption that the senses are 'restricted' to their proper objects. What seems right is that sight and touch are to be distinguished from the other senses, in that they both present such spatial properties of the objects as position and shape, which are properties in virtue of which one can be said to be perceiving the object itself rather than its sensory properties. That is consistent with the idea that each of the senses presents certain properties not presented by any other (sight—colour, opacity; touch—rigidity, texture; etc.). The unification argument now runs as follows: one's capacity to keep track of a single object over time or across modalities requires one to be a single enduring subject.

Consider the argument from temporal tracking. This argument claims that an adequate theory of the self must be able to make out the distinction between tracking an object over time and recognizing it as the same at different times. That distinction is one between separating or not separating the information reaching the self from the object via the senses. However, the information from a single object is necessarily separated if the self is nothing but a causally interconnected sequence of bundles of mental and physical events. The argument is rehearsed in the following passage:

There can be no [integration] in the case of a mere thought-series, each thought having a fixed object, *as in the case of different bodies*. ... The phrase 'as in the case of different bodies' is to be explained thus. Just as even for the 'no-self' theorist, a thought-series where each thought

has a fixed object but is in a different body is not integrated, so too the objects of [the thoughts of] a single body ought not be integrated, as there is no difference [between the two cases].<sup>6</sup>

Why? The thought is that one who keeps track of an object in time does not 'separate' the information she receives from the object at different times (cf. Campbell 1989). Someone who *recognises* an object as the same as one previously encountered does so by assimilating the contents of two 'dossiers', one containing information derived from one's current perceptions, the other containing information from one's past perceptions. The problem for the reductionist is that it has become a substantive matter as to whether the current dossier contains information from the same object as the earlier one; that is, an act of judgement is implicit in the identification. So the critical distinction—between *tracking* an object over time and *recognising* an object as the same at different times—collapses.

There is a substantive question about the role cross-modal identities play in our mental lives. If one is at all tempted by that model of the sense faculties which likens them to channels of information, distinct conduits through which information from the object flows, then unification and organisation of the information becomes a substantive work of judgement. Surely, however, it is a mistake to think that when I am holding an object in my hands and simultaneously looking at it, I am judging that *this* is the same as *that* (the first perceptual demonstrative is grounded in touch, the second in sight). It is certainly not the case that the cross-modal identity is like the identity between Hesperus and Phosphorus, known *a posteriori* by means of an empirical inquiry in conjunction with background hypotheses and reasoning. Campbell (1989) points out that a subject simultaneously looking at and touching an object need make no division between her visual and tactual input, the cognitive skills in question belonging to a sub-personal level, part of the cognitive substratum that makes a conceptual life possible (1989: 283). We may also observe that there are distinctive kinds of cross-modal illusion (Michael Ayers 1991: I, 187), and this supports the suggestion that cross-modal identities exhibit the kind of 'belief-independence' described by Evans (1982:123). Ventriloquism affords an example—one hears the ventriloquist's voice as coming from the direction where one sees the puppet. Another example comes from experiments where the subject's visual field is inverted—here, since everything within the visual field is initially seen as inverted, the subject's frame of reference must come from outside the visual field, for example from proprioceptive information about the orientation of one's body.

If this is at all on the right lines, then the model of the senses as channels of information and the conception of the self as that which compares and combines their deliverances come to seem like twin elements in a philosoph-

---

<sup>6</sup> Vātsyāyana under *Nyāyasūtra* 1.1.10.



ical illusion. If cross-modal identities are perceived, not judged, then there is no work of comparison and combination for the self to do.

Chakrabarti (1992) argues that the distinction between tracking an object and judging it as the same at different times would in any case collapse if objects are themselves merely bundles of sensations, and not the common causes of such bundles: the 'notion of the self as a heap or stream of mental events [is] inconsistent with [the] distinction between properties of physical objects and the objects exemplifying those properties' (1992: 108). The argument he gives in fact pertains to a claim about self-consciousness, that if we are bundles, we will not have the 'framework of predication or exemplification' at our 'disposal' (1992: 109), and will therefore be unable to conceive of objects as the substrata of properties. Even if this were so, it would not follow that objects are not *in fact* the substrata of properties—we might simply be deluded. But it is not in any case correct to say that a reduced self cannot entertain subject-predicate thoughts. Indeed it can entertain even first person predications; self-ascriptive thoughts need not themselves be ascribed to a thinker (Parfit 1984: 225; Cassam 1997a: 183). The capacity to entertain self-ascriptive thought is a necessary condition for self-consciousness. Chakrabarti's argument again commits a 'content externalizing' fallacy.

Nevertheless, the unification version of the integration argument based on temporal tracking is unsound. A single subject of experience is not entailed by the mere existence of enduring dossiers of information pertaining to physical objects. One objection is simply that 'many people can consult the same filing cabinet'. The same dossier of information can be available to the successive temporal parts of a causally integrated perduring subject of experience. A second objection is that it does not in any case follow from the possibility of temporal tracking that dossiers of information must endure—persist through time by being wholly present at different times, rather than perdure—persist through time by having a series of temporal parts, each causally explanatory of and inheriting the content of its predecessor. There is no requirement that the causal explanation of the temporal continuity of a dossier mentions an identity judgement.<sup>7</sup> The requirement exists, as we are about to see, only on the explanation of one's capacity to think of one's perceptions in a certain way.

---

<sup>7</sup> The model of perceptual integration as an inference, construction or abduction is the preferred and perhaps only model available to those who take each sense modality as restricted to its own domain of 'proper objects'. For Plato's idea that the 'common objects' are 'things which the mind itself considers by means of itself', see his *Theaetetus* 184e8–185a8, 185e6–7, and Bostock 1988: 110–22. The Buddhist theory of 'restriction' (*vyavasthā*) and 'construction' (*kalpanā*) is described by Matilal 1986: 250–54.

## §2 THE INTEGRATION ARGUMENT

We now consider what is required of someone who has the capacity to think of their perceptions in different modalities as perceptions of one and the same object. The force of the argument is that one could not think of one's perceptions in different modalities as having a common object unless one conceived of one's experience as being of an objective world, and that this in turn requires a conception of the numerical identity of that to which one's perceptions belong: cross-modality requires objectivity requires unity. Parfit himself believed that the impersonal description thesis, the thesis that "though persons exist, we could give a *complete* description of reality *without* claiming that persons exist" (Parfit 1984: 212), is threatened by the neo-Kantian argument that "we could not have knowledge of the world about us unless we believe ourselves to be persons, with an awareness of our identity over time" (1984: 225). It is not clear that he ought to have been worried; there is no straightforward conflict between the argument that a conception of an objective world requires a conception of oneself as the numerically identical subject of one's experiences and the reductionist thesis that, from an external standpoint, it is possible to analyse the continued existence of a person in terms that do not presuppose the identity of the person over time. For this reason, while the third 'objectivity' version of the argument is stronger than the previous two, it is a stronger argument to a weaker conclusion, refuting not reductionism about the self but only a reductionist account of the sense of self.

Kant argued that it is not possible to have a conception of an objective world without thinking of that world as spatial, and of oneself as located within it and following a spatio-temporal route through it. A familiar neo-Kantian formulation of his argument runs as follows. A self-conscious subject is one who is in a position to think of their experience as including perceptions of objects in what Strawson (Strawson 1966: 88; cf. Cassam 1997a: 28) calls 'the weighty sense', that is, as being particular items which are capable of being perceived and of existing unperceived. An idea due to Evans (1985: 261–62) is that in order to make sense of the idea that one can perceive what can also exist unperceived, one must think of perception as having certain spatio-temporal *enabling conditions*, such that in order to perceive something one must be appropriately located—both spatially and temporally—with respect to it. One can then make sense of the fact that a perceivable object is not actually perceived by thinking that the enabling conditions for its perception are not satisfied. Grasping the idea that perception is subject to spatio-temporal enabling conditions requires that one think of perceiver and thing perceived as standing in a suitable spatio-temporal relation, and so of oneself as having a location in the world. Likewise, grasping the idea that a temporal sequence of perceptions are of one and the same

object requires that one think of the thing perceived and the perceiver as standing in a more or less stable spatial relation over a period of time, and so of oneself as following a continuous path through space.

Now the conception of an object appealed to in the integration argument is not that of objects 'in the weighty sense', objects which are perceived but capable of existing unperceived. The integration argument begins with the idea that one's experience is such that one can think of it as including distinct perceptions of the same object at a single time. For one's experience to satisfy this condition, one has to be able to think of it as including perceptions of objects which are, let us say, 'plurally perceivable', capable of being perceived more than once at the same time. 'At the same time' refers here to the time of the object and not to the time of the perceptions: one has to be able to think of one's experience as including distinct perceptions of the same 'temporal slice' of the object. This is what is right about thinking of the senses as channel-like conduits of information from the object.

What is it to be able to make sense of the idea that one's perceptions are of objects which are plurally perceptible, that is, to be able to think thoughts of the 'I touch what I see' type? The idea of an 'enabling' condition is not what is required here, for the contrast is not between perceiving and not perceiving. What one needs is the ability to apply the distinction between thinking of one's perceptions as plural perceptions of the same 'temporal slice' of the object, and thinking of them as being of different objects or of the same object at different times. That is, one must have a grasp of what might be called the *convergence conditions* for perception.

The Kantian strategy was to observe how someone who thinks of their perceptions as subject to enabling conditions must think of both the objects and the subject of perception as spatially located. There is a similar double requirement on one's possession of the concept of a convergence condition. Grasping the idea of one's distinct perceptions as being of the same temporal slice of a single object requires, it is claimed, that one thinks of both the objects and the subject of perception as common loci of multiple properties.

Consider first the requirement on objects. Thinking that a perception of something red and a perception of something firm are perceptions of a single object at a single time requires that one is able to think of the object as simultaneously both red and firm. Without a conception of objects as the common loci of many properties, one could not make sense of the idea that one has here plural perceptions of the state of a single object, and not that one's perceptions are of distinct objects or are of perceptions of distinct temporal slices of an object. So the capacity to think of the objects of one's perceptions as plurally perceivable requires that one thinks of them as substances, the common loci of many properties.

Compare: '[Not all objects are mere aggregates] because a single object can arise with many characteristics. Since the indicative function [of words] is subject to restrictions, there is no refutation [of this idea].'<sup>8</sup>

The commentator adds: 'When one thinks "that pot which I saw, I now touch" or "That which I touched, I now see", one does not grasp an aggregate of atoms, and an aggregate of atoms not being grasped, what is grasped is nothing but a single thing.' Can one not reply that a bundle too can be thought of as having many properties? No, for we must keep in mind the distinction between thinking of one's perceptions as being *of* a single object, and thinking of them as being *caused by* a single object. A bundle can be a common cause, but not a common 'accusative', of distinct perceptions.

How robust is the concept of objectivity which the idea of plural perceptibility sustains? One might doubt whether it sustains a notion of objects 'out there', unless it can be shown that thinking of objects as plurally perceptible requires, in addition, that one is able to think of them as objects 'in the weighty sense', as both perceptible and capable of existing unperceived. Imagine someone who thinks of objects as plurally perceptible and who has the following sequence of perceptions: first, both touching and seeing an object; then just touching it; then again both touching and seeing it; and finally just seeing it. This person is able to think of the object as existing even when unseen, and as existing even when untouched. Can we now argue that, if he can conceive of it as unseen and as untouched, then he can conceive of it as both unseen and untouched? If so, then since the argument could run for any of the modalities, it will follow that he must be able to conceive of the object as unperceived altogether.

There is, of course, a logical gap between the claim that one can conceive of an object as existing independently of any one perception and the claim that one can conceive it as existing independently of every perception. Notice, however, that the concept of an object sustained by cross-modality is considerably more robust than the one to which Strawson refers in the hypothesis of a purely sense-datum experience, in which the objects of awareness are such that "there was no distinction to be drawn between the order and arrangement of the objects and the order and arrangement of the subject's experiences or awareness of them" (Strawson 1966: 99). For a subject who is capable of thinking of the objects of experience as existing untouched or as existing unseen is certainly capable of applying the distinction between her experience and what her experience is of. And it is precisely the capacity to apply that distinction that possession of the concept of an objective world requires (cf. Strawson 1966: 73).

How must one conceive of oneself if one is to be able to make sense of the idea that perception has convergence conditions? One has to think of

---

<sup>8</sup> *Nyāyasūtra* 4.1.35–36; the commentator is Vātsyāyana.

one's perceptions as integrable, as capable of converging on the very same object. In addition, one has to do this without, as it were, begging any substantive question about the identity of the object in the two perceptions. Thinking of one's perceptions in distinct modalities as having the same object is not a matter of thinking that some object *a* is being seen, and that some object *b* is being touched, and judging that  $a = b$ . Imagine *looking* at an object one is also *holding* in one's hand, an apple, say. One turns it round in one's hand, perceives that it is red and firm, that it has a certain shape and is a certain distance away. What is involved in the idea that it is the same object that is both seen and touched? It will not do to assimilate this to a case of the perceiver judging that that<sub>visually presented</sub> object is the same as that<sub>haptically presented</sub> object. For there is no separation in the information one derives from an object simultaneously touched and seen, of the sort that could ground distinct demonstrative references to it, and so no question here of making an informative identity judgement. This is the point of the observation that the idea of perceptual integration is not a matter of an idea of recognition or re-identification,<sup>9</sup> and also of the idea that the two demonstratives have the same sense.<sup>10</sup> The analogy with binocular vision is suggestive: seeing an object with both eyes does not involve any act of judgement that the object perceived by the left eye is identical to that perceived by the right eye.<sup>11</sup>

A further distinction is that between thinking of one's perceptions in distinct modalities as being *of* the same object, and thinking merely of them as being *caused by* the same object. What is it to take a perception as being *of*, rather than merely *from*, an object? It is, at the very least, to regard the perception as locating the spatial boundaries (shape and size) of the object.<sup>12</sup> It is for this reason that the integration argument is framed with reference to sight and touch, for it is only sight and touch that sustain the capacity to identify spatial boundaries.<sup>13</sup>

---

<sup>9</sup> See Udayana 1986: 752.

<sup>10</sup> See Campbell 1989 and Ganeri 1999a: 147–8.

<sup>11</sup> I borrow the analogy, but not its significance, from Nyāyasūtra 3.1.7.

<sup>12</sup> The Nyāya view is that it is a requirement on *object* perception that one can apprehend the object's shape. Īrīdhara clearly states that 'grasping a single object in both sight and touch is explained by assuming that it has a specific shape.' Halbfass 1992: 104, commenting on this, concludes that 'we are not dealing with an underlying substrate, but with shape as the common datum of tactual and visual perception.' This does not follow: the point is rather that we perceive *objects* in sight and touch because sight and touch inform us about the physical boundaries of the object. However, the role of sortal concepts here should not be overlooked—see Strawson 1974: 51 on the way concepts of physical objects serve to 'link or combine different perceptions as perceptions of the same object.'

<sup>13</sup> Campbell (1989: 289) notes that, unlike the other modalities, 'sight and touch both have the capacity to sustain, of themselves, our ordinary conceptions of enduring spatial things'. This is, of course, the reason for the Nyāya appeal to sight and touch in their version of the integration argument.

It has now to be shown that to think of one's perceptions in different modalities as capable of converging on a single object, one has to think of oneself as the single locus of those perceptions. The argument here turns on the idea of commensuration. If one did not think of oneself as a single subject of one's perceptions, then a substantive question about the position, shape and size of the object would arise: namely, whether the position, shape and size of the object as located by one's visual perception is the same as its position, shape and size as located by one's haptic perception. Suppose one takes oneself to have a visual perception of an apple and a tactual perception of an apple. The thought that one is seeing and touching the very same apple depends on the idea that the apple visually perceived has the same size and position as the apple haptically perceived. If the two perceptions had different subjects, then a substantive identity question would arise, namely, whether the *scale* and the *origin* of the spatial map employed in the location of the object in visual perception is the same as the scale and the origin of the spatial map employed in the location of the object in haptic perception. For the perceived size of the object is correlated to the scale, and the perceived location to the origin, of the spatial map. We have seen, however, that the idea that one's perceptions are subject to cross-modal convergence conditions carries with it the idea that no substantive identity question of this sort arises. One does not think of oneself as having to judge that the apple seen is the same as the apple touched. The force of this argument is that one who thinks of their perceptions as cross-modally integrated must regard those perceptions as belonging to—i.e. as property-tropes of—a *single* perceptual and reasoning system, one which draws upon a single way of representing objects' spatial properties (cf. Eilan 1993: 249–51).

The idea that it is necessary for self-consciousness that one conceives of oneself as a substance might be compared with the idea that one must conceive of oneself as a physical object. A question then is what it is to think of oneself as a physical object. In Cassam's view (1997b), it is to think of oneself as something which has the Lockean primary qualities, shape, place and solidity. According to Campbell (1997), it is to think of oneself as something which is internally causally connected and as having the capacity to function as the common cause of many phenomena. In response to the worry (cf. Cassam 1997b) that causal structure alone will not sustain a conception of the self as a physical object, rather than as an object of a more attenuated type (a process, for example), Campbell introduces (1997: 662–63) the idea of a 'categorical ground' of causal capacities:

your grasp of the identity of the self is knowledge of its place in a network of causal-explanatory relations; sameness of the self over time is the categorical ground which explains the internal causal connectedness of the self over time.

That clarification considerably narrows the gap between Campbell and the conception of the self as a *substance*, an enduring, common locus of many properties. For a substance is, among other things, the common locus of many *causal* properties.

Does it follow that the bundle theorist's claim to conceive of an object as an aggregate of properties is mistaken? No. For if the bundle is conceived as the common locus of multiple properties, then it is after all conceived as a substance. The bundle theory properly pertains to the casual microstructure of substances. On the other hand, if the bundle is conceived as an object but not a substance, then it is not a candidate for that onto which one conceives of one's perceptions as converging.

If we are to think that it is the same object that is both seen and touched, then we must expect changes in one's visual representation of the place of the object to be correlated with changes in one's tactual representation of its place. As one stretches out one's arm, one expects the object to *look* further away. The thought that these perceptions are of the same object is linked to the thought that tactual and visual representations of the object's location vary synchronically. One can make sense of that expectation only if one thinks of the perceptions as all locating the object with respect to a single spatial map, and hence of all the perceptions as one's own. The idea that one appeals to a backwards projection of the *egocentric* content of one's perception—that objects are represented as a certain distance away, to the left or the right, and so on—as a way of placing oneself on a spatial map, should not be confused with the thought that this is what grounds one's conception of oneself as spatially located. For it can at best ground a 'geometric' conception of oneself as occupying a point of view. This is all that is entailed too by the conception of the senses as being like so many windows opening out onto the world, with the self as an 'onlooker'.<sup>14</sup>

Let me summarise. I have distinguished three versions of the argument from cross-modality. According to the first version of the argument, what needs to be explained is one's capacity to identify an object touched as the same as an object simultaneously seen. According to the second, what needs to be explained is one's capacity, having once seen an object, to reidentify that same object by touch alone. According to the third version of the argument, what needs to be explained is one's capacity to think of one's perceptions in different modalities as perceptions of one and the same object. The first version falsely assumes a model of the senses as effecting a division in the input of sensory information. The second version appeals to an explanans insufficiently distinct from the explanandum. The third version is a stronger argument to a weaker conclusion: it seems to establish that one must conceive of oneself substantially, as the numerically identical owner of one's

---

<sup>14</sup> The conception is Praśastapāda's; see Chakrabarti (1992).

experiences if one is capable of cross-modal integrations. This conclusion is in agreement with recent work in developmental psychology claiming to show that an infant's cross-modal capacities are essentially implicated in their development of a sense of self (Meltzoff 1990, 1993a, 1993b).

### §3 THE REDUCTIONIST ACCOUNT OF THE SELF

We began by considering what is involved in the capacity to understand self-ascriptive judgements of the form 'I touch what I see', and we have been arguing that one must conceive of both the objects and the subject of perception as substances, the substrata of many properties. There is, as we noted before, no swift route from the epistemology of self-consciousness to the metaphysics of the self. To find a way through, we will develop an idea hinted at by a later philosopher:

The integrative judgement 'I am now touching the pot I saw' proves that the earlier and later perceptions have the same agent, as it couldn't occur if the agents are different...For the thought 'I Maitra am now touching the pot I Caitra saw' is an impossible one.<sup>15</sup>

The idea is that there is a connection between the possibility of integrative self-ascription and the fact that the person to whom the perceptions are ascribed is numerically identical. The suggestion is that whatever it is that fixes the content of first person thoughts does so in such a way that two tokens of the first person, as they occur in the same integrative thought cannot fail to co-refer, and that this coreference is what ensures that the subjects of the integrated perceptions are identical. Now the reductionist is not committed to denying that one can have thoughts which are genuinely first-personal and self-ascriptive (Parfit 1984: 225–26); what he is committed to denying is that it is necessary to ascribe those thoughts to a thinker. That is, he claims that there is an impersonal level of description, a level which will serve as the reductive basis for talk about persons, in which 'the subject of experiences is mentioned only in the *content* of the thought' (Parfit 1984: 225). The impersonal paraphrase of 'Sid thinks: I touch what I see' might be something like 'The thought: I touch what I see, occurs as part of this aggregate of psychological and physical events'. The issue is whether such paraphrases are genuinely reductive. The idea that they are not genuinely reductive is based on the thought that the paraphrase itself depends on an implicit reference to persons.

What we propose is an argument derived, not from the token-reflexive rule for the first-person (as in Campbell 1994: 162–63), but on its anaphoric behaviour spanning intensional operators. Consider the following pair of inferences:

---

<sup>15</sup> Raghunātha Śīromaṇi. 1986: 756.



[A] I touch the pot that I see.

∴ I touch the pot.

and

[B] I touch the pot that I see.

∴ I see the pot.

Such inferences are part of what Evans calls the ‘functional characterization’ of I-thoughts (Evans 1982: 262; Cassam 1997a: 188–89), inferences whose validity is partly constitutive of the possession of the concept. Clearly, these inferences are valid only when the tokens of the first person corefer, and so when the same person is the subject of both perceptions. It would not be valid to infer from ‘I touch the pot that I see’, thought by Caitra, to ‘I touch the pot’, thought by Maitra. Neither would it be valid to infer from ‘I touch the pot that I see,’ thought by Caitra, to ‘I see the pot,’ thought by Maitra. This is the force of the quoted passage. The problem for a supporter of the impersonal description thesis is how to retain those patterns of validity without mentioning persons (as the referents of names or of the first person pronoun).

In the impersonal paraphrase, inference [A] becomes:

It is thought by this aggregate: I touch the pot that I see.

∴ It is thought by this aggregate: I touch the pot.

The argument against the reductionist now is this: if the only thing that makes such paraphrases succeed is that the aggregate is identified as the reference of a token of the first person, then the paraphrase is not genuinely impersonal, for the concept of a person is being used to demarcate aggregates.

What then is it that fixes the content of the ascribed thought, and in particular the reference of the first person? My suggestion is that it is the existence of an *anaphoric rule* spanning the intensional context. It is surely just the anaphoric rule that a token of ‘I’, when embedded in a speech or propositional attitude report, refers to the subject of the report. If I report Sid’s utterance by saying ‘Sid said: I am F’, the first person refers to Sid. Just this rule is the rule governing uses of the first person which occur *within* speech reports.<sup>16</sup> The first-person does not always take ‘wide scope’—in contexts that are weakly quotational, instead of forcing a pronominal sub-

---

<sup>16</sup> The rule is clearly formulated by Gadādhara, in his discussion of the role of the first person within speech reports (Gadādhara 1927: 112–20). For further discussion of Gadādhara’s account of the role of the first-person within speech-reports, see Ganeri 1999a: 235–244.

stitution, there is instead a reference-shift from the utterer to the subject. The rule for the unembedded use of the first person, the usual token-reflexive rule that any utterance of a token of 'I' refers to its utterer, is suspended in weakly quotational contexts. The contexts introduced by the impersonal description thesis are weakly quotational; so the applicable rule is not the token-reflexive rule but the anaphoric rule. Applying the anaphoric rule here, in the paraphrase 'It is thought by this aggregate: I see the pot,' the aggregate is denoted only as the referent of the first person. Nothing short of relativization to persons will get the content-specifications of, and so the inferential relations between, self-ascriptive thoughts right.

Notice that in this phase of the argument, nothing depends on the embedded predicate—the integration of visual and haptic content bears only on the role of the first-person *within* belief contexts. The argument is: if the role of the first-person is substantival within belief contexts, and if, by virtue of the anaphoric rule, its role within and without belief contexts is the same, then its role outside belief contexts must be substantival also. The anaphoric rule for the first person spans vehicle and content. This rule is what licences the argument from a fact about the content of self-ascriptions of integrative judgements to a fact about the vehicle, without any conflation of properties of the content with properties of the vehicle.

So, to conclude, the possibility of self-ascriptive cross-modal perceptual integration requires a person to be a substantial subject of experience. The reductionist's existentially quantified substratum-free paraphrase of first-person attributions fails to preserve the validity of a distinct pattern of inference, one in which there is anaphoric binding out of an intensional context. Those anaphoric relations are the bridge between the substantival conceptual role of the first-person and its use as a referring expression.<sup>17</sup>

### References

- Ayers, Michael. 1991. *Locke*. 2 vols. London: Routledge.
- Bostock, David. 1988. *Plato's Theaetetus*. Oxford: Clarendon Press.
- Campbell, John. 1989. 'Is Sense Transparent?' *Proceedings of the Aristotelian Society* : 273–292.
- Campbell, John. 1994. *Past, Space, & Self*. Cambridge, Mass.: MIT Press.
- Campbell, John. 1997. 'Reply to Cassam.' *Philosophy and Phenomenological Research* Vol. LVII, No. 3: 660–64.
- Cassam, Quassim. 1997a. *Self and World*. Oxford: Clarendon Press.

---

<sup>17</sup> Many thanks to Arindam Chakrabarti, Chakravarthi Ram-Prasad, Paul Noordhof, Mark Siderits and Richard Sorabji, from whose comments I have benefited greatly. An earlier version of this paper was read at a panel on Indian theories of reference, truth and perception at the World Congress in Philosophy, Boston, 1998, organised by Arindam Chakrabarti.

- Cassam, Quassim. 1997b. 'Subjects and Objects.' *Philosophy and Phenomenological Research* Vol. LVII, No. 3: 643–48.
- Chakrabarti, Arindam. 1992. "I Touch What I Saw." *Philosophy and Phenomenological Research* Vol. LII, No. 1: 103–117.
- Chakrabarti, Kisor Kumar. 1999. *Classical Indian Philosophy of Mind: The Nyāya Dualist Tradition*. Albany: State University of New York Press.
- Duerlinger, James. 1993. 'Reductionist and Nonreductionist Theories of Persons in Indian Buddhist Philosophy.' *Journal of Indian Philosophy* 21: 79–101.
- Eilan, Naomi. 1993. 'Molyneux's Question and the Idea of an External World.' In Eilan et al. (eds.) 1993: 236–255.
- Eilan, Naomi, McCarthy, Rosaleen and Brewer, Bill. 1993. *Spatial Representation: Problems in Philosophy and Psychology*. Oxford: Blackwell.
- Evans, Gareth. 1982. *The Varieties of Reference*. Oxford: Clarendon Press.
- Evans, Gareth. 1985. 'Molyneux's Question'. In his *Collected Papers*. Oxford: Clarendon Press.
- Gadādhara. 1927. *Śaktivāda*. Edited by G. D. Sastri. Benares: Kashi Sanskrit Series.
- Ganeri, Jonardon. 1999a. *Semantic Powers: Meaning and the Means of Knowing in Classical Indian Philosophy*. Oxford: Clarendon Press.
- Ganeri, Jonardon. 1999b. 'Self-Intimation, Memory and Personal Identity.' *Journal of Indian Philosophy* Vol. 27: 469–483.
- Gautama. 1985. *Nyāyadarśanam*. Edited by Taranatha Nyaya-Tarkatirtha and Amarendramohan Tarkatirtha. New Delhi: Munshiram Manoharlal Publishers.
- Halbfass, Wilhelm. 1992. *On Being and What There Is: Classical Vaiśeṣika and the History of Indian Ontology*. New York: State University of New York Press.
- Lewis, David. 1986. *On the Plurality of Worlds*. Oxford: Basil Blackwell.
- Matilal, Bimal K. 1986. *Perception*. Oxford: Clarendon Press.
- Matilal, Bimal K. 1994. "The Perception of Self in Indian Tradition." In Roger T. Ames et al. (eds.), *Self as Person in Asian Theory and Practice*. New York: SUNY Press.
- Meltzoff, Andrew. 1990. 'Foundations for Developing a Concept of Self.' In Dante Cicchetti and Marjorie Beeghly eds. *The Self in Transition*. Chicago: University of Chicago Press.
- Meltzoff, Andrew. 1993a. 'The Role of Imitation in Understanding Persons and Developing a Theory of Mind.' In Simon Baron-Cohen, Helen Tager-Flusberg and Donald Cohen eds. *Understanding Other Minds: Perspectives from Autism*. Oxford: Oxford University Press.
- Meltzoff, Andrew. 1993b. 'Molyneux's Babies: Cross-modal Perception, Imitation, and the Mind of the Preverbal Infant.' In Eilan et al. 1993.

- Millikan, Ruth Garrett. 1991. 'Perceptual Content and Fregean Myth.' *Mind* Vol. 100, No. 1: 1–21.
- Mohanty, Jitendra Nath. 1992. *Reason and Tradition in Indian Thought*. Oxford: Clarendon Press.
- Parfit, Derek. 1984. *Reasons and Persons*. Oxford: Clarendon Press.
- Strawson, Peter. 1966. *The Bounds of Sense: An Essay on Kant's Critique of Pure Reason*. London and New York: Methuen.
- Strawson, Peter. 1974. 'Imagination and Perception'. In his *Freedom and Resentment*. London and New York: Methuen.
- Russell, Bertrand. 1912. *The Problems of Philosophy*. London: Williams and Norgate.
- Taber, John. A. 1990. "The Mīmāṃsā Theory of Self-Recognition." *Philosophy East & West* Vol. 40, No. 1: 35–57.
- Udayana. 1986. *Ātmatattvaviveka*. Edited by V. P. Dvivedin and L. S. Dravida. Bibliotheca Indica No. 170. Calcutta: The Asiatic Society.