Perception, Imagination and Demonstrative Reference:
A Sellarsian Account

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ABSTRACT
In an important late paper, 'The Role of the Imagination in Kant's Theory of Experience', Sellars brings together ideas about the complex nature of perceptual consciousness and the content of perceptual demonstratives. In a development of his previous ideas about perception, he clarifies the key role played by the imagination in integrating the conceptual and sensory (or phenomenal) components of perceptual experience. I propose a modification of Sellars's views on the imagination, and show how the resulting conception explains the different ways in which experiences can be conceptualised. I then discuss how the account enables us to understand exactly how, according to the Sellarsian critical realist analysis of experience, we are able to make demonstrative judgements about physical objects, while avoiding a problematic appeal to neo-Russellian notions of acquaintance.

Introduction: Sellars and the Structure of Perceptual Experience
Sellars wrote a good deal on perception, but he never produced a synoptic account of the topic. His treatment of perception, although touching on a wide variety of issues, is incomplete, and scattered across a number of papers spanning thirty years from the nineteen-fifties until the early nineteen-eighties. He makes no attempt to resolve all the problems faced by the form of Critical Realism he endorses. Even in the more extended discussions, *Empiricism and the Philosophy of Mind* (EPM), 'Phenomenalism' (PH), *The Structure of Knowledge* (SK), and his *Carus Lectures* (FMPP), his coverage of perceptual issues is very selective.[1]

The Critical Realist theory that Sellars adopts in EPM and his other writings has sometimes been criticised on the grounds that it amounts to a form of "indirect realism", and as such is unable to account for the demonstrative character of many perceptual judgements.[2] This assessment, I argue, rests on an incomplete grasp of the nature of Critical Realism and the resources available to that theory. My aim in this paper is to defend aspects of the Sellarsian account of perception, and to show how the Critical Realist account of demonstrative reference encounters fewer problems than competing theories. In outlining the Sellarsian position I shall pay special attention to Sellars's discussion of the essential role of the imagination in perception, and show how this notion constitutes a key element in any account of perceptually based reference. For the most part I shall concentrate here on vision as a paradigm case of distance perception.[3]

According to the Critical Realist theory of perception that Sellars upholds, a subject S perceives some particular physical object X, in the full sense that includes conceptual activity, if and only if the following conditions hold:

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[1] Sellars (1956), (1963), (1975) and (1981). I shall refer in the text to works from Sellars by their conventional abbreviations.
[2] See, for example, the criticisms in Smith (1982), chapter 2. The general position is also attacked in McDowell (1986) and (1998). I discuss these in more detail below.
[3] For reasons I discuss in my (2007), chapter 7, distance perception forms a distinctive and important class of perceptual activity. Several background assumptions concerning the basic structure of the Critical Realist theory are defended in detail in that work. The present paper seeks to extend the discussion of demonstratively based reference that I set out there in chapter 10.

1) The object X exists;

2) The subject S has an experience E, consisting of two components:
(i) An inner sensory, or phenomenal state E,
which causes:
(ii) An episode involving concepts of at least a low-level classificatory kind – a "perceptual taking": an intentional representational episode referring to a physical object;

3) The object X causes E to come about by an appropriate causal chain C, where C can implicitly be understood (by anyone who grasps the ordinary concept of perceiving) as the kind of causal chain which 'allows perceivers to survive in a hostile world'.[4]

In standard veridical cases of perception, the subject is *directly* aware, at the conceptual level, of the physical object he or she perceives; that is, the subject forms a noninferential perceptual thought, or "taking", referring to an *external* object. Nevertheless, the subject is at the same time *immediately* aware, nonconceptually, of inner phenomenal (or sensory) states that mediate the perception of the external object.[5]

This means that the Critical Realist is committed to three central theses concerning the perception of physical objects:

(A) *The Kantian Thesis*
Perceptual experience contains two components: first, there is a phenomenal (or sensory) nonconceptual element, and, second, a conceptual element, or perceptual thought. 'Conceptual' here is to be understood widely; it does not necessarily imply the ability to form judgements and have self-awareness, but it does involve the exercise of a classificatory ability. In EPM Sellars refers to these two contrasting states of mind as the 'descriptive' and the 'propositional' components of experience, respectively. In later work, they are referred to as *sensa* (or *sensing states*), and the subject's *perceptual taking*.[6]

(B) *The Inner State thesis*
Perceptual experiences are inner states. When a subject sees an object such as a red ball in normal daylight conditions, the reddish expanse involved in the experience is an inner mediating phenomenal state, a state that is in some way closely connected with the subject's brain, and is logically distinct from (though causally connected with) the actual physical object seen.[7] The perceived object transcends the phenomenal qualities

[4] The quoted phrase is from Sellars, SSOP (1982), sec. 89; precisely how this idea is to be cashed out is one of the points I shall explain in due course.
[5] There are good reasons for referring to the (*outer*) perceived object – usually some physical object in the subject's surroundings – as 'external' to the *inner* phenomenal states of which the subject is immediately aware; see my (2007), chapters 3 and 4.
[6] See Sellars SRPC (1977) and SSOP (1981); in EPM (1956), the descriptive content is also referred to as 'the sense-impression'.
[7] Sellars spells out the basic Critical Realist ideas in various places; in addition to the works cited above, see also PR (1955), SRPC (1977) and IKTE (1978). For a good account of Sellars's views on the nature of phenomenal qualities, see Rosenberg (1982).

that the subject is immediately aware of at the nonconceptual level. There are, nevertheless, important conceptual connections between (private) inner experiences and (public) external objects.

(C) *The Phenomenological Directness thesis*

The objects of perception are external, public objects. In having an ordinary perceptual experience – such as, for example, having a visual experience in seeing a dog chase after a ball – the concepts entertained by the subject in the perceptual taking refer directly to the physical objects he or she takes to be situated in the local environment, without any inference from a prior conceptual state. Such perceptual takings are caused by the phenomenal state immediately present in consciousness, but that phenomenal state is not the focus of the perception. Thus Sellars states in (SK):

> The objects of perceptual knowledge are the objects referred to in the propositional component of the perceptual experience, and these are physical objects, not private, subjective (let alone theoretical) items.[8]

In emphasising the fact that perceptual experiences are directed, without inference, upon external physical objects, Sellars is opposing traditional sense-data theories of the kind originally put forward by Russell and Moore.[9] It is, however, important to note that he is *not* objecting to the idea that the perceptual takings are mediated by inner phenomenal states.

According to the Sellarsian account, in normal circumstances I respond to visual input by adopting what Rosenberg calls 'the mode of perception'.[10] In looking at a dog, my perceptual taking is focused on the dog I see: I directly take there to be a dog present, without making any inference from some prior belief about my own inner experiences. While my perceptual taking is, in this sense, psychologically direct, it nevertheless has presuppositions that, if prompted, I could articulate. These relate to my own capacity as a competent perceiver, and to other contextual matters (e.g. my background belief that the lighting is normal). What is perceptually taken is represented by a complex denoting phrase, such as: 'This black dog …', or 'This brick with a red and rectangular facing surface …'.[11]

The perceptual taking is accompanied by the inner phenomenal state which causes it, and which, by virtue of its guiding role, forms a part of the experience. There is no conflict with common-sense assumptions about the directness of perception here, because I do not normally conceptualise my phenomenal state as such. However, if what Sellars claims in the later parts of EPM and elsewhere is correct, then my phenomenal state can, on occasion, also become the focus of my direct thoughts. Sellars argues in EPM that introspection provides evidence about the nature of experience, and through it we become able to correctly report our impressions, that is, our phenomenal, or sensory states. We respond to perceptual experiences "in the mode of

[8] Sellars (1975) section 59.
[9] See for example Russell (1914b) and Moore (1913-14).
[10] See Rosenberg (2000)
[11] Sellars, SRPC (1977) Part II; IKTE (1978) sec. 10.

introspection".[12] I can reflect on the experience I am having, and wonder whether it is an illusory one. It follows that concepts can be intimately connected with experiences in two quite different ways. Firstly, we can employ concepts referring directly to physical objects that transcend inner experience; such concept use is then *guided by* a nonconceptual awareness of the phenomenal states. Secondly, when we adopt an introspective mode of attention, we are (causally) prompted to exercise concepts *referring directly* to the inner phenomenal states themselves.

One set of problems facing a Critical Realist theory of perception of the kind upheld by Sellars therefore consists in explaining, more fully, how it comes about that we can conceptualise our experiences in two different ways, so that in the usual case we are able to make demonstrative reference to objects external to phenomenal consciousness. A second set of problems that arises for the Critical Realist account concerns the relation between the two components of experience.[13]. Various writers have emphasised the phenomenological unity of experience – so it can be asked, how exactly do the concepts we exercise in perception harmonise with the phenomenal aspect, so that experience presents itself phenomenologically as a unity?[14] In this paper I will show how the Critical Realist can provide answers to these two problems, drawing upon Sellars's approach to these issues in his later work.

The Role of the Productive Imagination in Experience:

In an important late paper, 'The Role of Imagination in Kant's Theory of Experience' (IKTE), Sellars adds a further dimension to the account of perceptual consciousness defended in his earlier work, spelling out the key role played by the imagination in accounting for the unity of perceptual experience.[15] In this paper Sellars appeals, specifically, to the role of the *productive imagination*, developing ideas derived from Kant. The productive imagination is an extension of the workings of the understanding. Working from the Critical Realist assumption that visual experience contains, at a fundamental level, an inner phenomenal component, and also a conceptual classificatory component of some kind, Sellars shows how the productive imagination plays two interconnected roles in the generation of the full-blown perceptual experience:

(i) Firstly, the imagination, through its exercise in the understanding, leads to the subject *conceiving* the external object seen, as the subject takes it, *objectively*, to be. The concepts exercised by the subject refer, in the standard case, to external physical objects that are potentially independent of any observer.

(ii) Secondly, the imagination "converts" the subject's visual sensing– the underlying nonconceptual phenomenal state – into something altogether much richer, through the fusion of *images* with the visual sensing of a coloured, spatial array. The result of the imagination working on visual input from the perceptual object is a

[12] See Sellars (1956), Part XVI, sec. 62; there are also passages in later work that support this view, such as the last part of SRPC (1977); but for a slightly different interpretation, see Rosenberg (2000).

[13] A good discussion of Sellars's account of the roles of the two components of perceptual experience, and of his reasons for that account, can be found in Williams (2006).

[14] The phenomenological unity of perceptual experience is a point that Firth emphasises (1949/50). As David Smith notes, the phenomenal and conceptual components of experience cannot simple be causally linked accompaniments of each other: Smith (2002), chapter 2.

[15] Sellars (1978). I should emphasise that the term 'imagination' is used in a quasi-technical sense that derives from Kant.

subjective, *perspectival* "sense-image-model" – a notion that I shall enlarge upon below. Subjects are able to generate appropriate images in experience because of an underlying conceptual grasp of the spatial nature of physical objects in general, even when they lack a grasp of the concept of the *specific* kind of object physically present.

Thus according to Sellars's model, there are two dimensions to the exercise of concepts in the perception. My *seeing* an object, such as a red apple, is a complex affair.[16] At the *conceptual* level, my perceptual takings, in the form of demonstrative thoughts, focus on the apple itself. I conceive of this object, this apple, as an independent space-occupying thing. I take it to be solid, and to have an exterior surface hidden from view. At the *nonconceptual* level, I am aware of a visual phenomenal state caused by the apple. This consists, at a basic level, of a sensing state, that is, of visual sensations of an expanse of red. Through the exercise of general concepts of physical objects, this underlying sensing state is interwoven with images to form a perspectival structure, a sense-image model, which (in an informational sense) represents the apple. Sellars is conceding to phenomenologists that visual experience is not just a matter of having visual sensations corresponding to the "two-and-a-half" dimensional surfaces of things, accompanied by beliefs about the objective spatial nature of things. He wants to do justice to the phenomenological fact that we seem to experience more than surfaces – we experience objects as solid, extended into space, having depth and hidden parts, and so on.[17] The apple I see is somehow in my consciousness as a whole, three dimensional object, a volume of edible white fruit, enclosed in its red-coloured skin.

For Sellars, the observable qualities of the apple, such as its colour, enter into visual experience in three different ways. By virtue of my perceptual thoughts, I may *take* what I see to be a red apple: I *classify* it as red. But because I am not just thinking about the apple there is also immediately present in my consciousness a *red phenomenal expanse*, roughly corresponding to the facing surface of the apple. In visual experience the phenomenal redness has *actual* existence in my consciousness. In addition, I see the apple, somehow, to *contain* a volume of white. Hence, according to Sellars, 'an actual volume of white is present in experience [in the form of an *image*], in a way which parallels the presence of the red. We experience the red to contain the white.'[18] Together with the imagined white of the apple, there may be, in my perceptual experience of it, further imagined features of juiciness and coolness. Sellars claims:

> But while these features are not seen, they are not *merely* believed in. These features are present in the object of perception as actualities. They are present by virtue of being imagined.[19]

So such features, which are not directly seen *of* the apple, are still importantly present, in the form of *image states* in experience. The imagination operates at two levels. It is a blend of imaging and conceiving.

The sense-image-model or structure of the apple comprises the totality of what is *present*, in the nonconceptual sense, in experience; it thus combines contributions from the senses and from the imagination. The model is, necessarily, *perspectival*: it

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[16] Although Sellars is ostensibly concentrating on Kant's views of the role of concepts in perception in his (1978), he is clearly endorsing the Kantian picture.
[17] Sellars (1978), Part II passim.
[18] Sellars (1978), sec. 13.
[19] Sellars, (1978), sec. 21.

represents the object seen from the point of view of the subject (in the informational sense). Such a structure is subjective, and transient. But it is only grasped, because we exercise concepts in relation to it. I am conscious of the apple in virtue of conceptualising my inner experience, the perspectival sense-image-model, *as* a cool, juicy, solid, red-surfaced apple; I thus think of the apple as an independent, *objective*, non-perspectival, enduring thing.

It must be stressed that I am not usually aware, conceptually, of the sense-images-models *as such*. But such structures both guide and, through feedback, are guided by my conceptual interpretation of the object I take myself to be seeing. The sense-image-model of the dog approximates to what some philosophers have called the non-epistemic *appearance* of the dog, understood as an inner state.[20] At the *phenomenal, nonconceptual,* level, images of the dog are combined with the visual sensations into a unified structure, a perspectival sense-image-model.

One further, very important, element needs to be added to the analysis. Sellars speaks of the concepts we exercise in perceptual experience as connected with sets or '*sequences of sense-image-models'*, in the plural. To grasp the concept of an objective kind, such as an apple, or dog, in the way that enables me to apply it directly in experience, entails that I understand what it is like to perceive that object from different points of view, and through time. This leads to what Sellars, following Kant, calls the *schema* of an object. The schema of an object derives from the dual concepts I exercise of that kind of object, and also of my own body, as these are spatially related. It is, in effect, a *recipe* that gives rise to a grasp of the possible experiences of observing that object. In order to grasp what a directly recognisable kind such as a dog is, I must appreciate what it is like to see the dog from different points of view. The schema of a concept of an object of kind F relates to my implicit grasp of sequences of perspectival sense-image-models of myself looking at an object of that kind F. As Sellars expresses the point, using the example of a pyramid:

> The concept of a red pyramid standing in various relations to a perceiver entails a family of concepts pertaining to sequences of perspectival image-models of oneself-confronting-a-pyramid.[21]

A Modification of the Sellarsian Analysis:
To what extent should we accept Sellars's analysis? I am assuming in this paper that Sellars is entirely correct to treat the phenomenal aspect of experience as an *inner* state.[22] But I don't find Sellars's claims about the way that images are usually present in experience entirely convincing, and in one rather dense footnote he allows that he may be conceding too much to the claims of phenomenology.

Perhaps in anticipation of eating an apple I may form an image of its white juicy centre, but I don't in corresponding fashion normally form an occurrent *image* of the whole volume of flesh contained within a dog's furry exterior, although I may imagine it getting up and wagging its tail. Yet I still experience the dog as a solid, three-dimensional physical thing. So what explains the phenomenological difference? I

[20] See for example the discussion in Chisholm (1957), chapter 4, and compare also Jackson on the phenomenal sense of 'looks' (1977), chapter 2.
[21] Sellars (1978), sec. 33.
[22] I defend this view at length in chapters 3, 4, and 5 of my (2007). See also deVries (2006) and Williams (2006).

suggest that what accounts for the different kinds of images I form are the *actions* that I would be likely to carry out in respect of the two kinds of thing, together also with facts about the behaviour (or lack of it) of the kinds themselves. Unlike some contemporary British artists, I don't usually envisage cutting the dog into two halves and displaying its insides. But I may well anticipate biting into the apple, and in consequence becoming perceptually aware of its white interior. I either *expect* to become perceptually aware of different aspects of the objects I engage with, or, at the very least, I am *prepared for* typical changes in their appearance. But the kinds of changes I expect differ from case to case. Exercising the recognitional concept of an object of a kind F is connected with my imagining, in this more dispositional sense, further experiences corresponding to my seeing the different aspects the object that I normally come in perceptual contact with. Sometimes such further experiences would result from the object's own behaviour. What I do imagine in the case of the dog are not its insides, but how it might move and take up a different position. This explains the difference noted above between the two examples.

It might also be questioned whether actual images occur as extensively in experience as Sellars seems to be suggesting. Research has shown that people vary considerably in the extent to which they form actual images in consciousness. Some people hardly construct any visual images at all when they think and perceive, whilst at the opposite end of the spectrum there exist subjects like the one described by Luria, whose conscious life seems to revolve around the production of a great many, moderately stable images.[23]

These points suggest a plausible modification of Sellars's claims about the role of the productive imagination, one that is still consistent with his central ideas about the structure of experience. Instead of construing the role of the imagination as essentially connected with the generation of occurrent images in consciousness, we should consider its dispositional manifestations. There are many objects that we recognise directly, without inference. How an object appears is not something we normally reflect upon, yet it is the basis for our recognitional responses. In directly applying a concept of a kind, such as DOG, to the thing in front of me, I exercise an *implicit* understanding of how dogs normally appear, at the phenomenal level. As a perceiver, I respond to the patterns of experience typically associated with the object before me, in recognising objective features of the dog and its relation to me, and coming to conceptualise it as a dog.

Most importantly, I can apply recognitional concepts such as DOG and APPLE directly, because I know how objects of the corresponding kinds look under different conditions. In seeing the object in front of me as a dog, I am able to anticipate, or imagine, what it would be like if the relation between me and the dog were to change. I am therefore prepared for certain kinds of likely changes in my visual experience, at the phenomenal level. So when I classify something I am experiencing as a dog, I have *implicit expectations* about how my future experience will vary, in a way that is consistent with seeing a dog.

According to the revised account I am suggesting, the imagination plays a role in this way: in noticing that what I see is a dog, I am prepared for certain kinds of typical *transformations* to the phenomenal elements of my visual experience. I have *implicit expectations* about the probable future changes in the nonconceptual phenomenal aspect of my experience. Of particular importance are the expectations I have of the probable experiential consequences of my own actions**.** If I bite into an apple, a white concave surface will become visible; if I walk up to the dog, it will take up a larger region of my visual field, and so on; if I walk around it, it will present a different perspectival

[23] Luria (1968).

appearance. But I am also prepared for the way that certain individual things – humans and other living animals – will move of their own accord. There may be subtle differences between what I *anticipate*, what I *expect*, and what I am *prepared for* in any situation. But these need not concern us here. What matters is that they all involve dispositions on my part relating to typical patterns of phenomenal experience associated with the relevant kind that I observe.

These anticipations, etc, that arise in perception are not formulated in an explicit form, yet they are prompted by the concepts we form, which in turn arise because of sensory input. So my concepts are both guided by the phenomenal state that is caused by visual input from the perceived object, and through feedback make me implicitly prepared me for further kinds of phenomenal experiences. In this way my concepts are unified with the phenomenal aspect of my experience: in attending to and conceptualising a given aspect of my experience as an individual belonging to a certain kind, I am prepared for transformations of that particular aspect. This, incidentally, is the cash value of Strawson's metaphor, when he speaks of *other* possible experiences "being alive" in a particular experience.[24]

Thus according to the modified Sellarsian account I am proposing here, seeing an object involves three main elements. Consider, by way of an example, the situation where I see a Dalmatian dog in front of me *as* a dog (in normal conditions). The following is true of me:

(1) Firstly, at the nonconceptual level, my visual consciousness contains a sensing, an inner phenomenal state, which is caused by input from the dog I see; this involves the nonconceptual awareness of a mainly black and white shape. It is possible also that I form certain occurrent images of other aspects of the dog. These together make up my (inner) sense-image-model of the dog.

(2) Secondly, I have a perceptual taking, which involves a demonstrative conceptualisation:

This dog … (is a Dalmatian/friendly/black and white in colour/lying down, etc)

In virtue of the exercise of what, for me, is a basic perceptual concept of a dog, I recognise what I see *as* a dog. The *first dimension* of the exercise of this concept consists in this referential use, directed onto a public object. In the normal course of events I may, or may not, endorse the perceptual claim I am inclined to make.

(3) Finally, I have a set of *implicit* expectations about how the nonconceptual component of experience might change. I am implicitly prepared for transformations of the sense-image-model, and particularly for transformations that occur as a result of my own actions. This is the *second dimension* of concept exercise. I do not usually reflect upon the possibility of such transformations to my experiences; but in *acting* upon the world in certain ways, I show my implicit awareness of them. These expectations play a crucial role in ordinary perception, in accounting for the connection between the two components of experience.

[24] Strawson (1970).

Endoscopic Minimal Access Surgery:
The connection between the two dimensions of concept exercise can be illustrated by an important category of perceptual phenomena. This comprehends cases of "displaced perception".[25]

Many surgeons now operate using a technique known as Minimal Access Surgery (or, more colloquially, key-hole surgery). This involves using a small telescopic device and instruments 3 – 10 mm in diameter that are inserted into a body cavity, such as the abdomen or knee, through small incisions. A film of the surgical procedures inside the body is relayed by a small camera mounted on the eye-piece of the telescopic device to a video monitor placed adjacent to the patient, while the operation takes place.

Surgeons need specific training for this procedure, in order to learn to use the image on the screen to guide the movements they make with the instruments. They learn to use a number of different depth cues to ascertain the exact position to which they need to move the instruments. These include occlusion, relative size, texture gradients, and motion parallax.

The training enables surgeons to acquire practical knowledge of how to integrate their actions with what they see on the monitor. Making the correct movements required to manipulate the surgical instruments whilst viewing the monitor becomes largely automatic. Seeing becomes "direct", in the sense that the perceptual thoughts, as well as the actions, of the surgeon are directed on to the internal organs and the instruments, without prior inference. The images on the monitor are not, normally, the focus of the surgeon's concepts.

The patient's exterior bodily surface prevents what we would normally term a "direct" view of the inside of the body and of the ends of the surgical instruments. Yet when surgeons are absorbed in the complexities of an operation, the patient's body and the instruments are *phenomenologically present* in their visual experience. Thus a surgeon can entertain demonstrative thoughts about the patient's inner bodily organ ('that gall bladder…'), and act directly on it.[26]

The surgeon's conceptualisation of the site of the surgery is guided by the two-dimensional images displayed on the monitor in front of him. But whilst carrying out procedures on the internal organs – for example, cutting away a gall bladder – the surgeon is not normally explicitly conscious of the images on the screen. The concepts exercised refer to what is "hidden", though phenomenologically present, and concern the instruments and internal bodily organs. Potentially, the way the surgeon conceptualises what is seen could alter. The surgeon might pause during the operation, adopt a different attentional set, and concentrate instead on how the images on the monitor appear to be blurred because the lens is fogged up.[27] But in attending to the image on the monitor *as* such, the surgeon uses a different set of concepts.

In such cases of displaced perception, the fact that there are two different dimensions of concept employment is clearly illustrated. In performing the operation the surgeon exercises concepts relating to the patient's body in a manner that allows the integration of perception with action. Yet in doing so, the surgeon is actually responsive to matters that, during most of the course of the operation, are not thought about. The images on

[25] My usage here differs slightly from that of Dretske (1995).
[26] In Evans's terms, the surgeon can entertain genuine 'here' thoughts about the organs in the patient's body; compare Evans (1982), chapter 6.
[27] Sometimes both kinds of conceptualisation will occur near simultaneously.

the screen lead *causally* to the exercise of concepts relating to the objective state of the internal organs, and guide the surgeon's actions, yet there need not be any explicit *conceptual* awareness of those images.

There are two interim conclusions about experience that may be drawn from a consideration of cases of displaced perception. For the first of these, imagine a fantasy where two patients, perhaps twins with similar bodies, are connected up to two separate monitors, which are placed side by side. Two surgeons begin operating by making similar movements of the scalpel. One of them forms a demonstrative thought, 'That gall bladder…', a thought directly prompted by looking at one of the monitors. What is essential to determining the reference of the demonstrative thought is the context, and in particular the *causal* chain linking the surgeon with one of the two patients, via one of the monitors, in a manner that allows the surgeon to integrate their actions with what they see. The referent of the demonstrative thought is not determined merely by whatever appears on the monitor, irrespective of whether the images displayed are, in some sense, more immediately "available" to the surgeon.

There is a second conclusion that can be drawn from such cases. The images displayed on the monitor can give rise to very different kinds of conceptualisation. While absorbed in the intricacies of the medical operation, the surgeon responds to the images by forming concepts that refer directly to the patient's internal organs hidden from "direct view". For the most part, the surgeon does not think of the onscreen images that, through some complex (and perhaps indirect) process, guide thoughts and actions. When the surgeon pauses to reflect on the condition of the monitor, the images prompt the exercise of concepts in quite a different way: the concepts exercised now refer directly to the very images themselves. Displaced perception thus illustrates how the very same visual input can lead, in different contexts, to the direct employment of concepts belonging to quite different categories.

Conceptualising Our Own Experiences Directly:

When I hallucinate, I can attend to my phenomenal states, and conceptualise them as such. Suppose I am aware of a red after-image. According to the Critical Realist theory, I can make an identifying reference to the image. I can pick it out as the kind of state that is normally caused when I see an actual external patch of red on the surface of a physical object. But this way of characterising my after-image does not exhaust its nature. For Sellars, an inner hallucinatory state is not *defined* by reference to the external, observable physical qualities that we appeal to in order to *identify* it, as deVries and Triplett have pointed out.[28] My after-image has intrinsic qualities, and through exercising concepts that belong to the framework of inner states, I can directly refer to the phenomenal nonconceptual component of experience that is immediately present in consciousness.[29] I refer to the very same phenomenal state that causally prompts my introspective thought, 'This red after-image…'.

According to the Critical Realist theory, the experiences that occur in normal veridical perception, and also in cases of illusion, are ontologically on a par with hallucinatory states. I am able to make direct reference to my perceptual experiences, and consider them as states that are, potentially, independent of the objects that cause them. Thus, when I introspect, I can reflect upon the fact that in seeing the dog in front of me, I am having an experience of a certain kind – an experience *as of* seeing a dog, but which, considered in itself, is of the same kind that could occur in a hallucination.

[28] For discussion of this issue see deVries and Triplett (2000), p.169.
[29] See Williams (2006), sec. 6; see also deVries (2005), chapter 8.

The examples of displaced perception provide a useful analogy, one which suggests a plausible account of the nature of introspection and its relation to perception. We are able to attend to and conceptualise our experiences in different, equally valid, ways. I can shift from attending to the external objects I see, to attending to the intrinsic nature of the experiences I have in seeing them. I can consider the experiences in themselves, as potentially independent of the objects that produce them. When introspecting, I do not discover new entities; rather, I conceptualise what is immediately present in a quite different way. It is open to me to consider experiences as causally related to external objects (as the Critical Realist claims), and not as in part constituted by them.

A full account of the way we apply concepts to our inner states would also say something about the two different aspects of concept employment. When I reflect upon the images on the monitor screen directly, and employ concepts that refer to them, I also have expectations appropriate to the likely way that images on a screen will behave. In a parallel manner, when I introspect my experiences, and consider them as subjective states, and distinct from the external objects which cause them, I have implicit expectations relating to potential changes in my experiences. I am able to act upon my experiences in ways that are very different from the ways that I act upon physical objects. For example, I can directly change my visual experience of a dog by closing my eyes, or by altering my focus so that I see the dog double. Such a change in my experience is of course very different from the change I cause to the dog when, for example, I take hold of its lead and it jumps up in an excited manner, expecting to be taken for a walk. Along such lines as these it is possible to illustrate the two dimensions of the exercise of concepts when they are applied directly to our own experiences, and to show what is distinctive about the exercise of concepts when we respond to our own experiences in the mode of introspection. The imagination plays an essential role in unifying my concepts with the phenomenal states that prompt them. We therefore have an answer to the first problem highlighted at the outset of this paper, that of explaining how the same experience can be conceptualised in quite different ways.[30]

Perception and the Problem of Demonstrative Reference

As we noted at the outset, Sellars's Critical Realist theory of perception has been criticised on the grounds that it is unable to provide an adequate account of demonstrative reference. According to this theory, the physical object perceived is not present in experience in any phenomenal sense. It is not immediately available to the perceiver's consciousness. It is therefore difficult, the objection runs, to explain how experience could provide the basis for our perceptual judgements. The thought is that if the phenomenal qualities of experience are understood as belonging to inner states, psychologically private to the subject, then the perception of public physical objects would be at best an indirect process. We would be unable to explain the subject's ability to make perceptual judgements about external physical objects, objects that transcend immediate experience.

I shall argue that it is possible to defend a Critical Realist account of how demonstrative reference is possible, and to show how the application of the ideas articulated above, relating to the role of the imagination, can be used to defend Critical Realism against this line of criticism. Before elaborating the Critical Realist theory, I briefly summarise some reasons for rejecting two alternative accounts of perceptual judgement.

A first account of perceptually based reference assumes that perceptual demonstratives are supported by the subject's capacity to identify what is perceived by a grasp of some

[30] I provide a more detailed defence of this general view of hallucinations in my (2007), chapter 9.

description fitting its properties. The object perceived is that which fits most closely, in certain key respects, the way that the subject *conceives* it to be as a direct result of experience. As David Smith notes, in places Sellars appears to be sketching out a version of this idea.[31] The problem, as Smith points out, is that one may see an object under all kinds of illusory conditions. It may be that none of the properties one is inclined, on the basis of experience, to attribute to the perceived object in fact belongs to it. Features believed to be central to the identification of an object, such as its position, may better fit some object that is out of view.[32]

There is another general difficulty with the description view. The reference of perceptually based demonstrative claims depends essentially upon contextual matters outside of the subject's conceptual grasp. Suppose a subject sees something in the surroundings, and takes it to be a friendly dog. As a matter of fact, the subject will not normally express the spontaneously arising perceptual taking in a form equivalent to an existentially quantified sentence, along the lines of 'there is one and only one dog at P such that it is friendly, etc.'. The perceptual belief occurs naturally in a form that employs indexicals: '*that* dog over there is friendly'. The employment of indexicals is not just a contingent matter. Where perception provides the subject directly with the basis for a demonstrative belief, the referent of that belief cannot be wholly specified by the subject in conceptual terms alone – indexicals, such as 'this', 'here', and 'now' are always essentially involved.[33] For such reasons, attempts to account for perceptual reference by appeal to the subject's own beliefs seem to be insufficient.

A second view seeks to explain the subject's grasp of perceptual demonstratives by reference to a distinctive interpretation of the notion of *acquaintance*. According to Russell's original formulation, acquaintance is a notion that in certain respects has broad application. Russell allows that the subject can even be acquainted with such entities as abstract logical facts.[34] Yet as far as empirical knowledge is concerned, Russell takes acquaintance to be confined to private sensible entities in consciousness, or entities such as sense-data that are related in a unique manner to the consciousness of a single subject. For Russell, sense-data are understood to be private, and distinct from public physical objects.

More recently, philosophers who advocate versions of the Direct Realist view of perception have sought to remove Russell's restriction on the kind of sensible entity that acquaintance puts us in contact with. They claim that, *pace* Russell, perception makes us directly acquainted with public physical objects.[35] The immediate presence of some physical object to the perceiver's mind enables the subject to make demonstrative reference to that object. Because nothing intervenes between the perceiving subject's consciousness and the external world, the subject is directly related to the physical object seen, and comes to form concepts appropriate to the category of entity immediately present, and to be able to identify it in a manner that supports demonstrative claims about it. Acquaintance constitutes the mechanism of reference that

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[31] See Smith (2002), p. 82. Sellars makes comments sympathetic to the description view of reference in his BD (1977) and in SRPC (1978).
[32] Smith (2002), p. 82; see also Grice (1956).
[33] For a defence of this claim, see especially Burge (1977) and (2007), and Evans (1982), Brewer (1999), and Eilan (2001).
[34] Russell (1914a), p. 127.
[35] I am not concerned here with the differences that can be discerned between the various different versions of Direct Realism, but with what they hold in common, in rejecting the idea that experiences are inner states. In this general category can be included Disjunctivist views; see especially Martin (2002), and also McDowell (1986), Snowdon (1990), Bermudez (2000), and Smith (2002).

makes possible the targeting of singular thoughts on the physical objects in the surroundings, so that subjects know *which* individual object it is that their perceptual thoughts concern.[36]

David Smith is appealing to this Direct Realist conception of acquaintance in rejecting Sellars's conception of perceptual experiences as inner states. He claims:

> For a perceptual this-thought to succeed referentially, our senses themselves must provide an object….We need the senses themselves to acquaint us with objects.[37]

From a Sellarsian perspective, there is a serious difficulty with this neo-Russellian revival of the notion of acquaintance. According to Russell, acquaintance is a state that is a form of sensing, or experiencing, yet it also amounts to a form of knowledge.[38] This "mongrel" conception of experience forms one of the main targets of Sellars's criticisms in the early parts of EPM, when he criticises certain empirical versions of the fallacy that he categorises as "The Myth of the Given". Sellars points out that his real target is not the alleged *inner, private*, status of experience, but the confused idea that experience can be both a *nonconceptual* state, that is, having some kind of *phenomenal* or *sensory* aspect – perhaps involving the direct awareness of the sensible qualities of actual existing entities – and yet also some kind of cognitive state providing *premisses* upon which empirical knowledge is inferentially based.[39]

Sellars would object to the very idea that the subject is able to make some sort of quasi-inferential move from the level of sensory, or phenomenal, awareness, to a conceptual grasp of what is immediately present, no matter to what ontological category it belongs. He re-states this objection in his later Carus Lectures (FMPP), when he describes the most basic form of "The Myth of the Given" as the principle that:

> If a person is directly aware of an item which has categorial status C, then the person is aware of it *as* having the categorial status C.[40]

In criticising "The Myth of the Given" Sellars is therefore not so much objecting to the idea of some *direct relation* between the subject and an external physical object – although he would not countenance the existence of such a direct relation – but the more fundamental idea that it could provide some kind of evidential *support* for demonstrative judgements. Whether the Direct Realist can answer this charge is an issue I shall not attempt to resolve here. McDowell, for example, has defended the view that experience provides an unmediated openness to the world, while attempting to avoid the problems that beset the traditional notion of acquaintance.[41] This is not the place for a detailed examination of the general Direct Realist standpoint, and of the question

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[36] See for example the claims made by McDowell in his (1986), sec. 2.
[37] See David Smith (2002), p. 85; 'object' here means a physical object. The remarks on p. 87 are in a similar vein.
[38] See, for example Russell (1914a) p. 167, and (1914b) sec. 2.
[39] Sellars (1956), in Part III, sec. 10; see also Part I, sec. 1.
[40] Sellars (1981), Lecture One, sec. 44; see also his (1956) Part VI, sec. 26 and Part VIII, sec 38.
[41] See McDowell (1996), chapters 1 and 2, and (1998); for criticism, see especially deVries (2006) and Williams (2006).

whether it can be formulated in a manner that resists Sellars's criticisms. I shall instead turn to a consideration of a third view of demonstrative judgement, an account which, I argue, makes best sense of the Sellarsian Critical Realist analysis of experience.

Critical Realism and Demonstrative Reference to external Objects

As we noted at the outset, for Sellars, the connection between the subject's phenomenal level awareness and perceptual judgement is causal and not inferential. This suggests an alternative to the two views so far considered. This third view attempts to show how the Critical Realist can explain the nature of our perceptually based beliefs, without having to appeal to the idea that the objects of perception must be immediately present in conscious experience.

Before I develop this Critical Realist model of perceptual judgement, there is one important preliminary point to note, which concerns the precise function played by immediate experience. The main motive for acceptance of the neo-Russellian acquaintance view derives from the undoubted fact that in normal perception experience plays some sort of necessary role, without which the subject would be incapable of making demonstrative reference to objects. This fact can encourage a cognitive illusion, when we begin to reflect upon the structure of the processes that occur in perception. The illusion arises because we construe the two components of experience as being more tightly connected than they really are. If it is accepted that, on the one hand, some kind of *immediate* experience is necessary for the production of perceptual beliefs, and that on the other, our perceptual beliefs are focussed directly on to physical objects, then it becomes tempting to assume that those outer physical objects *directly* perceived are identical with the very items *immediately* present.

But we do not need to equate what is immediately present in experience with the actual physical object perceived. The awareness of phenomenal qualities of some kind is certainly an essential ingredient in normal perception. This is not because it supplies the mechanism of reference; we can, in principle, make sense of the notion of "super blind-sight", where in the absence of phenomenal experience a subject directly "perceives" an object, forms judgements directly about its location and kind, and can thus make direct reference to it. The subject would simply be caused to have accurate, non-inferred beliefs that allow him or her to locate the object and communicate about it. But for normal human beings, the phenomenal aspect of inner experience is psychologically necessary for prompting the conceptual states that refer directly to external physical objects. The subject is aware that immediate experience of some kind is necessary for perceptual reference, but the necessity is causal. The subject's inner experience prompts and guides the subject's perceptual taking. This taking contains individual concepts targeted directly, without inference, upon the perceived object.[42]

With this preliminary point made, we are now a position to show how the Critical Realist analysis of perceptual experience is able to explain how demonstrative reference to publicly located physical objects is possible. The account has several parts, corresponding to the different senses of 'explanation' that are considered relevant. I consider in turn the main features of the Critical Realist model, indicating the critical role played by the imagination.

(i) *Aetiology:*

[42] The development of TVSS seems to support the separation of the notions of phenomenal immediacy and the mechanism of reference; see the discussion in Bach-y-Rita (1972).

One kind of explanation of the perceiver's ability to make perceptually based reference to outer objects appeals to empirical theories about the nature of evolution and connected areas of scientific enquiry. Humans, and others creatures to which we can attribute some kind of classificatory capacities, have evolved so that they are able to represent items in their surroundings, with the result that they can plan activities directed towards perceived objects. By employing perceptual mechanisms that represent objects in their vicinity, they improve their likelihood of attaining goals that satisfy their needs, and hence also their chances of survival. It is perfectly consistent to claim that internal low-level phenomenal states, having an analogue form, are causally involved in the production of higher-level representational states that relate directly to distal objects.

One development of the causal-historical account would concern questions about how this basic representational ability develops into fully-fledged linguistic behaviour. An underlying representational ability is one necessary precondition for any language training process to be effective. On the Sellarsian view, by being a part of a community, subjects with such abilities can be inculcated into linguistic activities, in which their exercise of classificatory states becomes transformed into the employment of fully fledged high-level concepts, of the kind which have their place in inferential practices and communication, and which can in addition have a referential dimension. It is such a story that Sellars begins to sketch out in the concluding sections of EPM; the importance of training is also of course implicit in the later work of Wittgenstein.[43]

(ii) *The Referential Connection*:

Such explanatory accounts deal with rather different issues from those that concern the mechanisms of reference of perceptual demonstratives. We may raise the formal question: what conditions must a subject S meet, in order for S to count as referring to a particular individual object X at time T, in making the perceptually based claim, '*That* object at P is a dog'?. Independently of the causal history of a perceptual experience, and its subsequent expression, we may enquire about the conditions such experiences and utterances must meet, in order to count as being *of*, or referring *to*, a specific individual.

The reason why subject S's utterance of 'That dog at P…' in the context picks some particular object X need not be because there is an actual dog at P. Demonstrative reference can succeed even in illusory circumstances. S may actually be seeing a fox, occupying a different location. Facts about how things appear, in the nonconceptual phenomenal sense, are also insufficient, for similar reasons. The issues concerning which facts determine content are notoriously deep and difficult. The Critical Realist suggestion mooted above is that, in a formal sense, what determines which individual the subject is seeing and, in consequence is referring to, is the existence of an appropriate kind of casual chain linking the subject S with the object X perceived. This is the type of causal chain that is involved in perception, and which, in the sense explored further in point (iii) below, sustains "navigational" perceptual activity: the ability of a creature to move safely about its surroundings. One further feature of the causal account has to do with the role of attention, and is also discussed briefly below; but here my concern is with the general differences between the Direct Realist and Critical Realist accounts, and not with providing a detailed analysis of perceptually based demonstrative reference. Nevertheless, if a causal theory of perception is accepted, we are provided with one very plausible candidate for the mechanism that determines the content of the individual referring expressions.

[43] See also the arguments offered in Bennett (1976), chapters 3 & 4, and in Brandom (2000), chapters 4 & 5.

This defence of Critical Realism is consistent with Evans's claims about the requirements for the successful demonstrative identification of an object. A discussion of the full ramifications of Evans's views on this issue is beyond the scope of this paper. What may be extracted from his account is that there are two very plausible conditions necessary for demonstrative identification of objects: first, that there is a continuing information link between the perceiver and the perceived object X, which allows the perceiver to keep track of the object, and to conceive of the object demonstratively identified; second, that the perceiver is able to directly locate the object in egocentric space, so as to be able to entertain genuine "here" thoughts about that object.[44] Since Critical Realism is a version of the causal account of perception, it clearly meets the first requirement; by emphasising the directness of perceptual takings and consequent actions aimed at external objects, it also meets the second.

(iii) *Communication with others*

From a third-person perspective, there is normally no great practical problem in ascertaining which object another person is seeing and responding to, and to which they are referring by their use of perceptual demonstratives. I am able to successfully communicate with others about which object I am currently attending to. This is because my reference to it, by the use of a demonstrative phrase in context ('That dog…'), is supported by potential action. I can go on, if required to *act upon* the object I refer to, for example by pointing towards it, or by singling it out through my activity in other ways. If I reach towards a dog, another person may say, 'Be careful with that dog, he is nervous…', restraining the dog with a lead, and so on. Nothing in such interchanges presupposes my having an *immediate* awareness of the dog I am seeing, acting towards and referring directly to.

Most language users have an implicit understanding of the fact that perception is essentially integrated with action. What I have elsewhere termed 'navigational activity' takes place when a subject sees some distal object, and steers a path through the surroundings in order to reach that object and make use of it.[45] It is through the essential reliance upon distance perception that humans and other creatures are able, with a fair degree of success, to act upon distal objects, so as to satisfy their needs, and to avoid harm. This core navigational conception of the function of seeing and other forms of distance perception is understood by scientists who investigate the process; this is made clear, for example, in the influential work of Milner and Goodale.[46]

It is with this idea about the dynamic function of perception in mind that Sellars writes:

> … we were given our perceptual abilities, not for the purposes of ontological insight, but to enable us to find our way around in a hostile environment.[47]

As Strawson noted, we implicitly accept that some variation in the position or orientation of an object relative to a particular observer will produce in them a corresponding change in experience; such co-variation points to a causal link between object and experience.[48] The causal connections of the appropriate kind that occur in distance perception are those that enable navigational activity to take place. There is

[44] See Evans (1982), chapter 6.
[45] A parallel form of navigational activity arises when a subject seeks to *avoid* some other creature; see my (2007), chapter 7.
[46] Miner and Goodale (1995).
[47] Sellars SSOP (1982), sec. 89.
[48] Strawson (1974).

therefore a principled basis for distinguishing between the types of causal connections that are appropriate for normal seeing, and those abnormal situations where deviant causal chains give rise to matching experiences. Scientific investigation reveals that there is in fact a complex chain of events, starting from light waves emitted from an object, and involving (in humans) stimulation of the retina and consequent transmission of nerve impulses along the optic nerve to the cortex. This causal chain underpins vision in circumstances which allow successful action upon objects. As perceivers, we do not need to know these particular facts; all we need to know, implicitly, is that there is some reliable mechanism involved in the standard case, which enables navigation to take place.

Our conventions of demonstrative reference extend the ways in which we act upon the objects we perceive. It therefore becomes plausible to view the causal chain that underpins navigational activity as contributing to the necessary conditions that, when applied in a particular case, determine *which* particular object another person is seeing, and to which that subject's use of a demonstrative expression refers.

(iv) *First-person "knowledge which"*:
This implicit understanding of the general function of perception also provides the answer to the challenge raised by McDowell and others: How do visual (and other) perceptual experiences equip perceivers themselves with knowledge about *which* particular objects they are seeing (or hearing, etc)?

There is no single answer to this question, but rather a series of answers, increasing in fullness and complexity. Imagine I am looking at a dog in front of me in the park, and state of it, 'That dog is a Dalmatian'.

(a) The simplest answer is that I do know which object I refer to, just by employing the demonstrative expression, 'That dog ….' in response to my present experience. I think a thought, the content of which I grasp, even though the content is in part determined by external factors. If I switched to thinking about some other individual I see – say, the cat in a nearby tree – I would be aware that I was exercising a different individual concept, relating to a distinct object, one connected with a different aspect of my visual experience.

(b) Secondly, I know which object I am referring to, in the sense that I am able to initiate actions focused on the object, because I am now thinking about that particular object. So I might throw a ball in a certain direction, intending *that dog* to run and fetch it. I might walk towards it, and so on. It is not necessary that the objects I act towards be immediately present in my consciousness. My actions are straightforwardly caused by my inner states.

(c) At a more complex level, I know implicitly which object I am referring to, because, if pressed, I would be inclined to say that it is the object I am seeing, by virtue of having a certain experience: an experience now *as of* a dog in front of me. We don't usually entertain such more reflective thoughts. As Critical Realism emphasises, perceptual takings focus directly on the external objects, conceived of as independently existing, objective entities. Yet I can also reflect upon my experience of the dog, as a subjective state – of some kind – that is involved in my seeing the dog. I need *not*, of course, think of the way the dog appears to me as involving inner phenomenal states. Someone who is puzzled by the phenomenon of double vision might reflect upon the

two images, or appearances, of a dog, without attributing ontological status to those appearances.

Here the role of the imagination, which I began this paper by considering, becomes important. In reflecting upon the appearance of the dog *qua* appearance of some kind, I understand it to be, at a minimum, perspectival and subjective: I am aware that I see the dog from my point of view, and that my experience is a distinct state from that belonging to my companion. The changes that I anticipate in respect of *my experience*, of the way the dog appears to me, are different from the changes I anticipate in the dog's position as it exists objectively, as we noted earlier. What I anticipate in exercising an individual concept referring to a particular object I see is a possible change to some aspect of my experience. The aspect will involve a specific spatial region in my visual field. The imagination is involved when I use concepts that relate to my subjective experience, in thinking about it as a state of some kind connected with the dog I see. So in thinking about the dog as a direct result of seeing it, I anticipate (implicitly) one part of the overall appearance of the scene to vary in ways typical of seeing a dog. In attending to the Dalmatian dog in front of me, and not, say, a green bush, I am more prepared for a rearrangement of the appearance of a black and white shaped object in my visual field, when the dog leaps up to catch a ball.

Knowing which object I demonstratively refer to by 'That dog…' also entails an implicit understanding of the fact that the object I am referring to is *the object I see*, in being aware of the subjective appearance I now experience. This may sound circular, because of the appeal to the notion of seeing. But the circularity can be removed if the navigational account of perceiving sketched above is correct: I implicitly grasp that what enables me to see some distal object is the fact that when I look at it, I have visual experiences. If the object changes, or if our relative positions change, then my experience will co-vary with such changes. This means, in effect, that I implicitly understand that my experiences are caused by the object I see. But my implicit knowledge comprehends something more, as argued above: I am aware, in some sense, that it is only by keeping visual track of the object that I am able to navigate through an environment so as to be able to home in on it, and make use of it. To see an object is for that object to cause my experiences in a manner that supports such navigational activity. This grasp of the nature of seeing is implicitly appealed to when we attribute perceptual states to others, and can be made explicit.

We are now in a position to offer a slightly fuller outline of the mechanism of reference and its connection with attention, according to the Critical Realist theory. When I see an object, attend to it and form a perceptual taking, there is a series of causally interconnected stages, which can be summarised as follows:

1 The object X causes an inner phenomenal state E in the subject, via the causal path standardly involved when S is able to navigate about the local environment;
2 The inner phenomenal state E causes a perceptual taking P, involving a complex demonstrative that may be expressed by an utterance of the form 'This F is G' (where G can include a description of the location of X in S's egocentric space).
3 The perceptual taking P *refers to* X, but importantly, also prompts *expectations* on the part of S with respect to likely transformations of a particular aspect of the overall phenomenal state E, of the kind appropriate to the way an individual of the kind F normally appears;

4 The exercise of the concepts employed in the taking P, together with guidance from the phenomenal array, enables S to act in appropriate ways towards X: to locate it, handle it, and so on.

As I warned earlier, considerations of space preclude any detailed of the Critical Realist theory of perceptual content. It is clear, however, that the theory is equipped to meet the essential condition that any account of the reference to individual objects must meet. It shows that there can be a principled basis for distinguishing the particular object referred to in the perceiver's demonstrative thought from the various other objects in the visual scene. This is a condition that the Direct Realist accounts fail to meet. The existence of the appropriate kind of causal connected events, involving the above stages, is what determines that the subject is referring to a unique object in forming a perceptually based demonstrative thought. The demonstrated object is the one that initiates the sequence, and is the focus of the subsequent extended actions (these actions may involve self-correction on the subject's part).

It is because I implicitly grasp something of the nature of this complex causal connection that I know which object my perceptual beliefs refer to. I implicitly know that the object X I am referring demonstratively to by my use of 'This F…' is the object that meets the following condition:

> X is the object that is causally related to my current perceptual experience by whatever causal mechanism is essentially involved when I am able to perceptually navigate around my current surroundings so as to attain my goals, etc…; it is the object that appears in my experience in the way that I expect F type things to appear

It might be argued that I could, in theory, articulate the facts I grasp implicitly about the causal chain that connects me with the object I am referring to, when I make a demonstrative claim, 'That Dog…etc'. However, it should be noted here that implicitly grasping such conditions does not mean that I could, in principle, set out in detail a definite description specifying which particular object I perceive. For one thing, my knowledge of the precise causal chain involved in perception is indirect – I am unable to specify the details of the actual physical and physiological causal chain that underlies my ability to perceptually navigate. More importantly, as we noted earlier, there is an irreducibly contextual aspect to demonstrative claims. I have to appeal to *my* experiences, and *my* surroundings. For this reason perceptual demonstratives cannot be reduced to definite descriptions.

Conclusion

Sellars's ideas about the productive imagination, as spelt out in his later work, provide the crucial link that explains how the phenomenal and conceptual components of experience can be unified. I am suggesting in this paper that we should understand the role of the imagination as, in part, dispositional. The imagination produces in the perceiver an implicit awareness, or set of expectations, of the likely ways in which the phenomenal, or sensory, aspect of an experience will be transformed. Such expected transformations result from the concepts exercised by the perceiver, which also have the role of referring directly to what is perceived. In the standard case, this exercise leads to demonstrative judgements aimed directly at the perceived object.

When we come to explain our ability to form demonstrative thoughts about the physical objects in our locality, we correctly think of our experiences as necessary, but are tempted to misconstrue the reason for this. The mistake is to assume that the entities to which our demonstrative thoughts refer directly must be immediately present in consciousness. The fact that experience equips us to directly identify – at the conceptual level – the outer objects we perceive is perfectly compatible with the claim that there is also a nonconceptual level, at which phenomenal *inner* states mediate such identifying claims. A careful formulation of the causal theory of perception, along the lines of the Critical Realist version upheld by Sellars, can account for the various different aspects of perceptual experience. We do not need to appeal to neo-Russellian notions of acquaintance. By acknowledging the essential causal connection between perceptual object and experience, Critical Realism is able to provide a satisfactory account of demonstrative reference.[49]

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