

Departament de Filosofia
Universitat Autònoma de Barcelona

Dissertation:

**Perceptual Demonstratives and Attention:
Conceptual and Epistemological Aspects of
Perceptual Consciousness**

Olga Fernández Prat

July 2002

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PhD Graduate Programme: Ciència Cognitiva i Llenguatge

Anything which we see to be continually changing, as, for example, fire, we must not call “this” or “that”, but rather say that it is “of such a nature”; nor let us speak of water as “this”, but always as “such”; nor must we imply that there is any stability in any of those things which we indicate by the use of the words “this” and “that”, supposing ourselves to signify something thereby; for they are too volatile to be detained in any such expressions as “this”, or “that”, or “relative to this”, or any other mode of speaking which represents them as permanent. We ought not to apply “this” to any of them, but rather the word “such”.

Plato, *Timaeus*, 49 d- 50 .

Three things are to be considered and differentiated... when seeing any object. First, the object we see; for example, a stone, a flame or any other body perceptible by the sense of vision, an object which can exist even before of being seen. Second, the seeing, which did not exist before the sense perceived the object. Third, the attention of the mind, which makes sight rest on the object contemplating it while the seeing lasts.

St. Augustine, *De Trinitate*, XI, 2,2.

Simple perceptions or impressions and ideas are such as admit of no distinction nor separation. The complex are the contrary to these, and may be distinguished into parts. Tho’ a particular colour, taste, and smell are qualities all united together in this apple, ‘tis easy to perceive they are not the same, but are at least distinguishable from each other.

Hume, *A Treatise of Human Nature*, Book I, part I, Section I.

My experience is what I agree to attend to.

William James, *The Principles of Psychology*, Chapter IX.

Acknowledgments

In developing my ideas on the topics of this dissertation, I am grateful to many people. For the most part I will restrict myself to those whose personal help has been very important, or even decisive, at different moments in my work. Bill Brewer was my supervisor at Oxford during the months of my stay there. He assisted my first ventures in the area between philosophy and psychology and listened to some of the ideas I had, or thought I had, on the Molyneux question. His sharp criticism, accompanied by occasional appreciation, and his unfailingly strong encouragement were of immense importance to me and a vital part of what made my stay in Oxford unforgettable. I am afraid that my work has moved in directions about which he is, to put it mildly, strongly sceptical. Perhaps is not clear from reading this work, but I have always been concerned about what I imagined he would say about my efforts, and the recognition —at least partial— of the strength of his point of view has contributed to shaping various of my ideas. I regret that I have not been able to engage his ideas on a (conceptual) demonstrative theory of perceptual content, and I hope to be able to do so on a future opportunity.

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As will be seen, Manuel García-Carpintero's ideas are pervasive in this dissertation. The impression I have when I read him is one of philosophy growing, and I really would like this dissertation to show how much I have learnt from his writings.

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Chapter 1: Introduction

1.1. Sources and aims of the dissertation: Demonstratives, perception and consciousness

The central topic of this dissertation is the study of a key aspect in the philosophical analysis of perception, to wit, its the “demonstrative” nature. This aspect has been regarded even as a necessary condition for visual perception at least. The description given for it is not at all clear as it stands. The word ‘demonstrative’ applies first to a type of linguistic expression, and hence what it means to say that *perception* has a demonstrative character should be explained. This can only be done in a very preliminary way without going fully into the detailed discussion of issues. Therefore, all that it seems appropriate to say here is that I will be concerned above all with the fact that in perception *particular* objects are involved in a way that seems to have an immediacy which makes it appropriate to use demonstrative expressions like ‘this’ or ‘that’ to refer to them. But why this is so, and what is the precise relationship of that particular character of perception to the use of demonstrative expressions is just part of what we must become clear about, and of what I hope this dissertation will shed some light on.

The relevance of the central topic of this dissertation can only be seen when one

appreciates how it lies at the crossroads of *epistemology* (it might be claimed that the perceptual demonstrative relation is the most fundamental relation between our cognitive mind and mind-independent objects), the *philosophy of mind* (it might be claimed that it is a key question both in the understanding of the externalistic character of the mind, and the relationships of the intentional with the linguistic), and the *philosophy of cognitive science*, since its treatment raises all the main questions on the relationships between common sense psychology, philosophical reflection, and scientific cognitive science.

Understandably, I will not be able to deal with all these topics in this dissertation. What follows in this introduction is a brief and rather “dry”, quasi-technical enumeration of those I do tackle, together with a short preliminary explanation of my motivation and my approach to them.

A way of approaching the special manner in which particular objects are involved in perception is to say that in perception objects are *demonstratively identified*, and contrast this with the *descriptive identification* of objects. This approach to the subject was initiated, I believe, by Strawson in his book *Individuals*, and was put into a broader perspective by Evans in his posthumous work *Varieties of Reference*. Evans brought the notions and the conceptual ways of analysis of the Fregean tradition to the approach, most centrally the notion of *sense* or *mode of presentation*, and did so in an original, innovative way. In this respect, it seems fair to say that Evans’s work was dominated by the attempt to develop a version of that notion which is adequate to capture theoretically what is distinctive of demonstrative identification in general, and demonstrative identification in perception in particular, and he did all this against the background of a recent tradition in the philosophy of

language —represented by Kaplan and Perry at the time— which held that this could not be done. Given his way of responding to this challenge, I believe it is fair to say that Evans’s work uses Strawson’s insights within a tradition of reflection that goes all the way back to Frege’s disputes with Russell at the beginning of the XXth century.

In this respect there are two general aspects of Evans’s work that I should be mentioned to put the work of this dissertation in perspective. One is that, from a general viewpoint, Evans’s work might seem to go against the tide, both in philosophy in general because of its much publicized “linguistic turn(s)” and in the analytical tradition in particular, at least if one listens to certain views that are (or were) very influential:

What distinguishes analytical philosophy, in its diverse manifestations, from other schools is the belief, first, that a philosophical account of thought can be attained through a philosophical account of language, and, secondly, that a comprehensive account can only be so attained.

(Michael Dummett, *Origins of Analytical Philosophy*, p. 4)

Immediately after this passage Dummett himself mentions the consequences of this view for the placing of Evans’s work:

Some recent work in the analytical tradition has reversed this priority, in the order of explanation, of language over thought, holding that language can be explained only in terms of antecedently given notions of different types of thought, considered independently of their linguistic expression. A good example of this new trend is Gareth Evans’s posthumous book [*Varieties of Reference*] (...) On my characterization, therefore, Evans was no longer an analytical philosopher.

According to Dummett's criterium, as well as Evans a constantly growing amount of recent work in philosophy should be excluded from the province of analytical philosophy: the work by Peacocke in *Sense and Content*, which appeared shortly after Evans's book, or in his more recent *A Study of Concepts*; by McDowell in *Mind and the World*, by Campbell in *Past, Space, and Self*, or by Cassam in *Self and World*, to name a few prominent examples. This is only to be expected if one recognizes all this work as influenced by Evans's stance on the way philosophy should be undertaken.¹ What is more, the immediate antecedents of much of this work

¹ Cf. *Sense and Content*, p. viii, where Peacocke, who may be regarded as the other obvious early thinker referred to within the trend alluded to, talks about just this kind of influence from Evans.

should be excluded as well. In relation to Evans, for example, we would have to take into account, at the very least, Strawson's views on demonstrative vs. descriptive *identification* in *Individuals* which has been mentioned above, and also his views on objective thought about objects in *The Bounds of Sense*. Even more generally, according to Dummett's criterion a whole approach to the analysis of *linguistic meaning* —the Gricean approach— would seem also to have to be excluded from the province of analytical philosophy, because an attempt is made within the approach to understand (linguistic) meaning by taking categories of thought such as *intention* and *belief* to be more fundamental, or at the very least *not less* so. Thus, all this work could be characterized as 'analytic philosophy' only in the loose sense of "adopting a certain philosophical style and as appealing to certain writers rather than to certain others" (Dummett, *op. cit.* pp. 4-5). But, at least when speaking seriously, we should exclude it all from the analytical province.

Whether this verdict should be accepted or whether it amounts to a *reductio ad absurdum* of the criterion from which it stems is a matter which I will not try to pursue further, but in any case, the work in this dissertation falls squarely with in the trend of "some recent work" alluded to by Dummett with which it aligns itself.

There is a second relevant general aspect of Evans's work which I should mention to place the dissertation in perspective, and this might also seem to go against the tide. It lies precisely in Evans's attempt to rescue the notion of sense for carrying out significant philosophical work. The tide here is the one of post-Kripkean, "direct reference" approach to meaning, which has been widely seen as opposing the use of a Fregean notion of sense in semantics. The relevance of this for the present work is, in principle, somewhat indirect, because this work belongs to the theory of

intentionality rather than to the theory of (linguistic) meaning. Nevertheless, it is felt when one considers the possible consequences of the “anti-sense” approaches, so to speak, for theorizing in the first field. In any case, the distinctive way in which theoreticians like Evans and McDowell have sought to oppose these approaches is, as is well known, by trying to capture the “supremacy” of reference over sense in a view according to which senses are “object dependent”; in other words, an *externalistic* view of senses.

Again, the treatment of perceptual demonstrative modes of presentation in this dissertation may be viewed, I believe, as being within this particular neo-Fregean tradition. Thus, the dissertation aims, at least partially, to (modestly) contribute to the development of an externalistic view of “senses” or modes of presentation in the domain of the intentional content of perceptual experience and the theory of perceptual consciousness and perceptual judgements, rather than in the domain of the theory of meaning.

The particular way in which Evans tried to develop this externalist perspective in connection with demonstratives and perception brings in another element in Strawson's thought —coming this time from the latter's study of Kant in *The Bounds of Sense*. This corresponds to Strawson's elaboration of a Kantian insight, to wit, that the capacity for objective thought, that is, thought that could be characterized—in some sense— as concerning objects that are conceived as existing independently of our minds, is closely linked to the capacity for spatial representation.

Evans brought in this Kantian-Strawsonian element by way of endorsing a principle of Russellian stock, namely that to understand a demonstrative *expression* one must know to which object that expression refers. In the case of a theory of

intentionality, and thus closer to Russell's original concerns, this principle requires that to entertain a demonstrative thought, a thinker must know *which* object the demonstrative element of the thought refers to. That, in turn, is taken to require the subject thinking of the object through a "substantive" sense or mode of presentation.

By talking of a "substantive" mode of presentation here, I mean that Evans defended a strong condition for demonstrative understanding: to entertain a demonstrative thought the thinker must be able to know what "would make true" the identity of the demonstrative mode of presentation of the object thought about with a "fundamental" mode of presentation, where a "fundamental" mode of presentation of an object is one that discriminates that object from all other objects of the same sort, which in the case of (perceptual) demonstrative thoughts or judgements about physical objects comes down to the determination of the object's location, as this location is given egocentrically in the perception of the object. (This will be more fully explained in Chapter 4.)

To a large extent, this second element of Evans' bringing together a theory of perceptual demonstrative identification and a theory of sense will be called into question in this dissertation. It is quite true that location plays a major role in the perceptual demonstrative identification of objects, especially in the cases of sight and touch, but there are several considerations that seem to show that Evans's requirement cannot be quite right, or so I will argue.

At the other end of the spectrum of theories of perceptual demonstrative thought, we find John Campbell's view of demonstrative reference in the paper "Sense, Reference and Selective Attention", according to which no *a priori* condition for such reference can be formulated. For this view, demonstrative reference to objects is a

matter of *selective attention*, in the sense given to this term in some theories of cognitive psychology, or rather, in a sense that scientific psychology will lead us to discover. An account of demonstrative reference is thus placed within the province of empirical investigation. But this, for Campbell, does not mean that we must give up talking of *senses* or modes of presentation in the analysis of the demonstrative character of our perceptual awareness of objects. On the contrary, according to Campbell the implication is that we must formulate a theory of demonstrative senses—that is, senses in a reasonably recognizable classical understanding of the word ‘sense’, according to which senses discriminate cognitive values as these reveal themselves in inference— within an *empirical* theory of selective attention.

As a matter of fact, I was first attracted to the group of problems that are dealt with in this dissertation by this intriguing Campbellian theory, in that it seemed to hold a promise to bring the scientific psychological description and explanation of human capacities directly to bear on the understanding of phenomenological traits of experience. In being thus attracted, I considered as a challenge the critical stance on Campbell’s empirical approach that unfolds in Michael Martin’s “The Shallows of the Mind”, and my initial motivation for working on this group of problems was to investigate the possibility of providing a principled answer to *Martin’s challenge*.

In the course of working on what eventually became this dissertation, I have come to substantially modify my initial intuitions and/or inclinations concerning Campbell’s theory or Martin’s challenge, although I feel I have at least retained their spirit. As will be seen, even if in one sense I retain Campbell’s attention-theoretic approach to perceptual judgement or thought, the version that I will defend differs significantly from his. Thus, my specific approach still leaves an important place for

the fairly recent recognition in cognitive science studies of (perceptual) consciousness of the central place of attention in perception, but the relation of empirical findings to the determination of demonstrative reference is clearly more indirect. On the other hand, I came to appreciate more fully the force of Martin's challenge, but I still think, even if not only for the reasons that I started out with, that he was not right after all in the views he put forth in the course of his criticism of Campbell's ideas about the limits of our philosophical analysis of the mental and their application to the case in hand.

In this way, by confronting the problem of the characterization of the demonstrative nature of our perception of physical objects, I was led to reflect on the relevance of empirical research for the philosophical articulation of the intentional content of perception. This issue was also present as I reviewed the work on analogue, imagistic, non-conceptual and phenomenal content, and pondered the relations of all these notions. As will become clear on reading the dissertation, I have regarded the work by Peacocke on perceptual content to be of fundamental importance especially that from the second half of the eighties as well as his later work on implicit conceptions, and I have drawn heavily on this to articulate my own position on the demonstrative character of perceptual content and on the place for conceptual analysis in this issue.

To the extent that philosophical reflection articulates the common sense or folk psychological notions of attention, and given that these in turn can be regarded as part of the "manifest image", to use the Sellarsian term, the problem this dissertation addresses may be taken, from a broader perspective, to be a case study in the relation between that image and the "scientific image". Although I realize that it can be taken

thus, and even think that it is not entirely devoid of interest, I have not developed the subject from that perspective, and so no attempt has been made here to engage the literature on it.

My work on the demonstrative character of perception took its particular direction from a type of methodological decision. Campbell's commentaries in his own paper, vaguely alluding to Kaplan's well known work on the semantic of demonstratives as precedents for his own ideas, again raised the question of the relation between a *semantic* theory of demonstrative *expressions* and an *intentional* theory of *perceptual* modes of presentation. My attention was drawn to recent work on the semantics of demonstratives, and particularly to Manuel García-Carpintero's "Reichenbachian approach" in "Indexicals as Token-Reflexives". On reading this, I gained the general impression that this field was clearly more developed or articulated than the theory of *perceptual* modes of presentation. I then tried to follow my supervisor's suggestion of trying to explore the possibility of using work in the first field at least as a *heuristic* tool to find concrete hypotheses in the second field. These hypotheses should then be argued for on their own terms of course, but perhaps paying attention to work on linguistic demonstratives could also provide some "collateral" help in finding or constructing such arguments. As is explained in Chapter 3, it is in this way that I arrived at my central conjecture to account for perceptual demonstrative thought.

In the same way, also that I was led to study what on the face of it seemed rather like a "Reichenbachian approach" to the intentional content of perception in Searle's book *Intentionality*. Eventually, I also found what seemed to me to be striking and perhaps not generally noticed similarities running between Searle's ideas and

Peacocke's ideas in *Sense and Content*, ideas with which, logically, mine had to be compared. Then I pursued this comparison in the wider context of contrasting several proposals to account for the perceptual mode of presentation of an object in perception which would be opposed by the Campbellian empirical approach. These proposals are classified as either "purely perceptual" (as my own proposal and the proposal coming from the mentioned ideas of Searle and Peacocke), or "substantial" (the ones due to Evans and McDowell).

Quite apart from this obvious reason for coming to terms with these other views, a reason which arose, so to speak, from the "logic" of discussion in a philosophical work, there was an independent motivating force for contrasting points of view here. It came, again, from what initially seemed to me to be intriguing remarks on "imagistic content" in Campbell's above-mentioned paper and on the relationships of this content to "propositional content", which Campbell somehow seemed to see as being "bridged" by attention in a cognitive-science sense.

In developing my own understanding of all this I was greatly helped by Naomi Eilan's review of Tye's book *Imaginary Debate*, with which I thought I could begin to see how to bring the "conceptual/non-conceptual" issue to bear on my approach, which in turn involved confronting the role of phenomenal properties in perception for reasons that I hope will be appreciated on reading Chapter 6 of this dissertation. The context of my approach required taking into account Peacocke's work on content in what might be called his "intermediate period", that in which he explicitly analyzed a notion of *analogue content*. I tried then to clarify the relation of this notion to the notion of phenomenal property or *quale*. The next thing to do was then to bring together the results obtained from this clarification with the reflections on the notion

of attention which were independently required by the fact that my approach to perceptual demonstrative modes of presentation is attention-theoretic.

The development of my thinking about the ideas that gave the first impulse to this work (Campbell and Martin's ideas) was accompanied by a fairly parallel development in the way of regarding attention itself as a phenomenon, although this became obvious only with the benefit of hindsight. At first, under Campbell's influence, I considered attention primarily as a scientific phenomenon, and was led to study the psychological literature on attention. Later I increasingly began to appreciate the ordinary ways of speaking and conceiving of attention, especially attention in perception, and eventually I came to see the importance of attention as a phenomenon "at the personal level", to use Dennett's phrase. In this shift I feel I benefitted greatly from writing by Bill Brewer and Johannes Roessler.

Eventually, I found a bridge between both perspectives when I went closely into the question of the status of the notion of *feature* in Treisman's empirical theories of attention. This empirical notion may be conceptually related to the notion of a *quale* and in fact I found reasons to think that both notions referred to the same properties even if these were individuated by different sort of criteria. Clarifying this made me more confident that perceptual attention may be related to the instantiation of qualia.

In the search of an explanation of how attention and qualia are related and how they can be brought together in a unified account of perceptual demonstration, I benefitted from recent externalist views of qualia, and I was then ready to take on board the view that perception is cognitively mediated by awareness of qualia, but I realized that this view is unable by itself to account for the demonstrative nature of the perception of objects. At this point I introduced attention as a mediating concept,

or rather, the notion of the *binding* of qualia that I claim attention consists in.

The resultant account can overcome, I hope, the traditional drawbacks of sensation-based accounts of perception, which put all the explanatory notions on the causal side, leaving aside the rational aspects of perception, that is, the fact that perception is also essentially linked to the space of reasons, in Sellar's celebrated phrase. After addressing this issue, I turn to explain why Campbell's own explanation fails on precisely this count. This attention-theoretic account links attention essentially to subpersonal procedures, and I argue that in doing this it cannot supply what Campbell claims it can: a rational explanation for the *point* of using such subpersonal procedures.

Thus, my verdict on Campbell's account is that he is fundamentally right in singling out attention as a key element in perception providing the clue to understand its demonstrative nature, but his account does not provide an acceptable combination of rational and empirical elements. I hope to have contributed to provide for such a combination by situating the link between both elements in a different region as it were, that is by linking attention to something like qualia, awareness to instantiation of which can be attributed to normal perceivers, and indeed in a way that they can be also claimed to have in a sense tacit knowledge of them.

Finally, a fairly general remark about the stance of this dissertation may be in order. As I have said above, one of this work's objectives is to make a contribution to the establishment of an externalistic view of modes of presentation in connection with the intentional content of perception, and with this, a contribution (however modest) to the advancement of an externalistic view of the mind and thereby —that is, by supporting externalism— also to the articulation of a realist position on the mind. But

I do not try to make my contribution by arguing in favour of externalism or intentional realism. Rather, I assume an externalist and realist standpoint from the very start, and try to clarify at least some of the difficulties facing this viewpoint in the specific domain of my chosen subject.

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1.2. An overview

Chapter Two

I first describe the growing importance of perceptual demonstratives in recent philosophical research in a general way, paying special attention to various works by Evans, Peacocke, Campbell, Cassam, Eilan and Brewer.

I also examine some central aspects of the relation between demonstratives as linguistic expressions and demonstratives as perceptual contents. In particular, and among other cases, I critically examine Campbell's hint at the relation between a theory of sense in the field of perceptual demonstratives and a theory of sense for linguistic demonstratives.

Finally, I include a summary of the kind of approach to the semantic of linguistic demonstratives that I have used as a heuristic tool to arrive at the basic formulation of my proposal about perceptual demonstrative modes of presentation, namely, the Reichenbachian "token-reflexive" account as developed by John Perry and especially Manuel García-Carpintero.

Chapter Three

In this chapter I will put forward a proposal about the intentional content of a perceptual state. Roughly, I hold that in perception things are present in our consciousness as *attended* (by us) and especially, we are aware of particular physical objects as *attended objects*.

As has been said, I arrive at the formulation of my proposal by using recent developments in the theory of *linguistic* demonstratives as a heuristic tool. I take the notion of a *referential intention* (of a speaker) from these and I suggest that recent work on the role of attention in perception leads naturally to a formulation of the hypothesis which substitutes *acts of attention* for referential intentions in determining the reference of a *perceptual* demonstrative. Particular reference is thus achieved by the reflexive role of the act of attention itself.

In this chapter the focus is first on the perceptual judgements associated with perceptual states. With reference to this, I first formulate the proposal by using sentences or, rather utterances, as *models* of intentional contents. This, I believe, allows us to develop the proposal far enough to be able to compare it to various other proposals about perceptual demonstrative modes of presentation.

I note the points of contact between my proposal and that of John Searle in *Intention*, in which (in a way that Searle does not make clear) the perceptual experiences themselves are part of the content of perceptual judgements, and also includes the experiences themselves as determinants of the content of the perceptual experiences. Detailed discussion of Searle's proposal and comparison with some aspects of mine follows. It will be shown that, contrary to the internalistic intention of Searle's proposal, the way my proposal for the intentional content of perceptual-

demonstrative judgements is formulated does not seem to compromise the externalist viewpoint. A crucial element that permits this possibility at this point is considering (acts of) attention in perception as inscribed in *perceptual cycles* in the sense of Neisser's *Cognition and Reality*, where perception, although not of course thoroughly intentional, is seen as having an intentional component in looking. The clue I follow here (using, in a somewhat modified form an idea of Johannes Roessler) is the necessary existence of monitoring for the intention, carrying with it a certain kind of primitive awareness of the experience.

Having presented my proposal and developed it to a certain point in the sense just mentioned, I submit it to an initial test, so to speak, while checking how it fares with respect to McDowell's criticisms of Searle's proposal. I claim that at this point my proposal already shows some clear advantages in this respect, although, I think that McDowell's criticisms show the need to develop it further. The task of the second half of this work is to provide this development.

Chapter Four

In this chapter the focus shifts from a proposal about the intentional contents of perceptual judgements to the perceptual modes of presentation that constitute these judgements. Again, the formulation of my proposal is facilitated by the uses of linguistic expressions as models for intentional contents. (In the end, of course, those models should be, so to speak, "cashd", but this is left to Chapter 6 and 7).

My proposal is then compared to other theories about demonstrative modes of presentation. I try to show its affinity to Searle and Peacocke's ideas (in *Sense and Content*) by putting together a proposal for those modes of presentation from the

standpoint of their ideas. These proposals (including mine) would configure a sort of “purely perceptual” approach to the subject, to be contrasted to the more “substantial” approach I find in Evans (“more substantial” in that (*a priori*) considerations about the nature of the objects demonstratively perceived enter into their formulation).

I then proceed to a detailed discussion of Evans's ideas, both in their interpretation by McDowell, and also in a weaker version (which, as a matter of fact, I believe represents Evans's own views better). I reconstruct Evans's *a priori* argument in favour of the essential role of location and argue that there is an argumentative gap in it. I also proceed to a partial discussion of Campbell's proposal. At this level of analysis my “purely perceptual” proposal is found to occupy a sort of middle ground between Evans and McDowell's more “substantial” approach, on the one hand, and Campbell's fully *a posteriori* or empirical approach, at least in the following respect: it is anticipated that what will finally be required for knowledge of the reference of perceptual demonstratives, according to my proposal, will have a much less rich *a priori* component than Evans's proposal even if it will still preserve an *a priori* element, thus moving away from Campbell's proposal although sharing with it the central emphasis on attention.

Chapter Five

This is a sort of “foundation chapter” on attention, strongly required because of the support from the notion of attention sought by the theory of perceptual demonstratives and the contents of perceptual-demonstrative experiences and judgements developed in the dissertation.

The main issue handled in this chapter is that of the relations between

“phenomenological” or personal attention, as this appears in common sense or folk-psychological notions of attention, or their conceptual philosophical development on the one hand, and attention as a (set of) subpersonal mechanism(s) postulated in cognitive science on the other. An overview of the main empirical approaches and theories of (selective) attention in cognitive psychology and neuropsychology is presented, while seeking to relax the tension between the “phenomenological” and the “mechanistic” notions. I think that this tension may arise in part because of a largely unperceived equivocation in the use of the terms ‘attention’ and ‘selective attention’, but I also believe that there are some genuine problems to be solved in the relationships between folk-psychological and/or philosophical approaches on the one hand and empirical approaches on the other, in the specific field of attention; problems which to a extent reproduce general situations and puzzles in the relation of the cognitive sciences to common understanding. For clarifying purposes I employ ideas here that have been used in a general context to understand the relationships between the two sorts of notions and approaches, including also among these David Marr’s well known distinction between levels of explanation of cognitive tasks, trying to adapt them to present purposes. (Marr’s levels are used for these clarifying purposes at several places in the dissertation.)

The conceptual viewpoint presented in a general way in the review of the empirical theories of attention is tackled in more detail in relation to the empirical approach to the study of attention in perception by Anne Treisman and her collaborators. In the analysis of this approach an attempt is made to separate the empirical from the *a priori* threads, which leads eventually to a specific proposal about the (close) relationship between the “features” postulated by the empirical

theory, and the qualia postulated by some philosophical theories of perception. This proposal is used in Chapter 7 to help in the final articulation of the status of my proposal about demonstrative modes of presentation.

Chapter Six

Before being in a position to clarify the issue just mentioned, I must be clear on a central dimension of the intentional content of perception which has been almost totally absent from the dissertation until this point (thanks to the device of modelling intentional contents with linguistic expression). This is the “pictorial” or “imagistic” aspect that perception is (rightly) seen to have. I first try to explain why we cannot expect much help from empirical approaches to mental imagery in clarifying this aspect. This involves me in clarifying the relation of a “common” notion of “pictorial character” and the theories of mental images in cognitive science (as in R. Shepard or S. Kosslyn's work), and the analysis of Tye’s proposal in the *Imagery Debate* to bring these theories to bear on clarifying the issue of what is to count as a pictorial representation.

I next turn to an exploration of recent proposals on analogue and non-conceptual content, following here the lead of some of Peacocke's contributions, namely his ideas about ways in which objects and properties are perceived and “second-order” isomorphisms. A main concern here is to clarify the relationships that such proposals about content have with philosophical theories of perception that postulate awareness of sensory qualities or qualia. With some important provisos I find that, the imagistic/analogue/non-conceptual contents that those proposals postulate amount to the “phenomenal contents” constituted by qualia.

Finally, I argue against the way in which Peacocke proposes to make analogue or “non-conceptual” contents play a role in the identity of perceptual modes of presentation. I think that role comes out too weakly in Peacocke’s theory, due to an unduly strong separation of the phenomenological and the epistemic sides of content.

Chapter Seven.

This final chapter begins by examining a proposal about the role that phenomenal properties play in the determination of the representational *propositional* content “linked to” perception. This proposal is made up of diverse ingredients, like the role of qualia in perception in views like those of Searle or Jackson, and a partially functional, and thus partially representational view of qualia argued for in recent work by García-Carpintero. This proposal will turn out to be close to the view I myself wish to defend, but I show that it cannot by itself deliver what we need; that is, an explanation of the specifically *demonstrative* content of the perception of physical objects.

After dwelling on some important aspects of the above mentioned proposal, mainly having to do with its externalism, I finally turn to developing my own view of the role that “imagistic” (non-conceptual, phenomenal) content plays in perceptual *demonstrative* modes of presentation. In my account, such a role is played by qualia (externalistically conceived), and they play a role as “combined” or *binded* in an object. This binding is involved in the awareness of qualia as *belonging to an object* (a notion reminiscent of sense-data theorists such as Jackson). Using the characterization of this notion, further reflection shows that the mentioned sort of awareness involves the awareness of the observable properties of the object as

properties of a single object, which in turn leads to equate awareness of qualia as belonging to an object to the kind of awareness constituting (perceptual) attention to the object, which according to my account characterizes the perceptual demonstrative mode of presentation of the object.

In this way, I present my proposal in a direct and (reasonably) complete form (that is, without the auxiliary help of linguistic models) for the first time. I follow Campbell in holding that the characteristically demonstrative nature of perceptual awareness of objects is centrally a matter of *attention*, but I part company with him in conceiving this attention within the bounds of a common sense and/or folk psychology view of it, since, as applied to the case at stake, attention comes out a matter of selecting an object from its perceptual background, a process which I link to the binding of the qualia caused by such an object in the perceiver.

According to my proposal, (perceptual) attention to objects is partially constituted by the identification of properties mediated by awareness of qualia. It is then, in some sense, a “sensation-based” approach. But, in his recent defense of his position, Campbell argues in a general way that “sensation-based” accounts cannot possibly succeed. In confronting this I explain why my specific proposal is free from the basic drawbacks that —as Campbell has correctly seen— plague the general approach.

I then return to my criticism of Campbell's approach, touching on the aspects that have opened for discussion with the development of the dissertation. The main issue centers around the notion of “cognitive access” or *grasp* of sense. I argue that, contrary to what Campbell claims, his position is, as a matter of principle, unable to explain how a subject has, as a person, cognitive access or grasp of sense. This might

be thought to be expected anyway because of the “subpersonal character” of Campbell's theory of perceptual demonstrative senses, but nevertheless, Campbell has presented an argument to the effect that his proposal can, after all, account for grasp of sense. My rejoinder to this consists in tracing the unsoundness of this argument to an illegitimate use of the notion of *procedure* on Campbell's part.

My final efforts are devoted to showing why Martin is not right after all in adopting the viewpoint from which he launches his criticism of Campbell's approach. I claim that, on the one hand, there is more room in this case for philosophical (“relatively” *a priori*) reflection than Martin allows, and on the other, that there can be a more intimate relationship between *a priori* and scientific investigations on the matters at issue.

Chapter 2: The Study of Perceptual Demonstratives

2. 1. Perceptual demonstratives in recent philosophical discussion

In contemporary philosophical discussion, Peter Strawson seems to be the first to have single out for our attention a kind of *identification* of ordinary material objects for which perception is essential. He called this ‘demonstrative identification’ and we have a case of it when a subject “can pick out by sight or hearing or touch, or otherwise sensibly discriminate” that object (*Individuals*, p. 18).

This demonstrative identification happens, for example, when looking for a person among a group of people, or when looking for one’s own car in the car park. A sensory mode may then be selected for such a search, and in these examples it will usually be sight. It makes no sense at all to try to identify a car that one expects to be motionless by engaging hearing in the search. However, depending on the details of the case, that may make perfect sense when one expects its engine to be running, as it also makes perfect sense to engage hearing when searching for a particular child whose voice one knows well in the play-ground. On occasions such as these, the sensory mode may be engaged on purpose, and some particular property of the object, like colours for cars, or voices for children, may play an outstanding role in the identification. But at other times the subject does not deliberately select a sensory

modality in order to perceptual-demonstratively identify an object, but rather a modality is engaged by salient features of the objects in the environment which may automatically attract the attention of the perceiver and result in her demonstrative identification of the object. (“That really is a nuisance!” when referring to a particular pneumatic drill.)

In speaking of ‘demonstrative identification’ Strawson was talking about a particular capacity. And, as the wide variety of examples cited show, there is no reason in what Strawson says to think that this capacity is essentially a *linguistic* capacity or that it is exercised only in using language. We should rather say that the capacity at issue is an ability exercised *in thinking* or an ability *of thought*, which it consists in the ability to be able to entertain a certain kind of judgement or, more generally, to entertain a certain kind of thought (“There it is!” “That is my car”) which, in consonance with Strawson’s terminology and, as it turns out, with later current terminology, may be called, respectively, ‘demonstrative judgements’ or ‘demonstrative thoughts’. Using this terminology we can therefore say that according to Strawson we do not have a demonstrative judgement or thought—a thought involving demonstrative identification— unless we are in perceptual contact with the object made salient by perception itself.

Further questions about the “perceptual contact” necessary for entertaining demonstrative thoughts may be asked. Proceeding in a certain direction one may ask, for example, when one sees or touches an object one metre ahead and then closes one's eyes or ceases to touch the object for a tiny fraction of a second, whether one still has the same demonstrative thought that was entertained before; that is, whether it is the same identification of the object which is being performed.

However, there is another type of question about such perceptual contact which may be asked; questions about various aspects of the capacity to have the thoughts at issue, among which the following one stands out: what is there in the perception of the object that enables a subject to entertain these distinctive kinds of thoughts? Now, it seems that a good first shot at an answer to this particular question would be that perception involves an *information link* between the perceiver and the object. One would then be left with the task of characterising the kind of information link which is relevant in singling out the target type of thought, and also of inquiring about other information links, perhaps based on capacities or information-providing mechanisms other than perception, that are closely related enough to give us a whole family of thoughts for which perception-based thoughts would act as a paradigmatic representative.

Thus, the first line of attack on the perceptual contact issue would involve questions about the proper contact with the environment embraced sensorily (such as, for example, whether this contact can be briefly interrupted). And the second line would rather concern the sort of contact involved, whether only a strictly sensory contact that should count, or whether other closely related informational links with an object may be included.

It is the latter line of inquiry that Evans pursues in *The Varieties of Reference* (1982). According to Evans sentences with demonstrative terms require what he calls information-based thoughts for their understanding. And this kind of information can be available in three different situations. First, when the object referred to by the demonstrative expression is in the environment at the time of the proference. The hearer and the speaker can then understand the remark because there is shared

perceptual information which provides the necessary perceptual contact. Second, when the object referred to is not in the environment at that moment but has been there before and the speaker has enough reasons to assume the hearer retains information about that fact. And finally, when the referred object has never been shared in an environment by speaker and hearer but the information available from the object can be shared, in the sense that it is information available from the testimony of others, and moreover the speaker is entitled to assume that the hearer has this information.

In the above-mentioned work Evans has a name for the demonstratives of the second and third kinds: he calls them, respectively, ‘past-tense demonstratives’ and ‘testimony demonstratives’. Surprisingly though, he does not introduce any terminology for naming the *first* kind of demonstratives, in spite of their providing the paradigm for demonstrative identification or demonstrative thoughts. Here is the passage where Evans describes the three kinds of demonstrative reference and introduces the terminology just mentioned, the passage in which a denomination for demonstratives of the first kind is conspicuously absent:

The characteristic is this: in order to understand an utterance containing a referring expression used in this way, the hearer must link up the utterance with some information in his possession. Thus, if a speaker utters the sentence ‘This man is *F*’, making a demonstrative reference to a man in the environment he shares with the hearer, the hearer can understand the remark only if he perceives the man concerned, and, bringing his perceptual information to bear upon his interpretation of the remark, judges ‘This man is *F*: that’s what the speaker is saying’. Or a speaker may advert to information which he presumes the hearer retains from a previous encounter with an object, saying, perhaps, ‘That man we met last night is *F*’; and here again, I do not think that the hearer can have understood the remark unless he actually remembers the

man, and thinks ‘That man is F: that’s what the speaker is saying.’ (I call such uses of the demonstrative form ‘that \emptyset ’, ‘past-tense demonstratives’.) Or again, the speaker might advert to information he presumes the hearer has from the testimony of others, perhaps from a newspaper article, or a rumour, or a conversation, saying something like ‘That mountaineer is *F*’; here I do not think that the hearer can be said to have understood what the speaker is saying unless he possesses this information and thinks, in a way which is informed by it, ‘That mountaineer is *F*: that’s what the speaker is saying.’ (I call these uses of demonstratives, ‘testimony demonstratives’.)

Evans, *Varieties of Reference*, pp. 305-306.

Evans indeed had an excellent opportunity at hand to introduce a special denomination for the kind of demonstratives that, according to him, provided the basic case. And an obvious one at that: parallel to the denominations ‘past-tense demonstratives’ and ‘testimony demonstratives’, the expression ‘perceptual demonstratives’ would be the obvious candidate for that paradigm.

Now, it is obvious from the text quoted that Evans was using the expression ‘demonstrative’ for a *linguistic expression*. And indeed, when describing Evans’s line of inquiry in the last few paragraphs, I have been talking of the *understanding of sentences* with demonstrative terms and some diverse kinds of *reference* to objects by means of different kinds of demonstrative expressions. On the face of it what we have here is a *semantic project*.¹ On the other hand, in talking about what is required for such understanding and such references, Evans is indeed laying out features of the *thinking* which is required for such an understanding as witnessed by the text quoted above. And this undertaking can take on a life of its own, leading to the delineation of

¹ One is reminded here of Evans’s very significant contribution to the semantics of demonstrative expressions in “Understanding Demonstratives”, in some passages of which it is possible to find the seeds for the new project which is described in the present chapter.

what Evans calls ‘information-based thoughts’ putting aside, even for a while, worries about their role in the understanding of sentences. And, one may be allowed to add, coming from the Strawsonian perspective I mentioned at the very beginning of the chapter, it is not much of a surprise that it did indeed acquire a life of its own.

As we will see in the next section, the way of introducing the new undertaking that is suggested in Evans's text quoted above gives rise to certain problems, at the very least problems of expression, given that the phenomenon of making perceptual demonstrative judgements or entertaining perceptual demonstrative thoughts is, at least pretheoretically, a different phenomenon from the phenomenon of using demonstrative expressions when these are used in contexts which require perception for their understanding. Thus, to make this difference clear at a pretheoretical level, consider a case in which there are two similar dogs and someone, vaguely nodding in their direction, addresses the owner of one of the dogs by saying: “That’s your dog Figo”.² Since the nod has been vague and the dogs are similar, there is a real question about whether the hearer’s attention has been directed at any particular dog. The hearer has truly no way of knowing which dog the speaker is referring to and so no way of knowing whether what the speaker says is true or false. But even if the speaker's utterance has misfired, her thought may perfectly well be directed at one of the dogs. Thus, we may hold that while the use of the demonstrative expression in this occasion is faulty, the demonstrative thought is well determined.

The (pretheoretical) distinction between the phenomenon of having what may be called ‘perceptual demonstrative thoughts’ and the competent use and understanding of demonstrative expressions which need a perceptual episode for such a use and

² The example is from Reimer (“Three Views of Demonstrative Reference”, p. 380).

understanding seems to confirm that the phenomenon of demonstrative thought in general must be distinguished from the phenomenon of the meaning of sentences or utterances with demonstrative expressions. Which does not imply that one cannot come to study the first via a study of the second. This, at least in part, is precisely the way in which Evans's approach to the new subject of study is to be seen, especially when one bears in mind texts such as the one quoted above.

With its own peculiarities, this was also the way for Christopher Peacocke, the other "founding father" of the study of demonstrative thought.³ His first contribution to the subject in "Demonstrative Thought and Psychological Explanation" is to a certain extent in the spirit of Kaplan's insistence on the importance of the semantic study of demonstrative expressions and, to a greater extent, of Perry's studies of the indispensability of thoughts or beliefs that should be expressed by demonstrative expressions for the purpose of explaining action.

Peacocke's contribution takes shape around his defence of the thesis he calls the *Indispensability Thesis*: "No set of attitudes gives a satisfactory psychological explanation of a person's acting on a given object unless the content of those attitudes includes a demonstrative mode of presentation of that object" (*op. cit.* pp. 205-206). Peacocke himself says of this thesis that it "generalizes the points made by J. Perry in 'The Problem of the Essential Indexical' (...) and further developed in his 'Perception, Action and the Structure of Believing'." It is in the fore-mentioned paper by Peacocke that we find for the first time, as far as I know, an explicit mention of the difference

³ But Peacocke seems to recognize a certain priority in Evans when he writes: "[T]hose who know his work well will recognize that my conception of how philosophy in this area should be done—as opposed to the particular views to be held—has been greatly influenced by vigorous discussions ... with Gareth Evans" (*Sense and Content*, p. viii).

between the “goal of a meaning theory for indexical languages” (p. 192) and something that is a “task of the philosophy of mind”, to wit, answering to “the need for substantive theories of demonstrative modes of presentation” (p. 194).

On his path to developing such substantive theories, Peacocke introduces a systematic notation for these modes of presentation. It is in this context that the denomination ‘perceptual demonstratives’ first makes its appearance (“Demonstrative Thought and Psychological Explanation”, p. 200). But Peacocke does not use it to refer to linguistic expressions, but, very roughly, to the “part” or “element” in perceptual demonstrative thoughts which, as it were, corresponds to the subject in the verbal expression that might be used to *describe* or “model” the thought. That is, in effect, a subset of what Evans called ‘Ideas’, a terminology that he explained thus:

Using what I hope is a harmless piece of convenient terminology, I shall speak of the Ideas a subject has, of this or that particular object, on the model of the way we speak of the concepts a subject has, of this or that property [in note: ... I capitalize the initial letter as a reminder that we are dealing with a technical use of the term.] And I shall allow myself to say that this or that particular thought-episode comprises such-and-such an Idea of an object, as well as such-and-such a concept. This is simply a picturesque way of rephrasing the notion that the thought is a joint exercise of two distinguishable abilities.

(Varieties of Reference, p. 104)

The non-linguistic usage of the expression ‘perceptual demonstrative’ holds for Peacocke’s use in the paper mentioned as well as for the work which constitutes a first culmination of his study of demonstrative thought, *Sense and Content*; as indeed,

it does as far as I know, for any other writings by Peacocke.⁴ And I will follow Peacocke entirely in this usage,⁵ for which I will be satisfied, for the moment, with applying the explanation contained in Evans's text for singular modes of presentation in general to it, leaving the task of further clarification to Chapter 4.

I maintain this usage in the ensuing brief description of several recent writers diverse intellectual interests and projects which concern perceptual demonstratives, at least where there is no suggestion to the contrary.

While Evans's interest focuses rather on perceptual demonstrative thoughts as a whole, Peacocke is also concerned with perceptual demonstratives as such. Peacocke's interest in perceptual demonstratives as in some sense the basic cases for the study of the relations between, so to speak, reference and sense "in thought" is also evident in John Campbell's work. As a matter of fact, Campbell uses the term 'senses of perceptual demonstratives', which on the face of it is semantic terminology, but which he puts to use to introduce his inquiry on the components of

⁴ Cf. "Demonstrative Thought and Psychological Explanation" pp. 200 and 204, where the expression first occurs, to my knowledge. Cf. further, p. 144 of *Sense and Content*, for the first occurrence in this work (for other occurrences, cf. 153 ff.).

⁵ A few paragraphs previously, in commenting on Evans's missed opportunity for introducing the expression 'perceptual demonstrative', I momentarily suggested a "linguistic usage" for it. Now, this usage is actually found in the literature, although perhaps rather as a mere *façon de parler*, as we will see below. One must be careful here not to be confused by genuine linguistic uses of the expression in the semantic literature on the behaviour of demonstrative expressions. Since demonstrative expressions that require perception for their interpretation are to be distinguished from uses of demonstrative expressions whose interpretation is determined by referring back anaphorically to other expressions in a linguistic context, we need a different denomination for each use. Thus, Ingar Brinck refers to these two uses respectively as the *perceptual use* and the *narrative use* (cf. her "Demonstrative Reference and Joint Attention"), but occasionally she uses the term 'perceptual demonstratives' to refer to demonstrative expressions as used in the first of these two ways.

thought at issue. His usage is closely related to another peculiarity in his approach, that of using the framework of inferences with perceptual demonstratives. As we will see in detail in the next chapter, Campbell believes that senses or modes of presentation, in particular the senses associated to singular expressions, are what allows a reasoner to rely or “trade upon” co-reference, in particular the co-reference of singular tokens of those two expressions:

Sense is that, sameness of which makes trading on identity legitimate, difference in which means trading on identity is not legitimate.

“Sense, Reference and Selective Attention”, p. 59
(cf. also “Is Sense Transparent?”, pp. 276 ff).

According to this characterization of sense it is analytically true that, if two perceptual demonstrative tokens have the same sense, then one can trade upon their co-reference in an inference. Indeed, inferences with perceptual demonstratives are a paradigmatic example of the constitutive relationship that Campbell postulates between sense and trading upon co-reference of singular terms.

For the characterization of the sense of perceptual demonstratives Campbell turns to empirical psychology, since he believes that senses or modes of presentation depend on how our perceptual systems actually operate for their identity. This is how, in following this path, he is led to link them to the cognitive capacity of perceptual attention (cf. “Sense, Reference and Selective Attention”).

Campbell also explores the possibility that perceptual demonstratives could be taken as a model for, apparently, the use of the first person pronoun (an issue that, in their own ways, is also found in Evans and Peacocke's work). Campbell's main

interest in this issue is in the study of the nature of the self, and he holds that a fruitful way to pursue this study is in the context of inferences with the first person pronoun (again there is an issue here about whether he means inferences in the sense — standard in contemporary logic— of involving *sentences* or other kinds of *linguistic* items, or rather inferences “in thought”; but we shall let this pass for now). Specifically, he looks to see whether the conditions in which trading upon co-reference is legitimate in the case of the first person pronoun are the same as the conditions in which one can trade upon co-reference in the case of inferences involving perceptual demonstratives. If this were the case, then, assuming the constitutive connection between those conditions and senses mentioned above, one might think that the sense of the first person pronoun can be thought of according to the model of the sense of perceptual demonstratives (cf. *Past, Space and Self*, pp. 87-93). Campbell, however arrives at a negative conclusion concerning this possibility, arguing that what legitimates trading upon co-reference in the case of perceptual demonstratives is “keeping track” of the object, while there is nothing that answers to this description in the case of the first person (see *op. cit.* § 3.2).

A comparison between perceptual demonstratives and the first person is also proposed by Quassim Cassam in “Self-Reference, Self-Knowledge and the Problem of Misconception” and in *Self and World*, at a key point in his argument in favour of the thesis that self-consciousness implies awareness of oneself as a physical object, itself in turn a key thesis in his inquiry into the nature of self-consciousness. Here, perceptual demonstratives are meant to deliver the model for understanding what kind of awareness is at issue. According to Cassam understanding a perceptual demonstrative (expression) does not require a substantive knowledge of the object

referred to by the demonstrative, but only an awareness of it as an articulated physical unity, which requires as little awareness of the object as being simply something with definite spatial boundaries (cf. “Self-Reference, Self-Knowledge and the Problem of Misconception”, p. 286). In a similar way, awareness of oneself as a physical object would require only awareness of oneself as “oneself, *qua* subject, as shaped, located and solid” and, in this way, “as a bounded corporeal object” (*loc. cit.*).

Thus, as we can see, both Campbell and Cassam compare the way the first person works (so to speak) with the way in which perceptual demonstratives work, but while in Campbell this comparison results in a dissimilarity, Cassam emphasizes the analogy. We may note that, as we have seen, the particular form in which they frame the issues owes much to Evans’s way of formulating issues about thought in a semantic key, as it were.

Perceptual demonstratives play a more central and positive role in Bill Brewer’s recent work on the foundations of empirical knowledge. In his book *Perception and Reason*, perceptual demonstratives appear first in the context of his defence of a key argument for his project, what he calls the Strawson-Argument. According to this, the singular modes of presentation which are part of the contents of perceptually-based beliefs cannot be descriptive. The possibility of misperception, but above all the possibility of reduplication or multiple satisfaction makes it impossible to determine a unique mind-independent referred (intended) object if the content of a perception is characterized descriptively. Hence, the determinate character of reference that characterizes our perceptually-based beliefs requires the more fundamental kind of reference that is found in perceptual demonstratives. Brewer describes this form of reference in the following way:

The Ideas⁶ involved at this level, I believe, are *essentially experiential* perceptual demonstratives. That is to say, the more fundamental mode of reference to spatial particulars, which is required to anchor our beliefs to a unique set of such things in the world around us, essentially involves a presentation of the particular thing in question in conscious experience.

(Perception and Reason, p. 28, author's italics).

Brewer's aim is to show how perceptual experience provides knowledge. He argues that this is shown by explaining how it provides reasons for empirical beliefs. The claim is that not only is the content of someone's empirical beliefs not independent (constitutively) of any relation she may or may not have with the actual things around her, but that this is recognized by the subject herself when she understands, as a perceiver, how her perceptually-based beliefs are based on experiences about particular mind-independent things in the spatial world around her. The fundamental mode of reference that is supposed to be distinctive of perceptual demonstratives provides the crucial element in the explanation of how this is the case.

As this brief and somewhat casual survey tries to illustrate, perceptual demonstratives play a key role in several important philosophical projects, most of them related in intricate ways. In *Individuals*, Strawson puts the existence and epistemological priority of (perceptual) demonstrative thoughts to work for setting out an argument in favour of a long-ranging *metaphysical* thesis: the ontological priority of spatio-temporal individuals in our conceptual system. Evans, essentially

⁶ Brewer is here using Evans's terminology, in which, as we have seen, an Idea is the singular "part" or "element" in a singular thought, and so it is not described semantically, as the the sense of a singular term.

motivated, it seems, by the project of developing fundamentally anti-Cartesian epistemological views, is interested in arguing for the existence of what he calls ‘Russellian thoughts’ and in investigating their varieties. He believes that the demonstrative thoughts associated with perception constitute a paradigmatic kind of such “Russellian thoughts”, but that there are other Russellian thoughts of the demonstrative variety, so to speak, which are made possible by capacities other than perception (such as memory) and other knowledge sources, like testimony. Moreover, he inquires whether there are other species of the genus ‘Russellian thought’ besides the demonstrative variety. His inquiry may take an apparent meaning-theoretical shape, but, as I have hinted above, it is aimed at thought-theoretical targets, in the province of the philosophy of intentionality and philosophy of mind.

Peacocke first linked the study of perceptual demonstratives to issues in the philosophy of action, but they soon appear in his work connected with the same general issues that concerned Evans, and also with issues in the philosophy of perception.

Perceptual demonstratives also play a significant role in the work of other authors ranging from Campbell and Cassam’s efforts at clarifying the “sense of the first person” to Brewer’s project of explaining how experiences provide reasons for empirical beliefs, or Eilan’s project of theoretical clarification of the “perspective of consciousness” (cf. her “Objectivity and the Perspective of Consciousness”).

2.2. Perceptual demonstratives and linguistic demonstratives

In the previous section I alluded to the difference between having demonstrative thoughts and competently using and understanding utterances with demonstrative expressions. I also suggested that we can pre-theoretically capture that difference in cases like Reimar's example, where the demonstrative thought —precisely a *perceptual* demonstrative thought this time— could be definite because of identifying a particular object, while there is no utterance linked to that thought by the rules that account for the competent use and understanding of sentences and utterances. This seems to suggest, still at the pre-theoretical level, the more general possibility of thoughts or judgements that are different due to the peculiarities of perception, but which can only find uniform (unique) linguistic expression in utterances with demonstrative expressions.

With regard to perceptual demonstrative judgements and restricted to the “part” of the thoughts in which we are interested, the distinction is the one between the *sense of a demonstrative expression*, the understanding of (and use of) which requires perception, and the *mode of presentation* of a particular in perception, which, assuming a general Dummetian conception of sense, would be roughly the distinction between the condition a particular must meet *to be the referent of an indexical or demonstrative expression* when this expression requires perception for its understanding, and the condition it must meet in order *to be perceptually identified*. The difference here is clearly one of intension, so to speak; but one must at least also reckon on the possibility that there is a difference in extension as well, that is, that not all the perceptual demonstrative modes of presentation are senses of (possible) expressions in the language.

But these distinctions between two kinds of phenomena are not necessarily a

barrier to approaching *in one way or another* the study of the first kind of phenomenon on the basis, or with the help, of the study of the second. And indeed, I have remarked that, to begin with, it was *historically* the case that the need for “substantial theories of demonstrative modes of presentation” —as Peacocke put it— came to be recognized as a subject of its own in the course of the study of the semantic peculiarities of demonstrative and indexical expressions. (I will expand on this point in the next section.)⁷

It is true, however, that the peculiarities of the new domain of study makes the mere application of a theoretical apparatus conceived to handle the semantics of demonstrative expressions unlikely to get us very far in the investigation of the new domain of the theory of intentionality, because the difference in extension remarked on above. Thus, we have Peacocke’s early warning that even without going into details “[t]he probable nature of these substantive accounts shows why one cannot identify type m.p.’s with Kaplan’s characters or token m.p.’s with ordered pairs of character and object.” And this is how he formulates the reason: “Character is essentially linguistic, a rule for determining an object as referent on an expression from a context of utterances, whereas it is not excluded ... that someone should empty token m.p.’s in his thought while having no word in his language (if any) to express those m.p.’s” (“Demonstrative Thought and Psychological Explanation”, p. 195). In *Sense and Content* Peacocke was soon to argue that what is here introduced as an

⁷The adjective ‘semantic’ is meant to be used so that it refers to properties that *expressions of a natural (public) language* possess, which directly are related to meaning —and so, they are not phonetic or phonological properties—, but which are not pragmatic properties.

open possibility is actually the case.⁸

Nevertheless, the respective conditions on senses of demonstrative expressions and (perceptual) demonstrative modes of presentation can somehow overlap, so that in giving details of the condition for understanding uses of demonstrative expressions one would come to find out something of importance about such demonstrative modes of presentation. This may be the rationale for a sort of *methodological stance* implicit in the literature, a decision that leads to a preference for discussing issues that belong rather in a theory of (perceptual) judgement or thought —something in the province of the study of intentionality and the philosophy of mind— in a “semantic key”, which shows in the use of semantic terminology and also in the use of the expression ‘demonstrative’ or ‘perceptual demonstrative’ to literally refer to a kind of linguistic expression, when the main issues lurking in the background discussion go well beyond purely semantic concerns. This, I feel, is what is going on in passage by Evans's quoted extensively in previous sections, and in passages by other authors on which I will comment below.

The crossing over of several projects and perspectives results in some danger of confusion. Indeed, what we have here is no less than: (1) two different projects, related in complex ways; (2) the possibility of using —as a methodological or strategical device— at least part of the language naturally appropriate to be used in one of the projects to clarify issues belonging to the other project; (3) the fact that there is an effort underway to extend the Fregean view from its home base (the

⁸ Peacocke's argument is, in fact, a straightforward consequence of the theory of demonstrative modes of presentation that he gives in Chapters 5 and 6 of *Sense and Content* (cf. especially pp. 106-107, 160-161 and 126).

semantic theory of language) to new domains.

Next, I would like to comment briefly on some examples which illustrate the different aspects of the peculiar situation which I have just been describing in a general way.

The first example is provided by attempts to extend the Fregean perspective in which we find certain formulations which suggest somewhat oddly, that it is a semantic issue which is at stake, when really it is not. A number of passages in Campbell's writings are a case in point.⁹ Take, for example, the passage in "Sense, Reference and Selective Attention" in which he starts with a text by Kaplan taken from his work "Demonstratives" (p. 514). I will not reproduce this text here but it will suffice to know that the context in which it occurs is one in which Kaplan is reconstructing a Fregean theory of demonstrations as part of his immediate aim to explain and criticize Frege's theory of demonstrative expressions. Thus, the context to which Campbell appends his comment, and the paper "Demonstratives" as a whole, is a context of research (a report) on a *semantic* theory of certain kinds of *linguistic* expressions (demonstrative expressions). Campbell says:

The problem this raises is how we are to characterise in detail the senses of perceptual demonstratives, such as 'that planet', or 'that car'. In the case of a definite description the phrase itself makes explicit the condition that something has to meet of an object to be its denotation. If two descriptions impose just the same conditions, then trading on identity is legitimate. But how are we to say what the sense of a demonstrative is?

(*Op. cit.*, p. 60)

⁹ Points similar to the ones to be made here arise in connection with other works by Campbell. (See specially Campbell, *Past, Space and Self*, § 3.2.)

Now, on the strength of the knowledge of the context of Kaplan's remark to which Campbell adjoins his comment, and, indeed, of the general project in "Demonstratives", and on the basis of Campbell's terminology in this passage, one may be fully justified, I feel, in assuming that Campbell is about to discuss a proposal about the semantics of demonstrative expressions. There is no immediate indication that allows the reader to suspect otherwise. Thus, it clearly seems that Campbell is applying the term 'perceptual demonstrative' to linguistic entities in that text, and that he is indeed talking about the sense of a certain kind of linguistic expression. According to all this, this text would make a standard philosophical use of the term 'sense'.

But if the reader approaches Campbell's text in this frame of mind he is likely soon to feel disoriented, because the text continues thus:

This problem of the sense of a perceptual demonstrative is a problem about selective attention. To find when two demonstratives have the same sense, we have to look at the principles that the perceptual system uses to select a collection of imagistic information as all relating to a single object.

This does not look at all like a proposal about the semantics of languages with demonstrative expressions. Indeed, as soon as we look into the context of Campbell's passage, we see that he introduces his subject by contrasting certain "imagistic contents" with certain "propositional contents", and his explicit purpose is to contribute to an explanation of the relations between the two. It is the key to just *these* relations that he finds in the *psychological* state of selective attention. Thus, we soon see that, far from being concerned with *the semantics of certain kinds of linguistic*

expressions, Campbell is interested in *the content of perceptual experiences*. This raises the question of why he is talking about the *sense* of a certain class of *linguistic* expression, as we must take him to be if we interpret the form of words he uses literally? Is he perhaps of the opinion that perceptual modes of presentation are just the senses of certain linguistic expressions? And this, assuming a perceptual demonstrative is the kind of linguistic expression which requires perception for its understanding. Or perhaps, although he rejects —or, at least does not assume— extensional identity of the classes of such senses and such modes of presentation, is he still choosing to theorize in a “semantic key”, that is, by *apparently* talking about the members of the first class?

There is yet another possibility, suggested by texts like the following one:

Among the concepts used in propositional thought, I will focus on the singular terms that we use to refer to perceived objects, such as ‘that car’ or ‘that man’
(Campbell, *op. cit.*, p.58)

In passages such as these, I submit, it is clear that Campbell is talking of demonstratives as a kind of *concept*, as is manifest in the very first words of the text above. The fact that he seems to refer to them as singular *terms* immediately after — even using singular demonstrative *terms of language* to (apparently) *exemplify* those demonstrative *concepts*— is not to be interpreted as an incongruence on his part, but only as reflecting the very widespread practice of using an assumed analogy of thought with speech for the purposes of expediency when introducing specific examples of thought items. This is the practice we find, for example, in the following passages by Peacocke:

Suppose a street lamp in London in the fog looks exactly the same from the north as it does from the south. Standing five meters north of it, you see it and think “That lamp is Victorian”. Would you have had exactly the same thought—not merely for the same type of thought— had you seen the lamp from five meters south and thought “That lamp is Victorian”?

(“Demonstrative Thought and Psychological Explanation”, p. 200)

For instance, two perceivers may have exactly the same type of subjective experience in respect of what is perceived and how (...) but one may use the concept “that diamond”, another may use “that shape”, another “that pointed figure”.

(“Nonconceptual Content Defended”, p. 382)

It follows from this interpretation of Campbell’s way of talking that when he uses the expression ‘perceptual demonstrative’ he is, after all and against all appearances, *not* alluding to a kind of linguistic entity, but to a kind of singular concept or mode of presentation.

But this leaves us with the problem of interpreting his expression ‘the sense of a perceptual demonstrative’. On the present interpretation, this would be *the sense of a concept* or, equivalently here, *the sense of a mode of presentation*. Is this a congruent way of talking? One recalls here that in the Fregean tradition of analysis of mental state attributions it is acceptable to talk of the sense of a sense. Even more to the point, in Peacocke’s pioneering paper “Demonstrative Thought and Psychological Explanation” repeatedly mentioned in these pages, he argues that, in the case of demonstrative thoughts, we cannot identify modes of presentation of objects with modes of presentation of modes of presentation of objects (cf. *op. cit.* p. 192). I cannot pause here to examine the context of Peacocke’s claim and even less the

argument itself. What I would like to pick up from this is only the possibility of interpreting Campbell's form of words 'the sense of a perceptual demonstrative' in the same spirit as Peacocke's 'the mode of presentation of a mode of presentation'.

I doubt, however, that Campbell's expression can be interpreted in this way. The reason for this is that in a Fregean approach to intentionality, which I assume Campbell to be following in his analysis of the intentionality of perception, it seems that the "sense" of a mode of presentation should determine this mode of presentation in the same way that sense determines reference in Fregean semantics. That is, the idea that there could ever be a case with a unique "sense" of a mode of presentation and *two*, or more, modes of presentation would be incongruent with the basics of such a Fregean approach. And, even though it would be premature at this stage to go into the details of Campbell's proposals to substantiate the claim, it seems to me that something like that situation would occur according to such proposals if, that is, we interpret Campbell's form of words 'the sense of a perceptual demonstrative' along the lines suggested.

I would suggest instead that if we persist in taking the expression 'perceptual demonstrative' to denote a certain kind of *concept*, as opposed to a certain kind of linguistic expression, we interpret the form of words 'the sense of a perceptual demonstrative' as trying to refer to a *type* of mode of presentation. That is, along with the different perceptual demonstratives —different modes of presentation *tokens*— there would be a unique mode of presentation *type* to which those belong. And it would be the aim of Campbell's theory to characterize such a type.

With these comments on Campbell's texts I do not claim to have ascertained the real intentions behind his terminology or linguistic usages. For one thing, I am not at

all clear that there are decisive reasons for choosing just one of the alternatives outlined to interpret what Campbell says. I only hope to have said enough to illustrate why we cannot regard those usages as at all straightforward.

As a final example on the topic of possible problems with terminology or linguistic usages, I would like to turn to texts from Eilan's "Objectivity and the Perspective of Consciousness" in which the author is at some pains to indicate when she is talking about *expressions* of a language and when she is talking about *thought contents*, as shown, for instance in the following passage:

Prime examples of expressions that cannot be used in an absolute conception are all the context-dependent indexical expressions such as 'I', 'now', 'here' or 'this'. Assessing the truth or falsity of such representations requires taking into account facts about when and where they are used, which objects are causing their use, and so forth, that is, requires taking into account the perspective from which thoughts they are expressive of are entertained.

(Op. cit. p. 239)

Nevertheless, consider the following text:

A representation is perspectival if the assessment of its truth or falsity requires taking into account the context in which it is used.

(Ibid.)

As the context of her paper makes clear, Eilan's use of the word 'representation' here is not to be limited to denoting linguistic expressions in a public language but is meant to include mental representations in its denotation as well. Still, in appealing to the relativity of the interpretation of one such representation to "the context in which

it is *used*”, she is treating such mental representations as something akin to linguistic representations, in that both of them can apparently be *used*. This is also found in other places in Eilan’s paper:

An account of how objective knowledge is possible from within the perspective of consciousness will be an account of how context-dependent indexical representations of objects and spatial properties, *the use* of which is at least partially constitutive of having a self-conscious perspective in play (...)

(*Op. cit.*, p. 244; my italics.)

The point is that we understand what ‘use of representations’ means when talking about mental indexical representations if we assimilate these cases to the use of *terms* in a language, where we use representation-types —expression-types— by generating *tokens* of them. But it is not obvious how that expression should be applied to the kind of representation Eilan mainly has in mind.¹⁰

A rather different sort of example is provided by Searle’s book *Intentionality*. As the title of the book indicates, it is devoted to the analysis of intentionality. It so happens that here Searle outlines a semantic analysis of indexical *expressions*, which for him include ‘I’, ‘you’, ‘this’, ‘that’, ‘here’, ‘now’, ‘he’, ‘she’, etc. In a book devoted to intentionality, one would expect him relate his analysis of these expressions explicitly to the analysis of indexical *thoughts* or thought components which may or may not be expressed by means of such expressions. On the face of his

¹⁰ In a broad meaning of the expression, we can talk of a person’s use of a mental representation of a determinate room, say, when she moves around in it. It does not seem that the use of the phrase in Eilan’s text can be assimilated to this one. We would indeed have a clearly legitimate use of the expression if we were prepared to assimilate mental representations to linguistic representations by endorsing the Language of Thought Hypothesis, but nothing else in the text points in that direction.

analysis of indexical expressions, one might perhaps think that the methodology is to proceed first to such an analysis, going on to elaborate on how the account provided can be made the basis for an account of indexical thought. But Searle does not do this. There is no account of indexical or demonstrative intentionality in his book. This is the cause for some perplexity, which is reflected, I think, in the following remark by John McDowell:

I note that it is a curiosity of Searle's discussion that he deals with the first person, for instance, only in the context of his treatment of indexical *expressions*, as if the first-person mode of presentation—to use Fregean terminology—was in play only when one speaks and not also in unexpressed thought. There is no reason to suppose that the general strategy (...) requires this.

(“Intentionality *De Re*”, p. 223, note 9; McDowell's italics)

At the very least, what we should perhaps conclude from the examination of these examples is that we find ourselves in an area of inquiry where avoiding unwanted interpretations or even perplexities is anything but easy. The examples given are among many which could have been chosen, and so, they really can be taken to serve the purpose of illustrating a situation in the area of inquiry. But their choice has not been left to chance. As will be seen, all four have a special connection with the path which the present investigation will take: Kaplanian *demonstrations* will provide a source of inspiration, Campbell's *selective attention* will be a key element in the proposal, and as will something akin to the *uses of demonstrative mental representations* which are alluded to in Eilan's texts. And all this will be put at the service of developing the kind of substantial *theory of perceptual demonstrative modes of presentation* which has been found lacking in Searle's writings. I hope,

however, that in pursuing this path I have taken note of the problems inherent in the examples examined so as to avoid their unwanted implications or pitfalls.

2.3. The aim of the inquiry

As we have seen in the very brief survey in the first section of this chapter, there are several areas of philosophical inquiry and diverse philosophical projects in which perceptual demonstratives are called for and a view of perceptual demonstratives must either be laid out or presupposed.

There is an obvious additional area of inquiry where interest in perceptual demonstratives naturally arises, indeed the “proprietary area” of inquiry for perceptual demonstratives, which is none other than the characterization of perception, including the characterization of the relationships of perceptual experiences to thoughts or judgements “directly related” to (or perhaps involved in) perception: perceptual thoughts or judgements. In fact, this is the perspective which will mainly inform the present work.¹¹

More specifically, we will concentrate on one characteristic of perception. Here, objects are presented in perception with properties which can be established by *observation*, and this is undoubtedly one of the central features or characteristics of perception. But what constitutes the focus of interest in this work is an altogether

¹¹ This is a major interest in Peacocke’s work on perceptual demonstratives since *Sense and Content*, in many ways the other “founding work” of current philosophy of thought, jointly with Evans’s *Varieties of Reference* and the two earlier papers by Evans and Peacocke mentioned in previous sections.

different feature of perception, namely the fact that perception provides the basic cases in which objects can be identified demonstratively. As we have mentioned, this ability is by no means a fundamentally linguistic ability; that is, it is not only an issue of using with understanding demonstrative expressions of a language, but that in perception a wholly distinctive *mode of identification* or *mode of presentation* of objects “in thought” is in play. It is this perceptual mode of presentation which I will account for.

As a matter of fact, in the case of visual perception at least, there is some plausibility in the claim that demonstrative thought about objects is necessary and sufficient to see an object. Peacocke put it like this:

... ‘seeing’ is what I shall call a *demonstrative-linked* concept: in particular we say that someone see those objects of which he is actually in a position to have (perceptual) demonstrative thoughts (...) If one fails to include the connection with perceptual demonstrative thoughts in an account of perception, one will leave it quite unanswered why objects at one rather than another stage of the incoming causal chain in perception are said to be perceived. If this is correct, it can be true that someone sees something only if he is in a position to have perceptual demonstrative thoughts about it.

(“Demonstrative Thought and Psychological Explanation”, p. 209)

I do not actually want to go as far as this. Thus, I will not assume that demonstrative thought is necessary for visual perception, although neither will I deny this claim. It is, then, a matter that I would like to leave open for the purposes of the present dissertation.

Now, it would be tremendously implausible if this distinctive way of identifying objects perceptually had little to do with other traits that are distinctive of perception,

such as the fact mentioned above of the observational character of the properties involved, and, moreover, the “imaginistic” or “pictoric” character that perception undoubtedly seems to have. Hence, the analysis of perceptual demonstrative modes of presentation will have to integrate the demonstrative character of perception with its other traits at some point.

In developing an account of perceptual demonstratives within this general perspective, I will proceed in two stages. In the first (Chapters 3 and 4) proposals to account for perceptual demonstrative judgements and perceptual demonstrative modes of presentation of individual objects respectively will be discussed in abstraction from their relation to phenomenological aspects of perception such as its putative “pictorial” character or the sensorial qualities which according to some theories are involved in perceptual experiences; or at least, these aspects will be kept in the background. I hope to show that we can go a long way towards characterizing perceptual demonstratives and perceptual demonstrative judgements without taking them into account. These other aspects of perception and especially their relationships to perceptual demonstratives will then move in to the foreground in the last two chapters, following a chapter devoted to the analysis of the notion of attention, the central notion used in the entire account, and which, as will be seen, plays a major role in unifying the diverse perspectives to be described.

What I wish to show in the first stage of the inquiry is that there is indeed something significant that unifies all types of perceptual demonstratives; a distinctive generic perceptual demonstrative way of identifying things. Moreover, I will also show that from the general characterization of this way, we obtain, in a systematic manner, the diverse (token) demonstrative singular modes of presentation of things

which a (neo-)Fregean view of perception is inclined to seek. What will be left for the second stage of the inquiry is the issue of how these various perceptual demonstratives might be distributed among the different sensorial modalities.

One device generally used to talk about specific perceptual demonstratives or about examples of perceptual demonstrative thoughts is to mention a *linguistic* expression, respectively, a demonstrative expression or a sentence within quotation marks or by equivalent means. There is some danger that unwanted implications may arise when using this procedure, as we have had occasion to see from the illustrations in the previous sections, and we cannot adopt this procedure without further ado when we do not want to assume that perceptual modes of presentation and perceptual demonstrative judgements are exactly the senses of (the appropriate sort of) linguistic expressions.

As I have mentioned in passing in the previous section, the unwanted implications can be largely avoided when we see such an apparent mention of a linguistic entity as showing by analogy the specimens of modes of presentation or judgements one wants to talk about. The use of this practice for the purposes of expediency is very widespread indeed. We can even exploit it to good purpose by using such analogies in the context of theoretical discussion, then making them play the role of *models(-by-analogy)* of the perceptual demonstratives or perceptual demonstrative thoughts for which we aim to provide an account. As models, they may have more or less merit, or they might be more or less faithful to what they are modeling. So, as well as avoiding some potential pitfalls, this perspective on the use of verbal expressions in the context of analyzing perceptual demonstratives and judgements may allow us to compare two “verbal expressions of a perceptual

judgement” and discuss their relative adequacy for indicating features of the judgements at issue with complete logical independence of the communicative situations, if any, which would prompt the verbal expression of such a judgement, even when mention of a communicative situation may help bring to mind the judgement which is the target of discussion at that moment.

When using verbal demonstrative expressions which I associate with the perceptual demonstratives or the perceptual thoughts I will freely adopt the widespread practice of the linguistic analogy and even this modelling perspective from now on.

With the help of this expedient, I can now make it clear what kinds of perceptual demonstratives and perceptual demonstrative thoughts I will concentrate on for the most part in the present dissertation. Concerning the latter, I will be concerned with thoughts that can be modelled to a first approximation with specific *utterances* of sentences of the following forms:

- (i) That is Pavarotti / That is that.
- (ii) That is a tree / That is torn.

In the first type of case the linguistic expression used to describe —or model— the thought combines a demonstrative¹², either with a proper noun or with a

¹² The use of the terms ‘demonstrative’ and ‘indexical’ pose a minor difficulty for us. Evans, for one, appears to regard the terms as equivalent (see, e. g. Evans, “Understanding Demonstratives”, p. 291), while, for example, Peacocke —discussing demonstrative thoughts this time— says that in his view demonstrative thoughts constitute a subclass within the class of indexical thoughts* (see Peacocke, “Demonstrative Thought and Psychological Explanation”, p. 187; Peacocke, however, seems to have

demonstrative in an identity statement (it is assumed that in the identities with two demonstratives there is a different “demonstration” —a “signalling”, as it were— for each demonstrative token). Cases of the second type are suggested by sentences where a demonstrative expression combines with a predicate. Moreover, as the examples suggest, my interest will be mainly restricted to cases where the demonstratives identify an *spatial* thing as opposed to either an abstract thing (like a number or a triangle, although physical triangles drawn on a board are not of course excluded) or a merely temporal thing (such as a mental state). This leaves us with physical objects and the properties thereof, and among these my interest will be focussed for the most part on the first. On the other hand, even though these will not constitute the prime cases, I will at least occasionally consider a kind of thought in which a non-spatial thing is demonstratively identified, namely thoughts about sounds.

A range of further cases of judgements where a demonstrative identification is performed could be added without much difficulty. These are suggested by sentences of the forms:

(iii) That tree is blooming / That bag was bought by my sister.

In cases like these the demonstrative is accompanied by a sortal, and the corresponding resulting expressions combine with a predicate in the utterance expressing or modelling the target judgements. It is obvious that an account of these

changed his mind about this point in *Sense and Content*; c.f. e.g. p. 107). I will follow Evans’s use without further ado.

would involve some account of the sortal concepts at stake. More generally, this would also happen if we were to direct our attention to perceptual demonstratives suggested by expressions like:

(iv) That shape / That pointed figure / That colour / That green.

However, the interest in the present work is focussed on the fact that entertaining or understanding the target thoughts involves actually identifying the thing being demonstrated. It does not seem that an exercise of a similar capacity—the capacity of determining whether a particular falls under the concept—is required for understanding the general concepts involved in the thoughts, whether those general concepts appear in the “predicative part” of the thought, or as supplementing the demonstrative in the “subject part”.¹³ This is one reason for neglecting such a “predicative part”, at least when it involves only such general concepts (unlike what happens in the second kind of the judgements suggested in (i)) but also for disregarding such supplemented demonstratives. It is true that these cases make up the most natural cases of perceptual demonstratives and there does not seem to be much difficulty in including (at least many of the) examples of such “mixed” cases, or of perceptual demonstrative thoughts which involve them, but there is not much point in using examples of this kind. When I do consider them (as in Section 1 of Chapter

¹³ This does not imply that the use of such concepts is the same in both parts. When the general concept occurs in “the subject part” the concept helps in the identification of the object, rather than being used to make a predication of something that is already identified, as happens when the concept occurs in “the predicative part” (cf. Peacocke, “Demonstrative Thought and Psychological Explanation”, p. 201)

4) it is only for reasons of naturalness in the example or for the sake of variety, but I do not really engage in an analysis of the contribution of the general concepts involved.¹⁴

A final limitation of this study is that is not going to discuss—at least not directly—any problems connected with what Kaplan called ‘cognitive dynamics’, and which we can describe as the study of the constitutive features of the persistence of thoughts with demonstrative modes of presentation over time.¹⁵

A key feature of all the kinds of thoughts I aim to deal with—those right in the target area as much as those that could also quite easily be included—is that they can be entertained only by somebody in a perceptual situation.¹⁶ (Thus, they are thoughts such that, if it were possible for a speaker to express them in a communicative situation, their linguistic expression could only be understood by somebody sharing the relevant perception with the speaker.) Some or most of them will not merely be entertained thoughts but actually *judgements* which specify a subject's *current beliefs*. Among these there are some thoughts for determining the truth value of which the

¹⁴ Currently influential views of perception—such as those of McDowell or Brewer—hold that it is precisely such demonstratives which capture the right “fineness of grain” of perception. Hence, it might be thought that in leaving out such demonstratives I am excluding beforehand just the central cases of some rival theories. I hope this is not so, since it seems that the fundamental tenets of such positions can be reformulated without such supplemented demonstratives, using simply the unsupplemented perceptual demonstrative ‘that’ (cf. Peacocke, “Phenomenology and Nonconceptual Content”, pp. 610-1).

¹⁵ As we might expect, Kaplan formulated the problem as a problem for the semantics of demonstrative expressions. Cf. “Demonstratives”, p. 538, n. 64.

¹⁶ Even if they also present this feature, I will not be concerned with the Quinean cases of “deferred ostension”, as when we point to a car that belongs to a certain man and say ‘That man is certainly rich’ (to describe the kind of thoughts meant with the help of a situation of communication this time).

perceptual situations suffice (perceptual judgements or perceptual beliefs),¹⁷ and

¹⁷ In some theories of perception such judgements are constitutive of the perceptual states themselves. This is a controversial issue on which I will try to remain neutral for the time.

some where this is not the case, like the ones we might exemplify with ‘This tree was planted by my father’ (we may call these latter ‘partially perceptual beliefs or judgements’).

To summarise, as characterized pre-theoretically, the thoughts in the target class are at least part of the thoughts among whose features are: (i) (external) *context sensitivity*; (ii) an obvious necessary relationship between perceiving the object demonstrated and entertaining or understanding the thought; and (iii) a “fluid transition” between thought and object, in the sense in which the thought can be entertained simply by perceiving in the adequate perceptual modality —say, by looking around the room and focussing on any object in it.

Chapter 3: Perceptual Demonstrative Judgements and Attention to Objects

3.1. A short summary of the semantics of demonstrative expressions

I have said that the fact that there are two different projects does not imply that one cannot take one of them —the semantic project— as a basis for pursuing the other *in some way or other*. I have referred to an initial way in which this has taken place: an historical connection, that is, the fact that the project of characterizing demonstrative thoughts and demonstrative modes of presentation seems to have arisen as a sort of generalization on the semantic project (cf. Chapter 2, § 1). Furthermore, I have mentioned the possibility of in some way using certain forms of expression or form of words, or certain formulations that literally belong to the semantic project methodologically with the real aim of pursuing issues concerning the second (cf. *ibid.* § 1 and 2). In this chapter I will attempt a variant on this methodological approach, but, quite a different one indeed from what Evans's or Campbell's texts may have suggested. This is the possibility of using the semantic theory *heuristically* to reach proposals in the other field that are subsequently to be argued independently. The suggestion is that reflecting on the semantic theory can prompt specific questions to be answered by a theory about perceptual demonstratives or perceptual demonstrative

thoughts, specific paths to explore and even specific hypotheses to be investigated.

Since I plan to use the semantic study of demonstrative expressions as a basis, it is necessary to have before us the kind of semantic theory I have in mind.

It is customary to distinguish pretheoretically between two types of deictic expressions: 1) *Pure indexicals*, paradigmatic examples of which are ‘I’, ‘today’, ‘yesterday’ and verb tenses: 2) *Demonstratives*, paradigmatic examples of which are ‘this’, ‘that’, ‘there’, but which also include pronouns such as ‘she’, ‘he’. Complex expressions, built by appending a general term to ‘this’ and ‘that’ — ‘this table’, ‘that tree in the alley’ — can be assimilated to this second kind. The distinction is based on the idea that the use of expressions of the second kind requires “demonstrations” (pretheoretically, something like pointing to an object) while the use of expressions of the first does not. Moreover, in the case of pure indexicals, the indexical expression itself in some way counts among the factors that determine reference, while it is thought by many that this is not the case with demonstratives.

As we will see, in a Reichenbachian approach (abbreviated as RA, from now on) to the semantics of demonstratives and indexicals such as that articulated by Perry and García-Carpintero following Reichenbach's pioneering work the distinction turns out not to be so sharp: the second group of deictic expressions is as a special case of the first one.

Kaplan's theory has been the semantic theory of (linguistic) demonstratives and indexicals for a while (from now on, we will be interested only in demonstratives). According to this theory, every demonstrative has a *character* and a *content* to use Kaplan's terminology. Intuitively, the character is what all tokens of a particular demonstrative share. Thus, it corresponds to what we could consider pretheoretically

as the linguistic meaning of the demonstrative. Kaplan theoretically articulates the notion of character as a function, the domain of which are contexts of utterance and whose values are the objects referred to by the demonstratives in those contexts. There is, then, another semantic property possessed by demonstratives: their reference relative to a context. In Kaplan's terminology there is a name for this property: it is the *content* of a demonstrative, that is, the object referred to by an occurrence of the demonstrative type (or, according to Kaplan's construal of this, a demonstrative-type-in-a-context). In plainer (although less exact) words, the content is the object referred to by a demonstrative when it is used successfully. We can define character as a function from contexts to contents, now using the word 'content' in this special technical sense.

Thus, according to Kaplan's theory, there are two semantic properties linked to demonstratives. On the one hand, we have the character, something that a demonstrative-type possesses, and on the other the content, something possessed by a demonstrative-type-in-a-context. As we will see, in an RA to demonstratives, their semantic properties are not possessed by *types* or *types-in-a-context*, but by *tokens* of the types, where tokens must be understood as token-events and not as a token-objects¹.

¹ The difference between construing tokens as token-events or as token-objects is clear when we consider the possibility of using, e. g. the same piece of paper with a sentence written on it (like 'I will come back in ten minutes') and sticking to a door. The same token-object (the same piece of paper) is used for announcing different messages on different occasions (they are different because they refer to different moments in time); in contrast, we have different token-events, or tokens considered as events (one such event in this case would be the particular hanging up of that piece of paper on a particular occasion), each announcing a different message. These different messages are not transmitted by the

In “Indexicals as Token–Reflexives”, García–Carpintero develops the difference between a theory of demonstratives and indexicals that treats types as having semantic properties, and a theory where it is the tokens which are the bearers of those properties. He defends the latter as the better of the two, but I will leave aside the arguments for this particular version of the RA in the brief summary of it that follows.

Let us consider an utterance like (1) in circumstances in which a subject is pointing to branches of what we can consider different trees one after the other.

(1) That is an elm and that is a beech.

An adequate demonstrative theory must fulfill the following desiderata in relation to (1) (cf. “Indexicals as Token Reflexive”, p. 550):

(i) The theory must give us something that is the same for the two different tokens of ‘that’, that is, something that corresponds to the meaning of the type-expression.

(ii) The theory must provide for the possibility that the two tokens of ‘that’ have different “contents” (different references), since, in agreement with our linguistic intuitions, it is not to be presupposed (except in an anaphoric use of the expressions) that the two occurrences of the demonstrative-type must refer to the same thing.

For the reason given, if the speaker is confused and he is in fact referring to one and the same tree with his two demonstrations, an utterance of ‘No, it cannot be so, that is the same as that’ made in reply to (1) (repeating the speaker’s demonstrations

token-object, since it remains the same across different messages, but by the token-events. (Cf. García-Carpintero “Indexicals as Token-Reflexive”, pp. 534-535)

accompanying each occurrence of the demonstrative “that”) would be informative. For the same reason, correferentiality of two tokens of ‘that’ expressed in different sentences in the same context cannot be taken for granted, as for instance when the speaker is forming an argument and he says ‘That is an elm’, in the same circumstances described above, and then, as part of the same argument, ‘That is a beech’.

An RA satisfies the two desiderata described above. The first one is satisfied by using a linguistic rule roughly as follows: any instance of ‘that’ refers to the individual (of the contextually determined sort) demonstrated when that instance is uttered. This rule also provides in a certain determinate way the referent of any token of ‘that’ (which is uttered in the right circumstances), thus also making it possible to satisfy the second desideratum. How is this done? The rule that governs the demonstrative is *token-reflexive*, that is, it provides the referent of any proper use of ‘that’ by resorting to *the (event) token itself*. Therefore, since when (1) is uttered there are *two different* tokens of ‘that’, there is nothing in the rule that means that the object determined as referent is necessarily the same in the case of both tokens.

Whatever the merits of an RA for a semantic theory of linguistic demonstratives, from the perspective of using the semantic theory as a heuristic tool for developing a theory about perceptual demonstratives and perceptual demonstrative thoughts it seems to me that an approach that uses the —to my mind— obscure idea of ‘type-in-a-context’ is not very promising, and that an RA is much more in consonance with the sort of singularity which is present in demonstrative thought.

One main reason for my being attracted by the particular theory developed by García-Carpintero, among other RA approaches to the semantic of demonstratives is

precisely the way in which the “Fregean side” of semantics is brought out. According to the RA as elaborated by Garcia-Carpintero, for a competent speaker to understand a demonstrative he must know its referent is the bearer of a property with the following three characteristics: (i) it is reasonable to consider it as individuating; (ii) it is associated with the expression on the basis of linguistic rules; (iii) it is epistemically transparent to beings who cognitively resemble us (cf. “A Presuppositional Account of Reference Fixing”, pp. 118-119). Thus, it can rightly be said that there is a *mode by which a demonstrative-token presents the referent*. To understand the demonstrative is to recognise the referent as presented in this way. Therefore we can say that the *sense* of the demonstrative-token is provided, thus making standard use of the word ‘sense’.

Hence, the mode of presentation associated to a token of ‘that’ (the sense of this token) would be described roughly thus: *object (of the contextually determined sort) demonstrated on the occasion of the production of that token*. Here we can see that when coming to (linguistic) demonstratives, sense or mode of presentation is a semantic property of *tokens*, not types (cf. García-Carpintero, *loc. cit.*). It is important to point out that since the semantic rule for demonstratives is associated with the types (even if by way of specifying the reference of each instance of a type), it does not give us a sense. We may say, perhaps, that the rule “guides” the determination of the mode of presentation of the object referred to by the demonstrative-token, a mode partially constituted by the token itself. Or perhaps the right thing to say is that the rule supplies only part of the mode of presentation and that the remainder is provided

by the demonstrative-token itself.²

These reflections on senses in connection with demonstratives will be of significance in the next section when we turn to an account of perceptual demonstratives and perceptual demonstrative thoughts or judgements.

There is another aspect of the semantic account of demonstratives which is relevant for my purposes. As we have mentioned, demonstratives differ from pure indexicals in that they have to be contextually supplemented with a demonstration. How exactly we are to understand this appeal to “demonstrations” has generated much controversy.

Kaplan's “Demonstratives”, which first appealed to demonstrations, did not make clear what should be understood as such, thus giving rise to the controversy. As I have said in the previous section, in the paper about demonstratives, by ‘demonstrations’ he could be taken to mean pointing gestures or visual presentations of objects discriminated by them. Eventually he realized that pointing gestures by themselves do not determine the reference of a demonstrative, and that an appeal to the speakers *intentions* to refer was necessary (cf. “Afterthoughts”). However, he did not succeed in correctly describing the intentions that were required for determining reference. In a famous example he maintained that the demonstrative ‘that’, in an utterance of ‘That is a picture of one of the greatest philosophers of this century’, refers to Rudolph Carnap, when the utterance is made by a speaker pointing behind him to where he believes a picture of Rudolph Carnap to be, while there is actually a

² Demonstrative-tokens being spatio-temporal entities, modes of presentation or senses constituted partially by them lie out side the type of internalistic senses which, according to most commentators, Frege had in mind.

picture of Spiro Agnew (there has been a change of pictures unnoticed by the speaker). Thus, Kaplan made the reference of the demonstrative depend on the speaker's intentions, regardless of any other considerations. This led Reimer to defend Kaplan's older approach in "Demonstratives, Demonstrations and Demonstrata", on the grounds that what determines reference should be a publically accessible element in the communicative situation, a view which is supported by our intuitions about the Carnap-Agnew case, to the effect that contrary to what Kaplan says, it is Agnew and not Carnap who should be regarded as the reference of the demonstrative. Bach replied to this in "Paving the Road to Reference" by pointing out that one obtains the result that the demonstrative refers to Agnew when one considers the *immediate referential intentions* of the speaker. The contrary result—that an utterance of 'that' in the described situation refers to Carnap—is only obtained if the *ultimate referential intentions* of the speaker prevail. In this way Bach restores Kaplan's insight about the necessary appeal to intentions for determining the reference of demonstratives, while leaving the correctness of Kaplan's specific proposal to hang on whether it is immediate or ultimate referential intentions that should prevail.

I believe that the intentions with regard to which the reference of (linguistic) demonstratives are determined are the intentions that can be manifest to the hearer in a communicative situation, or to put it more exactly, the intentions that a competent speaker is entitled to assume are manifest to the hearer. This way of putting the matter accords well, on the one hand, with both the standard cases where there is an act of pointing, and the "Agnew-Carnap cases", and also, on the other hand, with altogether normal cases in which there is demonstrative reference to an object but the speaker does not make any indication of her intentions by pointing. An example of this would

be when a speaker utters in somebody's presence 'This table is made of a rare kind of wood' in a room where there is only one table and the speaker is simply looking at it, or when a speaker utters 'That glass was in an unstable position' in a situation where one of several glasses has fallen in the vicinity of the speaker and hearer. In situations of this kind an object makes itself salient, so to speak, in a variety of ways, in my examples by being the only table in a room and by being the only glass that has fallen, respectively. These are situations in which the speaker, as a competent user of language, is entitled to assume that her referential intentions are manifest to the hearer.

Taking this explanation of demonstrations into account, we can return to the rule associated with a demonstrative like 'that', and formulate it thus: any instance of 'that' refers to the individual (of the contextually determined sort) demonstrated when that instance is uttered (cf. García-Carpintero's account in "Indexicals as Token-Reflexives", p. 550).

How can all these ideas about the semantics of demonstrative expressions be potentially useful in formulating a theory about perceptual demonstratives and perceptual demonstrative thoughts? Perhaps the first thing to notice is that in the second case we can neither talk of *utterances*, nor of *speakers* or *hearers*, nor of *communicative situations*, nor *a fortiori* of *intentions that a speaker is entitled to assume are manifest to the hearer in a communicative situation*, nor, for that matter, of *demonstrations*. But, perhaps something analogous could and should be found for some of these items. I will turn to this possibility in the next section.

3.2. From a semantic theory towards a theory of perceptual demonstrative thoughts

In the second chapter I suggested using a semantic theory of demonstratives as a heuristic tool in order to arrive at a formulation of a theory of perceptual demonstratives (cf. § 2.3). Roughly, according to the semantic theory, (linguistic) demonstratives used in utterances refer to the object which is most salient in the context in which the respective *token* demonstratives are used. I will now begin to use this *token-reflexive* theory to formulate an account of perceptual demonstratives which is itself token-reflexive in some way. It will be seen that the token-reflexive account of linguistic-indexicality is used at a key moment, exploiting the fact that there are certain respects where rather close parallelisms between both types of cases are manifest. At first I will only claim to use such parallelisms as heuristic aids to arrive at the formulation of a proposal, trying to show that this kind of approach in some way allows us to notice certain traits of the subject matter which are either less salient or simply unnoticed in other approaches. I believe that such parallelisms turn out to be all but superficial, and that the traits arrived at on their basis prove to be key pieces in an acceptable account of perceptual demonstrative judgements.

Until now I have used linguistic formulations; sentences or utterances, demonstrative expressions, etc. as auxiliaries to delineate the types of perceptual demonstratives and perceptual demonstrative thoughts that will be the target of my proposal. Now, however, linguistic items will be made to assume a further function, or, more exactly, it is the *semantic* study of the same linguistic items which is going to play the further role of heuristically motivating the proposal to be advanced

concerning the intentional contents that constitute our target.

Certainly there are *dissimilarities* between the linguistic case and the intentional-perceptual case. It is useful to begin by briefly considering those, before looking at how the similarities on which I will focus appear. Let us take the very simple example of the utterance ‘That is a tree’. Let us assume also that the object at issue is being pointed at by the speaker by stretching out his arm, and so making it perfectly manifest to the hearer. (Of course, whether there are circumstances which make such an utterance and/or pointing natural, or what those are is not relevant to us. If we wanted we could imagine a situation where there is some doubt about whether the object at issue is a bush or a tree, or where we are teaching a child to recognize trees, etc.). In a paradigmatic context of communication such as the one in the example, the speaker attempts to draw the attention of the hearer to the very object which constitutes the current object of attention for him (the speaker). To that purpose the speaker can effectively use any sort of “signalling” at the object, after which he regards this object as reasonably salient to the hearer. Success or failure in those situations is measured according to whether the attention of the hearer is drawn to the *same* object to which the attention of the speaker is directed, and there are a number of external circumstances that may endanger this key aspect of the communicative situation.

The attempt of the speaker described should be regarded as part and parcel of his communicative intentions, and it is such communicative intentions which are central in the case of the paradigmatic uses of demonstrative expressions.

For obvious reasons, all such specific intentions are absent in the cases which it is our purpose to analyze, cases where subjects find themselves in a perceptual

situation, directing their attention at a particular object. Furthermore, communication is an intentional activity, in the sense of being concerned with subjects' intentions to act, in a way in which perception definitely is not, and this by itself constitutes a major difference between the two sorts of cases, although as we will see, certain intentional traits are not altogether absent in the cases we are interested in.

Nevertheless, behind all those fairly obvious reasons for regarding the use of demonstrative expressions in communication as disparate with events of perception of particular objects, there are similarities which motivate me to try to exploit the theoretical tools used for the analysis of communicative cases for the corresponding analysis of the perceptual ones, and I now turn to these.

When a subject utters the sentence in our example ('That is a tree'), a particular tree is (normally) referred to. This reference is achieved by means of a demonstration. Now, in the theoretical study of linguistic indexicals there is in principle a choice about what exactly a demonstration should be taken to be. One of the options is to take a demonstration to be an *act of signalling* in the strict sense of the occurrence of pointing "gestures" caused by the intention of pointing to an object, area of space, etc. In a very wide sense, that includes not only prototypical finger gestures but also a number of other devices used for the same purpose, like suddenly raising the voice or raising eyebrows, etc. A second option is to identify the demonstration with the "intention of pointing" itself, in a general sense of this phrase that is perhaps better captured by the expression 'deictical intention'.³ In the second case, the pointing gestures, when they do occur, are only the *manifestation* of the demonstration; hence,

³ Cf. Kaplan, "Demonstratives", p. 490, Kaplan, "Afterthoughts", p. 582-4, Bach, "Paving the Road to Reference", and García-Carpintero, "Indexicals as Token-Reflexives", pp. 536-7.

they are not essential to it.

It is clear that the first option is immediately excluded for the purpose of explaining what is fundamental to the perceptual demonstrative identification of objects. It is obvious that there are no demonstrations *in that sense* in the case that interest us. But perhaps there is a chance to consider that something akin to a demonstration in the second sense is still taking place in perceptual identification. Or, which amounts to the same thing, there is something in perception that seems to serve the same function that pointing gestures, when informed by deictical intentions, serve in the case of communication. If pointing to an object when informed by the right deictical intentions serves the function of making an object salient to an audience for the purposes of communication, analogously it would seem that *attending* to an object—visually, auditively or by means of touch—has the similar function of making an object salient to the perceiver.⁴

With this motivation for using the notion of *attention* in the case of perception in a way rather similar to which the notion of *demonstration* figures in a theoretical account of linguistic demonstrative expressions in place, we can move directly to the “translation” of the relevant semantic rule. As already advanced in the previous section, the semantic rule for the demonstrative expression ‘that’ can be formulated as

⁴ A local object can make itself salient in diverse ways and this can perhaps be taken to be a *manifestation* of the subject's deictical intention (García-Carpintero, *op. cit.* p. 537). On the other hand, it is very natural to say, in certain circumstances, that a certain object has attracted our (perceptual) *attention* by making itself salient. The comparison of these two cases, however, does not capture the sense of the parallelism that I am trying to establish in the text, since if we regard the object's making-itself-salient as the manifestation of the deictical intention, we take it as the *effect* of our intention, while in the other case, it is the *cause* of our paying attention instead.

follows:⁵

(4) Any instance of ‘that’ refers to the individual (of the contextually determined sort) demonstrated when that instance is uttered.

And this is a preliminary version of the suggested “translation”:

(5) Any instance of ‘that’ refers to the individual (of the contextually determined sort) attended when that act of attention takes place.

This “rule”, as it stands, makes no sense, for there are no instances of a linguistic type involved in perception, with the obvious exception of cases in which the objects perceived are themselves linguistic tokens. At least, there are no such instances unless the linguistic types involved and their instances were thought to be elements of a language of thought. In any case, there is no proper link in formulation (5) between the demonstrative and the act of attention at issue. But there is no point in trying to amend this formulation in the last respect, since in any case it does not seem adequate to attempt to account for the intentional content of perception, or for perceptual judgements or thoughts by resorting to the controversial hypothesis that postulates a

⁵ Whatever the advantages of a Reichenbachian approach for a semantic theory of demonstrative expressions, it seems to me that, in any case, the rival approach we mentioned in the previous section, which uses the idea of type-in-a-context, is not very promising from the perspective of using the semantic theory as a heuristic tool for the purpose of developing a theory about perceptual demonstratives and perceptual demonstrative thoughts: the Reichenbachian approach seems to be much more in consonance with the kind of singularity which is present in perceptual experience and thought.

language of thought.⁶

Nevertheless, we can use the intuition which is at work in (5) to approximate the first formulation of my proposal for the content of a perceptual demonstrative judgement or thought. Take as an example the very simple case of a perceptual judgement straightforwardly associated with the utterance ‘That is a tree’. With some important reservations which will be discussed later (cf. Chapter 4, § 1), we could express its content in the following way:

(6) The object attended in *this* act of attention is a tree.

This is the bud of the theoretical proposal for the account of perceptual demonstratives and perceptual demonstrative thoughts to be developed in this dissertation. The claim is that there is a kind of perception which involves a distinctive sort of identification of objects, which pre-theoretically we think of as demonstrative.⁷ Perception of this kind is linked, in a way that I prefer not to characterize further for the moment, with certain kind of judgements or thoughts: perceptual demonstrative thoughts. According to the proposal made with the help of the formulation in (6), the kind of perception at issue involves the sort of awareness of an object which consists in (perceptually) *attending* to it, so that a perceived object

⁶ We saw in Chapter 2, § 3 that some formulations concerning perceptual demonstratives seemed to make literal sense only in the context of such a hypothesis, most likely against the will of their authors. Analogically to what happens in those formulations, accepting a weaker version of the rule in (5) would involve us at best in carelessness.

⁷ I leave open the question of whether there is perception of objects, or any perception at all that involves perception of objects, which does not require this kind of demonstrative identification.

is primarily present to the mind of the perceiving subject as the object *currently attended to*.

Hence, according to the proposal, the state or episode of attention itself, which is necessarily involved in perception of objects, plays an essential role in identifying the object being attended to. More concretely, a state, event or act of attention identifies an object in a *token-reflexive* sort of way. In this respect the case resembles the determination of the propositional content of an utterance of a demonstrative sentence, as this content is understood in the token-reflexive theory of demonstratives which I have taken as my (heuristic) point of departure. In the case of interest to us, it is even more immediately clear that the token at issue —an episode of attention— is not a thing or object, but rather an event.

Once this proposal is stated, it is easy to see how it can be generalized to other thoughts in the target area. For example, an explanation of the perceptual judgement that we may naturally express linguistically by uttering ‘That (tree) is blooming’ would be suggested by the sentence:

(7) The object (or object of the tree kind) attended to in *this* act of attention is blooming.

Naturally the proposal needs much clarification, refinement, development and defence. What is it exactly that is claimed by saying that the object is presented as attended to, and indeed, as attended to in the current act of attention? Am I suggesting a hypothesis about modes of presentation of objects in perception in the sense that we talked about modes of presentation in the previous chapter (cf. § 2)? What kind of

awareness of the object is (perceptually) attending to it? Does the proposal imply that we have some kind of awareness of attention in turn? Does it imply that the subject capable of perceptual demonstrative judgments has to possess the concept of attention? What is attention in general, and attention to objects in particular? What has attention to do with the phenomenology of perception? Indeed, the rest of the dissertation is devoted to trying to answer these questions and others related to them.

In this chapter I will try to provide some clarification and undertake a preliminary defence of my proposal in the context of a discussion of a related proposal which is part of Searle's view of perceptual intentionality. I turn now to an explanation of this view, concentrating on what is most relevant for the present purposes.

3.3. Searle's theory of perceptual intentionality

The proposal advanced in the previous section aims to account for the "demonstrative character" of basic perceptual judgements. It seems that at least part of what is involved in this is the simple intuition that a case of perception of an object is a case in which, to put it bluntly, that very object and not a similar one or even one that is qualitatively indistinguishable is involved. This feature of perceptual judgements may be called the *particularity* or the *particular-directedness* of the intentional content of perception and perceptual judgements.⁸

⁸ The second denomination is McDowell's (cf. "Intentionality *De Re*", e.g. p. 216). The first is used by Searle for alluding to a more restricted case, namely, the case in which the perceiver somehow

If it succeeds the proposal advanced will account for this particular-directedness and/or the demonstrative character of perception in a way analogous to the way in which a token-reflexive account of (linguistic) demonstratives accounts for the content of utterances of demonstrative sentences, that is, by making the presence of a descriptive element compatible with that particular-directedness. In this way, the proposal would turn out to belong to an entire general (neo-)Fregean tradition in the philosophy of language and the philosophy of mind which is especially concerned with answering the challenge posed by the alleged inability of Fregean views of representational content —both linguistic and mental— to cope with the particular-directedness of certain linguistic devices and mental states. And more particularly, it would belong to the sub-tradition that essentially resorts to the token-reflexive character of the content of those devices or states to account for particular-directedness.

A pioneer in this particular theoretical direction is John Searle, in his book *Intentionality*. In this work Searle proposes a particular version of the token-reflexive idea, in which the particular-directedness of the mental states at issue is accounted for by resorting to the particularity of *perceptual experiences*, and the particularity of these experiences, in turn, is at least partially accounted for by resorting to the token-reflexive character of their content.

According to Searle the intentional content of, for example, a visual perception of a tree in front of the perceiver, may be approximated by (cf. *op. cit.* p. 48):

recognizes the particular object as something already somehow known, and takes his experience to be one of perceiving precisely such an object (cf. *Intentionality*, p. 64 ff.). I stick to the more general case. Recognition of the object would add complications that can be left out for the purposes of the present dissertation.

(1) I have a visual experience (that there is a tree in front of me).

In this formulation the sentence in brackets is meant to “express” in a certain way the intentional content of the visual perception or the visual experience, a content which is, for Searle, always propositional:⁹ a visual experience is “never simply *of* an object but rather it must always be *that* such and such is the case” (p. 40).¹⁰

In any case, sentence (1) would only gather *part* of the content of the visual perception or the visual experience. Searle now adds a decisive novelty. As is well known, causal theories of perception contend that there is visual perception only when the object or state of affairs perceived *causes* the visual experience¹¹. And, on the face of it, Searle’s theory would seem to add something to this claim, that is, to the claim that (in perception) the object or state of affairs perceived causes the visual experience. It would seem to add the requirement that *this very fact* —the causal

⁹ Searle places the sentence which gives the intentional content in brackets, and I will respect this convention so long I am discussing his views. He holds that a sentence “expresses” the content of a visual experience only in so far it is the “verbal specification of the conditions of satisfaction of the visual experience” (p. 40). Moreover, it is not that the content of the experience “is linguistic but rather that the content requires the existence of a whole state of affairs if it is to be satisfied” (*ibid.*). This is all very well, but it easily leads one to raise the further issue of *just what* then is the nature of such a (non-linguistic) content. This issue will figure prominently in the dissertation.

¹⁰ This includes cases in which the perceiver abstains from actually making the perceptual judgement, as is the case, for example, when a subject who is aware of the particulars of the Müller-Lyer illusion refrains from judging or believing that the two segments at issue are of equal length. In this way Searle sides with those who think that the basic content of perception is propositional (*seeing that*, in the case of visual perception) against those who, like Jackson (1977) and Dretske (1995), maintain that it is perception of things which is fundamental.

¹¹ The classical reference is Grice, “The Causal Theory of Perception”.

fact— belongs to the intentional content of the visual experience itself. Thus, he specifies the content of the visual experience in our example as follows (cf. *op. cit.* pp. 48-49):

(2) I have a visual experience (that there is a tree in front of me, and that there is a tree in front of me is causing this visual experience).

It can be seen from this formulation that by including “the causal fact” in the intentional content of the experience Searle is making the identity of that intentional content depend on the very experience at issue, and hence, in effect, in his view the conditions of satisfaction of the experience are partly determined by the experience itself, since the conditions of satisfaction are determined by the intentional content. More specifically, the intentional content and the satisfaction conditions of a token perceptual experience are determined relative to a property of such token experience, to wit, the property of being caused by the state of affairs which is an essential part of the satisfaction condition determined by the intentional content, or, as Searle puts it more simply, the property of being “caused by the rest of its condition of satisfaction, that is, by the state of affairs perceived” (p. 48). In this way, token perceptual experiences can be said to “reflect themselves” in their intentional content.¹²

¹² Here Searle talks, not very properly, of *self-referentiality*, which involves him in issuing the warning that “[t]he visual experience itself does not *say*” that it figures in its own intentional content (p. 49). Eventually, he rectified this point: “... perhaps it would have been better to try to state the point without using the notion of reference, but e.g. that of token-reflexivity” (in “Response: Reference and Intentionality”, p. 238). ‘Token-reflexivity’ is appropriate because the intentional content of the visual experience “reflects” the token experience itself in the way that has been explained. Notice also that, since what belongs to the intentional content is that the perceptual object or state of affairs *is causing*

I will return to the discussion of the import of the proposal that perceptual experiences are involved in their own intentional contents, later. This, in any case, requires paying attention to Searle's general views on perception and perceptual experiences, which I will now outline briefly.

Searle differentiates between experience and perception, that is, between simply having a perceptual experience and a case of genuine perception: "... I am distinguishing between experience and perception ... Experience has to determine what counts as succeeding, but one can have an experience without succeeding, i.e. without perceiving" (*Intentionality*, p. 38). Experiences determine "what counts as succeeding" because, as we have seen, they have an intentional content determining their conditions of satisfaction. Moreover "visual and other sorts of perceptual experiences are *conscious mental events*" (*op. cit.* p. 46, Searle's italics) possessing "specific phenomenal properties" (*ibid.*). That is, there is always a "what it is like" side to them, so to speak.

Searle resorts to experiences to account for what is common to cases of (genuine) perception and cases of illusions and hallucinations: Somebody who has a visual hallucination can share the visual experience with a perceiver (pp. 57-58). With all these ingredients, Searle's position strongly recalls the position of a defender of the representative theory of perception. In particular, the latter would also postulate entities that are "conscious" and "mental" for the same purpose of providing a sort of "neutral content" to be shared by perceptual and pseudo-perceptual states alike. Moreover, Searle shares the internalist stance which is typical of such theories: "It is

the experience, and particular causal relations hold, properly speaking, between events, the experience enters its own intentional content as an *event*.

a consequence of my account of [i]ntentionality that one could have all of the mental contents one has, and still the objects that in fact correspond to those contents in the world, the objects which ‘fit’ the contents and thus are ‘referred to’ by the representations in question, might not even exist” (“Response: Reference and Intentionality,” p. 237).

However, rather surprisingly, Searle rejects a representative theory of perception and classifies his theory as “a version of ‘naive’ (direct, common sense) realism” (cf. pp. 57-59). Ultimately, it would seem that he believes himself to be justified in locating his view in the “direct realist” camp because he holds that an experience is —as he insists for the particular case of visual experiences— “the vehicle of the [i]ntentional *content* of our visual perception”, not “the *object* of visual perception” (*loc. cit.*) —that is, the state of affairs perceived. But, as he leaves just what the description of the visual experience as the vehicle of the intentional content amounts to unclear, it is not at all certain that his view on perception can be regarded as a variety of a “direct realist” theory.¹³

More generally, as we have seen, according to Searle there are two features to perceptual experiences: their having an intentional content, and their possessing phenomenal properties. As far as I can see, he does not say anything about the relationship between these two features that goes beyond the vague claim that, in perception, intentionality “is realized in conscious experiences (cf.: “[T]he

¹³ A source of discrepancy between Searle’s position and a (typical) representative theory would lie in the fact that, as Searle makes clear in the text quoted above, he regards experiences as *events*, while in traditional versions of representative theories they would be as things rather than as events. This might be a potentially important difference (as will be seen in Chapter 7), but Searle’s internalism keeps him close to traditional versions of representative theories.

intentionality of vision is characteristically realized in visual experiences which are conscious mental events”, *op. cit.* p. 46). This seems poorly-equipped to stand up to much close inquiry about the character of Searle’s position in the philosophy of perception. In any case, the character of experiences as *conscious* mental events involving phenomenal properties can hardly be unrelated to the “self-referentiality”—indeed, token-reflexivity— of their intentional content, as I will stress later on. But Searle remains silent on the connection.¹⁴

There is one final peculiarity of Searle’s theory of perception which is related to the points already made. When explaining above the decisive novelty introduced by Searle in his theory, I took care to say that Searle’s proposal “would seem” to add something to the central claim of a causal theory of perception, namely, that what I called ‘the causal fact’ itself is part of the intentional content of visual experience (see example (2) above). My caution is due to the fact that when Searle uses the verb ‘cause’ in his formulations, he means it in a special sense: he means it to refer to his own notion of *intentional causality*, and not to a (mere) natural relation between

¹⁴ Among the perplexing issues I find in Searle’s text is his assertion that the claim that there are visual experiences “is a genuine empirical ontological claim” (cf. p. 46). This is, of course, a point of divergence with representative theories, as indeed, with philosophical theories of perception in general, but what I find most perplexing about it is that he does not seem to be able to maintain his assertion without undertaking risky compromises. Indeed, he accepts that “[t]he verbs ‘see’ and ‘remember’, unlike the verbs ‘desire’ and ‘believe’, imply not only the presence of an [i]ntentional content but also that the content is satisfied” (*Intentionality*, p. 52), but then, given that in his view the visual experience is part and parcel of the intentional content, it would seem that the explanation of ‘see’ analytically implies the existence of visual experiences, unless, that is, the doctrine that experiences participate in their own intentional content is also itself a “genuine empirical ontological claim”. I will take issue with Searle’s assertion in Chapter 7, in relation to a theory which postulates something akin to Searle’s visual experiences.

objects or events “in the world”. It seems that in introducing that notion Searle is trying to overcome the conflict of traditional versions of theories which appeal to experiences in the determination of intentional content with the aim of giving an account of the intentionality of perception which is at the same time “first personal”, that is, an account from the point of view of the perceiving subject. As the formulation in (2) shows, Searle aims to provide that sort of account, and he holds that the use of a standard, “natural” notion would be incompatible with this aim (cf. *op. cit.* pp. 117-126). I will not pursue the complication introduced by this notion in Searle’s theory, since it does not seem to me that it contributes to clarifying the appeal to internal entities in his theory, as will become clear in the next section.

Before considering this decisive point, I will complement my initial description of Searle’s views on the intentional content of perceptual experiences with a brief look at his related treatment of the case of perceptual judgements, beliefs or thoughts. This will facilitate a more exact comparison with my own proposal, as formulated in the previous section, since it concerns such thoughts as well. Thus, I focus on a specific (possible) perceptual judgement —or possible thought or belief— involved in an episode of perception like the one of the example I used above, at least when the perceiver would take his experience at face value, an episode where a possible judgement is involved which the perceiver could express by saying “That is a tree” (leaving the improbability of this as a communicative situation to one side as irrelevant). According to Searle, this judgement would be represented simply in the following way (cf. *Intentionality*, p. 212 for a little more natural —and complicated— example):

(3) (There is a tree there causing *this* visual experience.)

On the face of it, and contrary to the case of the extensional content of an experience, we do not have anything here that reflects itself. Thus, we cannot say that the present account of perceptual judgements is token-reflexive. Nevertheless, the “reference” to the experience in the account —indeed, the fact that according to this the experience is somehow essentially involved— would seem to have favourable consequences. Because of reasons that are parallel to the well known reasons in the linguistic case, trying to account for the way in which the object is “presented” to a subject in visual perception in a specificatory manner by something akin to a *description*, is bound to be unfaithful to the afore-mentioned feature of the particularity or particular-directedness that seems to characterize the sort of judgment which a subject could express by saying “*That* is ...”. Searle’s proposal contains much of such a descriptive character, since the object which the perceptual judgement is about is somehow determined through a descriptive property, namely: *tree causing this visual experience*. However, this property is not a purely descriptive property, but rather a mixed descriptive-demonstrative property. And this fact seems to change things radically: the particularity of the tree the judgement is about seems to be taken care of by the particularity of the visual experience concerned, precisely to this extent: the identity of the judgement is determined entirely by the relevant object in the perceptual situation (assuming there is such a relevant object) and it is entirely irrelevant to the identity of the perceptual judgement whether there is another thinker enjoying a qualitatively identical experience at some other location in physical (or logical) space. Thus, it might seem that Searle’s specific (quasi-)descriptivist account

succeeds where traditional descriptivist accounts fail. If his proposal could be made to work in detail, it would account for the “particular-directedness” of some mental states.

With regard to its potential to account for the particularity feature of the perceptual judgments at issue, there is an obvious similarity between Searle’s proposal and mine as the latter has been formulated so far, as emerges when comparing the formulation in (3) above and my formulation in the previous section, repeated here as (4):

(4) The object attended in *this* act of attention is a tree.

Just as in Searle’s proposal, the *visual experience* itself belongs to the determination of the judgement or the thought, the *act of attention* belongs to it in mine. Indeed, in my proposal the token-reflexive feature seems to be present. The attending or token act of attention has an object as its content, and which object this is is determined by which act of attention that was.

The two proposals seem to hold parallel promises to solve the problem of particularity. The particular-directedness of perceptual judgements or thoughts would be accounted for by the particularity of the visual experience involved in Searle’s proposal, and by the particularity of the episode of attention involved in mine.

A caveat concerning the potential of Searle’s proposal for solving the problem is that if internalism is indeed integral to it, as Searle believes, his theory would not after all offer a real perspective for providing a solution to the problem of particularity. In my opinion, a theory which purports to offer a solution to this problem but for which

it is a possibility that no such objective particulars exists (*none* of them), has the ring of paradox, since the problem of particularity is precisely the problem of how the mind, or the intentional contents that are determined by what is “in the mind”, is or are specifically directed toward particulars, paradigmatically particular physical objects, objects which are fully “mind-independent”.

As will be seen, I will not follow Searle in his internalism, and although I agree with him in adopting a first-personal perspective, my account will do so without appealing to intentional causality. But given the undeniable similarity between the approaches, there is a real issue about what the concrete features mine has that make my own approach diverge on those points. These will gradually emerge throughout this work, beginning in the next section, where, I turn to a more detailed discussion of one aspect of Searle’s proposal. I will examine the nature of the appeal to an internal entity in his proposal which is signalled by the use of a demonstrative expression —‘this experience’— in its formulation. Since there is also an evident appeal to an internal entity in my proposal (albeit a different one this time, introduced in an identical manner) using a demonstrative expression in the formulation, the examination of the meaning of the above-mentioned central feature in Searle’s proposal will provide an immediate opportunity to expand on its significance in mine.

3.4. McDowell’s criticism of Searle’s account

In his “Intentionality *De Re*”, a commentary on Searle’s proposal, McDowell criticises Searle from the position that his proposal has not been properly developed at

a decisive point. As we have seen, Searle's proposal seems to have the potential to solve the problem of particularity where other descriptive-specificatory approaches fail. But the decisive element of the account is its appeal to a *particular* perceptual experience. McDowell's objection is that Searle does not discuss the "particular-directedness" that we could reasonably think is involved in the element of the content that is alluded to in Searle's formulation by his use of a demonstrative expression — 'this visual experience', and that this is a very significant deficiency in Searle's account:

But what about the particular-directedness signalled here by "this visual experience"? How is this to be made out to conform to the general "Fregean" picture?

This kind of demonstrative expression is enormously important at several points in *Intentionality* (...) and that makes it remarkable that the book contains no discussion at all of the questions I have just posed.

(McDowell, "Intentionality *De Re*", p. 217)

We can understand, I believe, the true meaning of McDowell's concern here if we reflect that the use of such a demonstrative expression is a theoretician's device for capturing something, and we ask what it is exactly that the device aims to capture. There is a real, general issue about the character of the philosophical proposal and its exact relation to subjects' experiences and judgements, but it seems that we can discuss the concrete issue at hand now without going into the discussion of the general issue. We can ask ourselves: what is it in subjects' experiences or thoughts that would justify the use of the demonstrative device, referring *in the formulation* to a perceptual experience? In other words, what do the models aim to model here? Searle repeatedly says that what the demonstrative expression in his formulations

aims at capturing is something that *shows* in subjects' experiences and judgements (cf. pp. 49 and 213). And what is it that the experiences and judgement show? I do not think that Searle gives an explanation that helps us in answering this question. And I think that this is precisely McDowell's concern in the passage quoted.

I do not see any alternative to thinking that at least an essential part of what Searle's formulations indicate is that in a perceptual experience there is an *awareness* of the experience itself, and that there is also such an awareness in the genuine perceptual judgement. Again, in spite of the difference in language, I think that this is also essentially McDowell's diagnostic:

In the absence of help from Searle on this point, then, let me suggest that the best account of the sort of particular-directedness that is, perfectly intelligibly, signalled by phrases like "this visual experience" in those formulations of his exploits the fact that the experience itself —the very object to which those contents are directed— is a possible focus of the mind's attention, simply by virtue of being enjoyed. In the right circumstances, namely that one is having a visual experience, the experience itself can be a determinant of the mode of attention or directedness that one might indicate, at least to oneself, by "this visual experience."

(McDowell, *loc. cit.*)

I understand this passage as simultaneously pointing to the need to recognize something like an awareness of, or "access" to the experience¹⁵ and making at least a sort of gesture or suggestion about the proper kind of awareness in Searle's account.

¹⁵ This reading of McDowell is also found in the paper "Searle on Perception" (cf. "... there is a correct point in what the critics say", p. 27), where García-Carpintero explains more clearly the sort of concern at issue. He designates the kind of awareness at stake in Searle's proposal with the expression 'cognitive access' (cf. p. 28). For the time I will use it simply as an alternative denomination, without asking what might lie behind the addition of the adjective. I will deal with this in Chapter 7, section 2.

But I do not think that it is really an *attention* to the experience that is involved here.

This alternative is rejected by Searle in a passage in which he is commenting on Merleau-Ponty. As far as I can see it is the only passage in which he touches on the issue of awareness, and due to its negative character it is not very helpful. In the passage in question, Searle is trying to dispel philosophical resistance to admitting visual experiences, in his substantive sense. One such source of reluctance is epitomized by Merleau-Ponty, who holds that visual experiences do not exist because any attempt to focus our attention on the experiences inevitably alters the phenomenology of experience. If the phenomenology of ordinary experience does not reveal us as attending to experiences, recognizing them as entities would be like adding something that is not there. Searle agrees with the premise about ordinary phenomenology, but not with the conclusion:

As one proceeds through the active affairs of life one seldom concentrates one's attention on the flow of one's visual experiences, but rather on the things they are experiences of. (...) One does indeed alter the character (though not, in general, the content) of a visual experience by focussing one's attention on it, but it does not follow from this fact that the visual experience was not there all along.

(Searle, *Intentionality*, p. 44)

So, Searle is implying that in normal cases of perceiving, subjects do *not* have access to visual experiences through some sort of attention.

Thus, I do not think that the positive “gesture” or suggestion in McDowell’s text is found in calling the kind of access to the experience that is required an *attention* to

the experience.¹⁶ It seems to me that where McDowell really contributes to making the kind of access a person must have to his concrete visual experiences a little more intelligible is in his *minimalist* formulation of the nature of such access. It would be an access the subject has to the experiences “*simply by virtue of their being enjoyed.*” Certainly, these words do not seem to point to anything like an introspective attention by the subject to his visual experiences.

But this, if anything, would make looking for a clarification of the way in which the visual experience is supposed to be accessed in perception only more urgent, in connection to an approach like Searle’s.

Taken in a certain way, the sort of concern that McDowell expresses about Searle’s proposal would seem to require the development of such a proposal. But of course, this can also lead to the adoption of a negative stance if one is sceptical about the possibility of such a development being forthcoming, or if one believes oneself to hold a better alternative. The latter constitutes a second line in McDowell’s commentary on Searle’s proposal, according to which in allowing for the experiences themselves to constitute (part of) the intentional content of experiences, Searle would be acknowledging that experiences are not “object independent”:

It is not a matter of a specification intelligible independently of the object specified: the presence to the mind of the object itself enters into any understanding of these demonstrative modes of presentation.

¹⁶ As a matter of fact, I do not believe that the text really means to suggest that it is attention to the experience that is at stake here. I think rather that ‘the mind’s attention’ in the text is just a form of words incidently chosen to give linguistic form to the deficiency that is found in Searle. This might be signalled, I think, by the rather casual phrasing “mode of attention or directedness” that occurs just a little later in the text.

(McDowell, “Intentionality *De Re*”, p. 217).

Except that in this case the object at issue is an internal object of course. Now, if this is seen to be problematic, that is, if with McDowell the particular move Searle makes here signals “a kind of indirection” which is somehow to be taken as wrong, why not directly embrace the “object-dependent” option in an account of “external demonstratives” once that it has been shown that one is prepared to take the step towards allowing “object-dependence”? This is how McDowell expresses his suggestion:

The suggestion is, then that “this visual experience” can signal a way in which a visual experience can be presented in a thought, made possible by the fact that the experience itself is present to the mind by virtue of being enjoyed. And now I want to raise the question why it cannot be fully Fregean to parallel this idea for the case of perceived objects. (...) Why should we not suppose that ‘that man’ —when a man is in one’s field of vision— expresses a way in which a man can be presented in a Fregean Thought, made possible by the fact that the man himself is present to the mind by virtue of being seen? (...) In answering the question how the man is presented in such Thoughts, there is no substitute for saying ‘He is presented as *that* man’, exploiting his perceived presence to make oneself understood.

(McDowell, *op. cit.*, p. 218).

McDowell mixes criticism with positive proposal here¹⁷; a proposal which, as he says, he does not propose to argue in his commentary. In fact, I do not think there is

¹⁷ He even claims that the approach suggested would be more consistent with Searle’s professed direct realism about perception, the view that in perception we characteristically directly perceive objects and states of affairs in the world. This touches on a point in which there seems to be real tension in Searle’s views, as has already been mentioned in the previous section.

necessarily an opposition between the kind of approach to which McDowell alludes in this text and a token-reflexive approach of the general sort to which Searle's proposal belongs, although showing this will require, apart from development, taking exception to the literal sense of McDowell's last claim, that in explaining how a material particular—a man, say—“is present to the mind” in the cases at issue *there is no substitute* for the formulation that McDowell mentions. On the contrary, what is required, and what is possible, is an elaborate theoretical account of the demonstrative modes of presentation of material objects. These issues will be dealt with in the next chapter.

3. 5. Preliminary justification of the attentional proposal

In § 3. 3. we had an opportunity to look at parallelisms and similarities between my proposal for accounting for perceptual demonstrative judgements and Searle's approach to the description of the content of perceptual experiences and perceptual judgements. Such parallelisms will be developed and commented upon at other places in the dissertation (cf. the first sections of Chapters 4 and 7). I would now like to look in detail at only one specific issue concerning my proposal that is brought up by its parallelism with Searle's position. Indeed, the main justified objection to Searle's proposal to which I have alluded in the previous section may well carry with it parallel doubts about the way in which the act of attention could be brought to bear “demonstratively” on the determination of the demonstrative perceptual judgement or thought. Specifically, it might seem that my proposal is bound to fall prey to a version

of McDowell's concern in that the inclusion of the act of attention would seem to involve a sort of objectionable "indirection", in that the object perceptually identified is only "reached" by previously "capturing" an internal object, to wit, the concrete mental act of attention.

I find the doubts in this respect fully justified, and although a more complete response to them will only be possible when my proposal has been fully developed, I think that at this stage an account can be given in which the cognitive access to the internal entity postulated ceases to be mysterious, and the postulation of this access is seen only as what I think it really is: the recognition that perceptual consciousness involves a (basic) sort of *reflective consciousness*.

Psychologists nowadays think of perception in terms of the reception and processing of information. Some decades ago certain psychologists issued the idea that in order to make sense of the quantity of information subjects receive, this information must be fitted into previously existing *schemata*, to use the term originally introduced in this context by Bartlett in *Remembering* (1932) and which has been given currency more recently by Ulric Neisser in *Cognition and Reality* among others. Neisser introduces the notion of a schema with the help of an example thus:

If we happen to see someone smile, for example, there may be information to specify (a) the shapes of his teeth; (b) the changing positions of his lips; (c) the fact that he is carrying out a certain culturally-significant act; i.e., smiling; (d) something about his mood, which may be cheerful or sardonic or merely polite depending on the context in which the smile occurs. When we perceive his mood, we are not engaged in the same perceptual cycle as when we are attending to his lip movements. We develop a different (though perhaps overlapping) set of anticipations; we pick up information that extends

over a different span of time (...).

(*Cognition and Reality*, pp. 21-22)

Some philosophers (see Hamlyn, 1983)* have interpreted Neisser's notion in a strong way, according to which it would imply that what is perceived will not be perceived *as* anything unless the perceiver has prior concepts, knowledge and beliefs. Thus interpreted, the claim that perception takes place in the framework of schemata is very much at odds with the Gibsonian approach to perception, according to which, in sight for example, the ambient optical array provides enough information in itself to make it quite unnecessary to refer to anything inside the perceiver.

I do not think that accepting this strong interpretation of schemata is at all mandatory. Neisser's idea of a schema can be given a weaker interpretation, which may be seen to be in consonance with the most acceptable of Gibsonian claims. As can be anticipated from the above quotation, Neisser's schemata are part of *perceptual cycles*, a notion that is aptly summarized by Roessler in "Perception, Introspection and Attention" (p. 56) as follows:

A perceptual cycle, in Neisser's sense, consists of three elements: an anticipatory schema, specifying what kind of information the perceiver aims, and expects, to acquire; exploratory activity guided by the schema, such as looking or listening; and finally, the information picked up as a result of this activity, which in turn modifies the schema.

I agree with Roessler when he qualifies Neisser's notion of a perceptual cycle as "relatively undemanding and inclusive" (*op. cit.* p. 57). Neisser insists on the vast amount of information that we, as perceivers, have at our disposal, and his idea is that

to process this quantity and variety of information we have to be endowed with a previous “schema”. But even newborn babies have schemata:

... there can never have been a time when we were altogether without schemata. The newborn infant opens his eyes onto a world that is infinitely rich in information: he has to be ready for some of it if he is to engage in the perceptual cycle and become ready for more (...) What babies do know, I believe, is how to find out about their environment, and how to organize the information they obtain so it can help them obtain more. They do not know even this very well, but well enough to begin.

(*Cognition and Reality*, p. 63)

The second part of this text attempts a minimal description of a necessary condition for perception which would at the same time be the subject’s contribution to it, by reflecting his current interest. In the first part of the text this is claimed to be innate, although elsewhere Neisser emphasizes that it is learning which strengthens and develops the innate schemata: as we learn we are able to make more and more conjectures about the environment we find ourselves in, and we tend to expect certain responses to our conjectures from it. In this way the information gathered would *partially* depend on the abilities of the perceiver. Neisser puts it in this way: “We can see only what we know how to look for” (*op.cit.* p. 20).

Neisser does not expand on the force with which the word ‘know’ should be taken in this formulation. But we must, I think, interpret it in a weak way which does not give rise to Hamlyn’s interpretation. Learning does not alter the essential character of schemata. It is still, so to speak, “the same kind of thing” that a newborn baby has, not something that is conceptually articulated, and it is in this way that it is useful to the perceiver for organizing the incoming information.

This “undemanding” interpretation of Neisser’s ideas should be kept in mind as our interest turns to two central aspects of schemata:

In my view, the cognitive structures crucial for vision are the anticipatory schemata that prepare the perceiver to accept certain kinds of information rather than others and thus control the activity of looking (...) At each moment the perceiver is constructing anticipations of certain kinds of information that enable him to accept it as it becomes available. Often he must actively explore the optic array to make it available, by moving his eyes or his head or his body. These explorations are directed by anticipatory schemata, which are plans for perceptual action as well as readinesses for particular kinds of optical structure.

(*Op. cit.* p. 20-21)

In short, schemata both *direct the activity of looking* and *prepare the subject for what can be found*. Furthermore, “[t]he outcome of the explorations —the information picked up— modifies the original schema. Thus modified, it directs further exploration and becomes ready for more information” (*ibid.* p. 21).

Neisser is then effectively conceiving perception as involving “intentional elements” where talking of achievement and failure makes sense. But it is not only that this talk makes sense. The key point is that the subject *must somehow be aware* of achievement (or failure) because only thus can it be detected that a perceptual cycle has been closed and a new one can be initiated. Using Roessler’s term, the subject *needs to monitor the success, or otherwise, of his activity*; that is, there must be “some kind of monitoring, aimed at establishing whether the intention is fulfilled” (“Perception, Attention, and Consciousness”, p. 59).¹⁸

¹⁸ In appealing to Neisser’s ideas in the preceeding paragraphs, I am not appealing to an empirical theory of scientific psychology at all. Even if coming from a empirical psychologist, Neisser’s

Furthermore, it seems reasonable to assume that the “searching” activity at stake involves *attending* to the environment. Thus, I suggest that what I have called ‘acts of attending’ in previous sections can be seen as being individuated by perceptual cycles, and hence, the need to monitor the success or otherwise of the subject’s activity is at the same time a *need to monitor when an act of attending has been accomplished*, so that a new one may start.

For a better understanding of this claim, I think at this point it is convenient to take into a consideration an objection that Burge raises about Searle’s proposal in “Vision and Intentional Content” and which might equally, *mutatis mutandis*, be thought to affect mine. Burge is objecting to the fact that Searle’s formulation, with its apparent reference to the experiences of the perceiver, requires him to be aware of these experiences or to have some immediate cognitive access to them. There are, Burge admits, loose senses in which it can be said that perceivers are “aware of” their visual experiences. But according to Burge, the sense in which Searle requires this to be so is a stronger one, and he does not think that this captures what “visual experience itself transmits to us” (*op. cit.* p. 210). Because of this, Searle’s proposal “gives a misleading picture of mental ability” (*ibid.*, p. 209). In more detail, Burge’s claim is as follows:

There are surely various loose senses in which we “directly experience” or are “aware of” our visual experiences. They are part of our conscious, visual life; we react to them in a discriminating way. But Searle’s view requires more. *Reference* to those experiences must be part of every visual experience of physical objects (...). But ... [t]o

reflections are located rather at the level of common sense psychology which can be developed by philosophical discussion.

make reference to one's visual experiences, over and above the physical objects that one sees by means of them, one must have some means of distinguishing experiences from the objects they are experiences of. There is a sense in which the visual system itself must make some such discriminations in order to have objective reference to physical entities. The system must be capable of screening subjective visual phenomena from the deliverances of the system that have objective significance. But ... although visual experiences are manipulated within the visual system, they are not thereby referred to by the subject in visual experiences. Such manipulations and discriminations are unconscious, automatic, and most important inaccessible to use by other parts of the cognitive system. Empirical evidence and common sense both suggest that they are not supplied to visually based thoughts useable by the central cognitive system.

(Op. cit. pp. 204-5)

The reason Burge gives for these claims is, I believe, to be found in the text coming after that just quoted:

For the subject's judgements to make reference to visual experiences, the subject himself, not merely a sub-system of the subject, must be capable of making discriminations between experiences and physical objects (...). I think that these are what are ordinarily called 'conceptual discriminations.'

(Ibid.)

Transferring these remarks to the discussion of our view, I completely agree that it is the subject himself and not merely a sub-system of his which must be said to be able to discriminate between the object attended and the act of attention. What I do not agree with, however, is that a *conceptual* discrimination is required, and so the subject must possess the concepts necessary to make the discrimination. My proposal, as already outlined, is meant to be completely congruent with the "undemanding"

interpretation of the perceptual cycle.

So, when I postulate the need for monitoring acts of attention, this is not done in the spirit of advancing a cognitive- psychological hypothesis about sub-systems of the perceiving subject. I believe that the sort of monitoring I have mentioned, like the perceptual cycle as a whole, is something in which the *person* himself engages. In terms that will be explained further in Chapter 5, the postulation at issue is a claim at the “personal” rather than the “subpersonal” level. However, this does not mean that the perceiver can quite readily make it clear to himself that he is engaging in acts of attention, for which he would require the possession of the relevant concepts.

In this framework we can make sense of the subject’s awareness or cognitive access to his own acts of attention which is presupposed by our proposal. And given that acts of attention are the only “internal” entity to which my theory appeals, we are in a position to make some sense of the kind of cognitive access to internal entities that this theory assumes. This is essentially, to borrow Roessler’s words again, “the awareness of an achievement”.¹⁹ Since there is intentional activity involved,²⁰ the

¹⁹ Roessler uses this idea, as well as the idea of monitoring, for a rather different although not unrelated purpose, since his main interest is accounting for introspection (cf. Roessler, “Perception, Introspection and Attention” , pp. 55-61).

²⁰ That there is intentional activity involved in perception, even of the kind envisaged here, does not make perception itself an outright intentional activity. Following C. Evans in *The Subject of Consciousness* and Eilan in “Perceptual Intentionality, Attention and Consciousness” Roessler makes much of the intentional aspects of perception. But I agree with him when he says:

... having a particular perceptual experience can be an achievement on the part of the subject. But note that this does not make perceiving itself an intentional activity. It is one thing to say that attending is something we (sometimes) do intentionally, and that by attending we exercise some control over the content of our perceptual experience; it is another to claim, implausibly, that seeing or hearing something can be done intentionally. (Roessler, “Perception, Introspection and Attention” , p. 57)

awareness at stake is one which is “aimed at establishing whether the intention is fulfilled” (*ibid.* p. 59), or the act of attention realized. In short, the awareness of whether a perceptual cycle has been completed.

In this way it can be seen that from our theory that there is an answer to the requirement expressed by McDowell in relation to Searle’s proposal for an account of the kind of “particular-directedness” to an internal object which is signalled by the use of ‘this act of attention’ in my proposal, as it was signalled by the expression ‘this visual experience’ in Searle’s proposal. I hope that something was said to alleviate the corresponding qualms in relation to my proposal in the previous considerations, and indeed, in exactly the “minimalist” direction that McDowell foresaw, since it would not be wrong to say that the act of attention “is a possible focus of the mind’s attention, simply by virtue of being enjoyed” (cf. the first quotation from McDowell in § 2 above).

With this the hope of developing a genuine solution to the problem of particularity enters the stage again. The fact that a demonstrative perceptual thought would concern a particular individual in the way intuitively required would result from the particularity of the act of attention involved.

Hence, to be specific, two judgements concerning respectively numerically different, even if qualitatively identical individuals, would still be different judgements. Moreover, there is a point about phenomenology here. Searle saw this case—or, rather the parallel case of two perceptual experiences concerning qualitatively identical but numerically different objects—as one in which there is the “[s]ame phenomenology [but] different contents and therefore different conditions of satisfaction” (*Intention*, p. 50). We can now see that this is not right. In the present

view, identifying an object as ‘*this* object’ means identifying it roughly as ‘the object attended in *this* act of attention’ where the current act of attention is, in a way, *registered* in consciousness. Because of this, the judgements or experiences at issue would also be phenomenologically different. This could not be otherwise if perceptual consciousness involves, in some sense, a kind of reflective consciousness.²¹

²¹ In this way, Eilan's requirement that “the existence and identity of spatio-temporal objects” is not “extrinsic to the characterization of how things are from within” the perspective of consciousness would be fulfilled (cf. “Objectivity and the Perspective of Consciousness”, p. 236), and in an account that can in a fair way be regarded as “Searle-like”.

I think that the previous discussion gives me grounds for claiming that at this stage my proposal shows some advantages over Searle's in the respect alluded to, although further developments in this respect will have to wait until the proposal receives further elaboration in the chapters to come. Among other things, in Chapter 7 we will see how visual experiences are used in my account, so that if it is felt that there is something right in Searle's proposal in this respect, it will also be seen that this aspect is not lost in mine.

By now it will be clear that I am relying on the possibility of meaningfully and truly attributing certain cognitive abilities (knowledge, discriminations, etc.) to subjects which, although they are personal—it is the person that possesses that knowledge—cannot readily be recognized by their possessor, who is not, without further ado, in a position to formulate what he knows, discriminates, etc. In this I agree with Searle when he rejects the assumption that “the description of a conscious [i]ntentional content should be given in terms which are part of the immediate consciousness of the agent” in replying to Burge (“Response: Reference and Intentionality”, p. 231). Although I will not attempt to engage in a general theoretical defense of the opposite view, I hope that my resorting to it in the chapters to come will at least be illustrative of the kind of use to which it can be put and the advantages it brings with it.

One final issue to be taken up in a preliminary way here concerns the problem of internalism. Although we will be in a better position to face this possible charge in the last chapter of the dissertation, it seems possible at this stage to say something about it. To begin with, it is quite obvious that the awareness of the “internal entity”—the act of attention—which is “cashed” in terms of monitoring, is not to be confused with

a *further act of attention* directed at the (perceptual) act of attention itself. This further act may undoubtedly take place as well, but then we should not assume that such further acts occur in normal perception. Moreover, neither need we assume that when they do take place, in introspection, they are akin to cases of *perceptual* attention (*pace* perceptualist theories of introspection). Thus, there is no “indirection” here of the sort that seemed to worry McDowell or Burge most.

A further distinction between attending to an object in the environment and the kind of basic awareness of the act of attention that I am postulating is that as we have seen, whereas perceptual attention can be regarded as an achievement, and hence awareness of it is the awareness *of* an achievement, we should not say in the same sense that basic awareness of attention is *itself* an achievement. There is no intentionality involved in it.

Finally, it now seems possible to understand the kind of “internal entity” to which the account appeals in a way that is compatible with externalism. In the first place, acts of attention seem publically accessible; they appear to be something that cognitive scientists can study. And second, even if the basic kind of awareness of acts of attention that I have tried to capture with the notion of monitoring is not itself an achievement as attending to an object undoubtedly is, it seems that monitoring yields knowledge about acts of attention where ignorance or error are not excluded, while an internalistic conception would exclude this possibility.

Chapter 4: Approaches to Perceptual Demonstrative Modes of Presentation

4.1. A “purely perceptual” approach to perceptual demonstrative senses.

In the previous chapter, I presented the basic orientation of my approach to the analysis of perceptual demonstration in the preliminary formulation of the intentional content of perceptual demonstrative judgements. I now turn to the demonstrative modes of presentation of particular objects which are “ingredients” in such judgements. I first recall some basic notions about the idea of sense, in particular, the sense of a singular term.

As is well known, identity statements constitute the paradigmatic cases in which Frege tried to show the necessity of recognizing another semantic property of expressions; their *sense* (*Sinn*) to use his technical term; in addition to their reference. If we identified the meaning of the singular terms in identity statements with their reference, then terms with the same reference would have the same meaning, and thus the identity statements themselves would not be informative to any speaker, exactly as in the case of an identity statement with only a singular term:

(1) The Evening Star is the Evening Star.

Nevertheless, we can easily recognize that identity statements with different singular terms, like (2), are informative:

(2) The Evening Star is the Morning Star.

Senses are introduced to account for the intuitively clear difference between (1) and (2). The informativeness *versus* the lack of it of (2) in comparison to (1) is responsible for the fact that all competent speakers of the language should agree to (1), while only speakers with additional astronomical information would agree to (2). This fact signals that (1) and (2) have different “cognitive value” for speakers of the language, and thus, that the only terms that differentiate between the two sentences —“the Evening Star”, “the Morning Star”— differ in cognitive value.

As a technical Fregean notion, then, the general idea of the sense of an expression is the idea of the *cognitive value* of that expression *for competent speakers of the language* to which the expression belongs. It is for such an idea that supporters of a Fregean theory of sense argue, and it is against such idea that detractors turn. The latter argue, in effect, that no general or common *property* of each of the diverse meaningful expressions of a natural language exists that can be recognized as its cognitive value by competent speakers of that language.

Following Dummett,¹ to specify the property constituting the sense of an expression one must specify the condition something must satisfy to be the referent of that expression. The condition at issue is that stating the way in which the referent must be identified *to understand the language*. This is then the condition which

¹ Frege: *Philosophy of Language*, especially Chapters 5-7 and 12.

speakers of the language, *purely by virtue of being competent speakers* know an object meets if it is the referent of an expression: the speakers of the language, purely by virtue of being competent speakers, think of the objects-referents as satisfying such a condition. Ideally, the competent speakers of the language, purely as such competent speakers, know that the object or objects that are referred to by the expression at issue meet *that* condition.

Thus, on the one hand, sense is something that meaningful *expressions* of a language have, a certain property *of expressions*, but on the other, senses are properties of or conditions *on objects*. (This is captured in the double way we talk of senses: as senses *of expressions*, and as modes of presentation *of objects*.) And, moreover, such conditions have a special epistemic privilege: they are *epistemically accessible* to a subject *qua* competent speaker of a language (he or she knows which conditions they are).

Furthermore, at least in the case of expressions that are singular terms, such conditions are also *individuating*, that is they are conditions (meant) to be satisfied by precisely one entity.

It is natural to think of the possibility of extending this Fregean framework beyond the domain of language. Instead of individuating conditions an object must satisfy to be the *referent* of *expressions* epistemically accessible to the *competent speakers of a language*, we may be interested in individuating conditions on objects which are epistemically accessible to subjects by virtue of another quality they may have. In particular, we are interested here in *individuating* conditions which are also *epistemically accessible* or *known* to subjects *by virtue of their being normal perceivers*. These conditions will be the ones constituting perceptual demonstrative

modes of presentation

When discussing issues in this new context, the terms *senses* may not be appropriate since they may be thought of as tied to *expressions* in a language. On the other hand, the expression ‘mode of presentation’, for its orientation toward objects, so to speak —as capturing conditions *on objects*— offers itself as a more adequate denomination. Indeed, I will predominantly use this expression, (as Peacocke does, but for the sake of variety I will occasionally use ‘sense’ as well. This terminology is preferred by authors like Evans and Campbell, although strictly as a variant, that is, free from any connotations of being a property of linguistic expressions.

If we restrict the discussion —as is here our main interest— to the modes of presentation of particular (material) objects, we can immediately raise the issue of whether there are modes of presentation of objects which are distinctive or characteristic of perceptual states ((seeing a tree in front of one or rather seeing, say, that a particular tree is blooming), perceptual beliefs (“That tree is already blooming”), or of the beliefs which we have called “partially perceptual” (“That tree was planted by my father”). And our search is for (individuating) conditions accessible (known) to subjects as (normal) perceivers.

In this chapter I intend to present my proposal in a way that makes it possible to carry out an initial comparison with the other current proposals known to me. For this purpose, it is not necessary to develop it fully; nor is it perhaps convenient, least the trees not let the forest to be seen. My strategy is, then, to introduce my proposal as a specific representative of a general approach, which I call ‘the purely perceptual view’. In also presenting the rival proposals as representatives of contrasting approaches —the ‘substantial view’ and the ‘subpersonal view’— it will be possible

to discuss these proposals and simultaneously place my own among them in the panorama.

In introducing my proposal I will proceed somewhat obliquely. I will first outline the general approach my proposal belongs to with the help of two other specific versions of the same approach. These may be called ‘the Searlean version’ and ‘the Peacockean version’, although neither of them is actually defended by a philosopher (at least not at the present time), but which will help in painting the general picture.

In Chapter 2 § 3 I mentioned that Searle does not make a proposal about demonstrative mode of presentation in general in *Intentionality* (or anywhere else), but only about the senses of demonstrative or indexical expressions. In the previous chapter we discussed the central traits of Searle’s theory of the intentional content of perceptual experiences and of perceptual judgements, from which any explicit suggestion about a specific perceptual demonstrative mode of presentation of objects is absent (which we saw McDowell complaining about at the end of § 5 of that chapter). Nevertheless, from Searle’s theory of intentional content we can obtain conditions for such demonstrative modes of presentation, such as the following one:

(3) tree causing *this* visual experience.

This, in effect, might be *prima facie* regarded as a reasonably individuating property or condition, and also as epistemically accessible to the subject. It would hold the promise of being reasonably individuating if we first put aside qualms raised by the fact that in its linguistic description a demonstrative expression —apparently referring to an internal object— is used, and that this use obviously requires an

explanation (see § 3. 4), and second, if we make a “straightforward” reading, so to speak, of the word ‘tree’ and of the concept of cause, thus contradicting Searle in word and spirit.² As such, it might be proposed as constitutive of the perceptual mode of presentation of the object present both in a perceptual state, in a corresponding perceptual judgement or perceptual belief, and in what we have called partially perceptual beliefs.

We can obtain a rather similar putative proposal from Peacocke’s theory in *Sense and Content*. Using Peacocke’s own words (cf. pp. 110 and 113), slightly adapted to the present example, the condition in this case would be given by

(4) object of the kind tree (causally) responsible, in the manner required for perception, for the properties in *that* region of the visual field.

Following Peacocke here, it would mean that the properties alluded to in (4) are phenomenal properties, since the visual field itself is also meant to be a phenomenal field (and not at all anything like the subject’s “visual surroundings”). In this way, we would again find here that the responsibility for the individuating work, so to speak, has been handed to internal entities.

When we recall that Searle’s visual experiences also have phenomenal properties we seem to be forced to recognize a strong similarity between candidates (3) and (4) as defining conditions of modes of presentation, indeed almost “stylistic variants”, as

² Recall Searle’s thoroughgoing internalism, which also involves a notion of “intentional causation”, as mentioned in § 3.3.

it were, of one another.³

In the recent paper “A Presuppositional Account of Reference Fixing”, García-Carpintero proposed conceptualizing the senses of linguistic items as ingredients of certain presuppositions, namely, presuppositions of acquaintance with objects. Making use of this idea,⁴ one might propose either of the following as the “presupposition of acquaintance” in the states —respectively, a perceptual state, a perceptual judgement or belief and a partially perceptual belief— that we are taking as examples:

(5) There is a (unique) tree causing *this* experience.

(6) There is a (unique) object of the tree kind (causally) responsible, in the manner required for perception, for the properties in *that* region of the visual field.

It seems straightforward that the (putative) modes of presentation expressed in (3) and (4) are, respectively, “ingredients” in the presuppositions expressed by (5) and

³ The words “in the manner required for perception”, occurring in Peacocke’s original proposal, obviously have the role of discarding “devious” causal chains like, say, the one in the case where the object caused a neurologist manipulating the brain of the relevant subject to provoke the phenomenal properties at issue in her. But the point is, quite obviously, in need of elaboration. Indeed, if (4) were seriously proposed as a candidate for constituting the kind of mode of presentation we are looking for, some other aspects of Peacocke’s theory should be taken care of (see below).

⁴ Here I am again taking the semantic theory of linguistic demonstratives heuristically as inspiration for developing proposals concerning *perceptual* demonstratives (cf. § 3.2). Actually, concerning the temporal development of the ideas presented here, it is in part this heuristic strategy which first led to the proposal concerning my own alternative “reading” of the way of presentation (see below), and it was this, in turn, which led to the somewhat new ways of seeing Searle’s and Peacocke’s proposals that find expression in the present lines.

(6).

Sentences of the kind illustrated in (5) and (6) are used to express the existence and uniqueness of something (a particular tree in the case at hand). Hence, regarded as expressing presuppositions, they express the notion that the existence and uniqueness of something is presupposed. And it is fitting to ask whether either of these *presuppositions of existence and uniqueness* —the “Searlean candidate” and the “Peacockean candidate”, as it were— is an apt candidate for capturing the kind of acquaintance with the object that we may allow is taken for granted by a perceiver in the relevant perceptual situation.

In the parallel linguistic case, García-Carpintero rejects the corresponding candidates. Associating mere presuppositions of existence and uniqueness to senses would give us, he thinks, a *descriptive* —rather narrowly or genuinely Fregean— theory of senses, just the same theory which has been discredited by the discussion ensuing from Kripke’s work on the reference of proper names and transferred to the case of demonstratives by Kaplan and Perry. He says:

Talk of senses as ingredients of presuppositions may have suggested that in the indexical case, the presupposition is also *that there is a unique y*. This is not the view, however, for it would entail that singular terms are synonymous with descriptions capturing their senses, literally (that is, attributively) used. It would then contradict the intuitions exhumed by new theorists of reference, which I share.

(*Op. cit.* p. 132)

To understand what this seems to amount to in the case of perception, take for instance the example of the perceptual judgement in the presence of a particular tree, in full view, to the effect that *that tree* is (already) blooming. The “Searlean”

intentional content corresponding to that judgement will be given as follows (remember that here we are attempting an externalist reading, to the extent to which this is possible at this stage, that is, putting aside the fact that there is an apparent reference to an internal element in the specification of the content for the moment):

(7) There is a (unique) tree causing *this* experience, and that tree is blooming.

Continuing to pursue the inquiry about this linguistic formulation for a while taking it as a model of the intentional content of a corresponding judgement, we can apply Russell's theory of descriptions (in reverse order) to (7), thus getting:

(8) The tree causing *this* experience is blooming.

As a model of the original judgement, which seems to have a definite (perceptual) demonstrative character, one could wonder whether this is minimally faithful. Admittedly, the demonstrative character is not completely lost since there is still a demonstrative expression in the formulation, but one might complain that in the judgement which is being modeled it is intuitively *the tree* which seems to be demonstratively presented, while according to the model it is *the experience of the tree* that is represented as being demonstratively presented. (This might come close to the spirit of the complaints by McDowell that we saw in § 3. 4.)

If we were to depart from (4) as a proposal for the perceptual demonstrative mode of presentation, we would arrive at (9) as the corresponding "Peacockean" model for the content of the perceptual judgement of our example:

(9) The (unique) object of the kind tree (causally) responsible, in the manner required for perception, for the properties in *that* region of the visual field, is blooming.

As a matter of fact, (9) comes close to capturing Peacocke's *actual* proposal in *Sense and Content* (see pp. 110 and 113). We should digress for a moment to mention a key complication. Peacocke (the Peacocke of *Sense and Content*, that is) would consider (9) as giving only an *indirect*, although central, insight into the original intuitive judgement. His theory of perceptual demonstratives in that book and his theory of demonstratives in general, was an *evidential* theory, which means that the content of judgements or thoughts with a demonstrative or indexical character entertained by a subject would be identified with a certain pattern of evidence, and this was taken to consist in the canonical evidence that would make the subject disposed to make the corresponding judgement.⁵ Peacocke held that a general way of characterizing the relevant evidence related to a straightforwardly demonstrative thought —the evidence which would dispose a (ordinary) subject to judge the thought— was by identifying such evidence as (part of) that which would constitute

⁵ As is well known, Peacocke eventually abandoned the views on content contained in *Sense and Content* (at least in part due to the fact that he eventually came to find the notion of *canonical evidence* problematic). There are, however, two general ideas in his “evidential view” (his own term) of content in that book. The first is the idea of relating intentional content constitutively to evidence, and the second is construing evidence “internally”, rather than “externally”. It seems clear that Peacocke later abandoned the second idea, but it is not so clear to me whether he preserves, and to what extent, the original perspective concerning the first. For what concerns us here, cf. “Demonstrative Content” pp. 123-5.

evidence for an adequately conceptually sophisticated thinker —one who possessed the relevant concepts— to judge a certain second thought, to wit, precisely the kind of thought that we try to exemplify with (9). In our example that is, the relevant pattern of evidence related to the original perceptual judgement (“That tree is blooming”) would be indirectly captured by (9), because the evidence that would cause a subject to make the original judgement is (part of) the evidence that would bring a correspondingly sophisticated subject, that is, one who possessed the concepts expressed by the theoretical terms in (9) (‘visual field’, ‘region of the visual field’, ‘properties of a region of the visual field’) to judge the thought expressed or modeled by (9).

Putting aside Peacocke’s own views of the relation between a perceptual judgement, like the one in our example, and the theoretical model in (9) in *Sense and Content*, the issue we were interested in was whether expressing the content of that perceptual judgement as in (8) or (9) is unfair to the specific (perceptually) demonstrative character of such a judgement (and the corresponding issue for the intentional content of a perceptual state or a partially perceptual belief). To complaints to that effect it might perhaps be replied that demonstrative “reference” or “indication” to an internal element is, in fact, all that perceptual demonstrative thought about an ordinary physical object *amounts to*, although, of course, this claim would need clarification and defence.

In any case, we seem to take a small step forward in the analysis of our example if we propose a *referential* reading for the descriptions in (8) and (9) instead of a

descriptive one.⁶ It seems intuitively more acceptable to think that presuppositions of acquaintance with an object, if there are such notions, should be conceived as being akin to referentially interpreted descriptions of that object rather than to attributively interpreted descriptions of it. The contrast between the two interpretations of descriptions was delineated intuitively by Donnellan some time ago:

... when a definite description is used referentially, not only is there in some sense a presupposition or implication that someone or something fits the description, as there is also in the attributive use, but there is a quite different presupposition; the speaker presupposes of some *particular* someone or something that he or it fits the description”
(“Reference and Definite Descriptions,” p. 288; Donnellan’s italics).

In the “Searlean view” of the perceptual judgement that I have been describing, this would amount to suggesting that when we make the judgement at issue we are presupposing *of* a particular tree that it is causing our current visual experience, instead of presupposing *that* there is a unique tree which is causing this experience. With small changes, something analogous would hold in the “Peacockean version” of the proposal. Hence the mode of presentation of the object in either of these views would be given by the individuative condition that is an “ingredient” of the “referential” presuppositions.

Let us call the “Searlean” and “Peacockean” views developed so far *purely perceptual* views of perceptual demonstratives, that is, purely perceptual views of the mode of presentation of the object in perceptual states, and the relevant perceptual and partially perceptual beliefs or judgements. In any version of such a view, the

⁶ This is the move suggested by García-Carpintero for the parallel case of linguistic demonstratives; cf. “A Presuppositional Account of Reference Fixing”, pp. 133-135.

particular concerned in these perceptual states, if there is one, is first and foremost characterized by possessing some individuating property *that concerns the fact that it is being perceived*, instead of being characterized in terms of a more “substantial” property it may possess.

Now, the account of the intentional content of perception or perceptual judgements that I began to develop in the previous chapter is also meant to involve a purely perceptual mode of presentation of the object, if any, presented to the subject. Moreover, this can be seen by carefully following the line that brought us from a “Searlean” or “Peacockean” view of the relevant intentional contents to a conception of the corresponding mode of presentation of the object in the target perceptual states and judgements. According to my proposal then, the object is presented as *the object attended in this (current) act of attention*. More exactly, the object is presented in a way that we could model imperfectly with the description (10), when it receives a referential reading:

(10) The object attended in *this* act of attention

Following on from what has been said above in connection with the “Searlean” and “Peacockean” views, by characterizing the subject’s mode of presentation with the help of the description in (10) what I am trying to get at is that what is constitutive of a demonstrative perceptual judgement is the perceiver’s *taking for granted* that the judgement is about a particular object, precisely *the very one which is currently the focus of attention*. In characterizing the state of the perceiver as one of “taking for granted” or “presupposing” here, I am trying to capture the idea that the fact that the

judgement is precisely about the object being attended does not in any way *occupy the attention* of the perceiver, even if some sort of awareness of it is reflected in any of his actions in which the object attended is involved.⁷

I hope to be in a position to dig more deeply into my proposal's relation to the “Searlean” and “Peacockean” proposals, as these have been previously developed, in Chapter 7 when we examine the relations of attention to the phenomenology of perception. In the meantime, since I will continue developing that proposal my taking it as the representative of the “purely perceptual” approach to perceptual modes of presentation from now on will be understandable. Also, we may recall that appealing to an internal entity in accounting for demonstrative intentionality is common to the different versions of the approach, and that while we do not have any accounts of this appeal concerning the other versions of the same approach (which is not to claim that no such account could be developed) at hand, some work already been done on my own version of the approach (cf. § 3. 5).

A fuller development of our proposal will have to wait until the aspect of the subject mentioned in the previous paragraph (the relations of acts of attention to phenomenal properties) has been taken care of. But I hope that enough has been said by now to facilitate a comparison with other, “non purely perceptual”, approaches to the senses of perceptual demonstratives at this stage, and to note some consequences

⁷ As suggested in the previous footnote, I think that the apparatus used by García-Carpintero for characterizing the senses of expressions as ingredients of presuppositions could in part be adapted to the case of modes of presentation of objects in perception. In particular, we might presumably want to say that a perceptual state *s* of an agent can be said to presuppose a proposition *p* if and only if it is reasonable to infer from the fact that the agent is in the state *s* that he takes *p* to belong to the action context (cf. the definition of presupposition for the linguistic case on p. 131 of “A Presuppositional Account of Reference Fixing”).

of my proposal in the course of the discussion.

4.2. The “substantial” view of perceptual demonstratives.

Although my aim in this dissertation is mainly restricted to perceptual demonstrative modes of presentation of physical objects as explained in Chapter 2, § 3, a new kind of perceptual demonstrative mode of presentation will play an important role in the following discussion: demonstrative access to *positions* in space. This is chiefly due to the central role that positions play in the accounts of perceptual demonstrative modes of presentation of physical objects which I am about to examine in this section.

I do not think that this is the place to expand on a general discussion of the relation between demonstrative access to positions and perceptual demonstratives of objects, and in any case, I do not feel that I can really discuss the new kind of demonstrative phenomena in their own right. For the purposes of the discussion of the proposal in this section, I will mainly take for granted that there is some account or other that would be useful here. I hope that I can do this without prejudicing the discussion of perceptual demonstratives of physical objects, which is really the aim of this dissertation, in any way.⁸

The ideas on perceptual modes of presentation that I will be discussing in this

⁸ In Chapter 7, I will be ready to discuss what I take to be the basic conscious access to spatial positions and the role it plays in an account of perceptual demonstrative modes of presentation of physical objects. But I will not undertake the further task of giving an account of the demonstrative presentation of positions.

section are for the most part due to Gareth Evans, but for reasons of expediency I will proceed by expounding them first under one particular interpretation, one that I in fact surmise is not entirely correct. The interpretation at issue is McDowell's, and hence I will refer to the view, thus interpreted as the Evans-McDowell view, making it very clear that McDowell himself would disclaim any contribution of his own to that view to judge by his writings. He would simply take it as the view Evans actually held.

In Chapter 3 § 1 we saw how Searle thought that in analyzing perception something should be added to the causal Gricean approach. Evans talked in terms of “information-links” rather than of “causal links”, perhaps to avoid associating himself with a view that, like Grice’s leads to the introduction of phenomenal properties in the analysis of perception. Otherwise, the step he takes is similar to Searle’s: it is not enough to require the right information-links; the intentional content of perception should allow for a certain *cognitive perspective* of the object on the part of the subject.

In the previous section I tried to make it clear in general terms, what the perspective Searle postulated is, or rather, leaving aside, Searle’s actual views for our purposes, what is the perspective or mode of presentation of the object that a “Searlean view” postulates is. In the following text we have the basics of a rather different view of the cognitive perspective on the object:

We are now in a position to answer the question what makes demonstrative identification of spatially located material objects possible. In the ordinary perceptual situation, not only will there be an information-link between subject and object, but also the subject will know, (...) upon the basis of that link, where the object is.

(Evans, *Varieties of Reference*, p. 170)

Indeed, in what I am calling the Evans-McDowell view, the individuating knowledge about a physical object that is necessary and sufficient for the mode in which the object is presented to the subject (at a certain time) is just *knowledge of the position* the object occupies (at that time):

Such identification [demonstrative identification of material or physical objects] depends on the subject's locating the object.

(McDowell, "Peacocke and Evans on Demonstrative Content", p. 255).

At this point, we need to pause to look at what is at stake here from a wider perspective. The first thing to recall is that Evans put the characterization of the individuating condition being sought in the case of demonstrative thought about physical objects in general (perception, memory, etc.) in terms of providing "discriminating" or "identifying" knowledge of the object, since this was in turn to be a particular case of a totally general requirement for a *discriminative conception* or for possessing *discriminating knowledge* of the object in his own terms (*op. cit.* pp. 65 and 89). Indeed, Evans attributed this general requirement of possession of discriminative knowledge to Russell (p. 65) and described the desideratum as implied by Russell's Principle of Acquaintance, one which he (Evans) formulated as requiring the subject "to *know which* particular individual in the world he is thinking about", as a necessary condition for having a thought about something (p. 44, my italics; cf. also p. 65, where Evans emphasizes these words).⁹

⁹ In "A Presuppositional Account ...", García-Carpintero mentions Boër and Lycan's account of the (ordinary) notion of *knowing who*, according to which knowing who somebody is turns out to be essentially a matter of knowing properties of the person at issue that identify him or her and which are important for contextually salient purposes. In this contextual dependence of the requirement García-

Evans then proposed to use the requirement of discriminating conception in terms of the notion of a *fundamental Idea*. A fundamental Idea or mode or presentation (recall that ‘Idea’ is the technical term introduced by Evans for modes of presentation of individuals) of an object is one such that when a subject possesses such an Idea of the object, “one thinks of it as the possessor of the fundamental ground of difference which it in fact possesses” (*op. cit.* p. 107). In turn, the fundamental ground of difference of an object, it seems, must be provided by a correct or privileged answer to the question of what differentiates that object from any other of the same sort. Evans introduced this notion by giving examples; so, the fundamental ground of difference of the number *three* would be being the third number in the series of numbers, and the fundamental ground of difference of the shape *square* would be having four equal sides joined at right angles (cf. *loc. cit.*). In the case of a position in space, what distinguishes it is “its relations to each of the objects constituting the frame of reference” (p. 151), and in the case of physical objects, what singles one of them out from the others *at a certain time*, no matter how qualitatively similar they are, is its spatial position *at that time*, as such a spatial position is determined relative to an objective frame of reference (i.e. by its relations to the objects constituting the

Carpintero finds “a reason to doubt the correctness of any such general claim as RP [Russell’s Principle]” (p. 125). However, to see this as a reason against Evans’s endorsement of the principle would, I think, be unfair in view of Evans’s rejection of relying on “the colloquial use of the expression ‘knowing which’” —or ‘knowing who’, for that matter—, of his general qualms about a rough presentation of the principle, of his noteworthy efforts to give a substantial account of the knowing who/which requirement, which rules out an interpretation of it as “contextually dependent”, and finally, of his specific argument for its need (cf. Evans, *op. cit.* pp. 89-92).

frame of reference).¹⁰

Evans's general distinctive proposal for the *discriminating knowledge* that is required—for having thoughts about objects of *any* sort—is, then, that it must *involve fundamental Ideas or modes of presentations* of objects of that sort (cf. *op. cit.* § 4.5, especially pp. 106, 108-110; also p. 114). The importance of this for the case that concern us is that (perceptual) demonstrative thought about physical objects must *involve* Ideas or modes of presentation of the objects that discriminate them in terms of their own fundamental ground of difference (cf. *Varieties of Reference*, § 4.5, especially pp. 106, 109-110; also p. 114). The moot point is exactly *how* these fundamental Ideas are involved, and what we have seen is that there is a fairly straightforward answer to this: the mode of presentation is *constituted* by the fundamental Idea—by knowledge of location in an objective frame. Here is McDowell's explanation of this point:

Evans's idea ... is that in the presence of the general ability to locate oneself in the objective world (to put egocentrically identified places and egocentrically located objects into an objective frame of reference), egocentric location of a place or a material object can constitute satisfaction of the 'know which' requirement even when that is glossed ... in terms of the idea of the fundamental ground of difference for places and material objects. The subject's 'Over there' or 'That one' can express knowledge of which item—that is, which element in the objective order—his thought concerns.”

¹⁰ It seems that Evans eventually came to find relying on the notion of an objective frame of reference in an account of demonstrative identification problematic (cf. section 3 of the Appendix to chapter 7 of *Varieties of Reference*). The problems he found would not stem from the “well-known interdependence between what differentiates objects from one another and what differentiates places from one another” (p. 151) but from the possibility that “the seemingly objective mode of thinking about space is, after all, contaminated by egocentricity” (p. 265). I will not go into these later concerns here.

(*Op. cit.* p. 259)

According to McDowell, then

[t]he point of appealing, in the course of the explanation, to the mere general ability to align egocentric and objective location is that the mere ability suffices to explain how an actual egocentric placing can count as an *actual* placing in the objective order.

(*Op. cit.* p. 258; my italics).

We can explain what McDowell is saying in these texts by resorting to the example of an event of visual perception of a (blooming) tree in the previous section, or rather, to the corresponding perceptual judgement, and using certain devices we used there to characterize judgements and modes of presentation.

Let p be the actual position of the tree as characterized in relation to the perceiving subject, in a way which the linguistic predicates ‘just in front’, ‘at-mid-distance’, ‘not-too-far’, even if helpful, model rather imperfectly. And let p^* be the actual position of the tree as it would be characterized in a “cognitive map”, that is, in relation to the objects constituting the frame of reference. We can, then, model the way in which the object is presented to the perceiver in a first, very crude, approximation with the description:

(11) The object at position p .

Of course, this would be inadequate on several counts, first and foremost in suggesting that the object is presented perceptual-demonstratively as *whatever is at position p* , and so, that a perceptual demonstrative mode of presentation is a variety of

a descriptive-attributive mode of presentation. We know from the previous section, however, that we can improve things a little, perhaps even significantly, by reading description (11) *referentially*. A second defect of (11) as a model is that it represents the perceptual subject as possessing conceptual capacities that he perhaps lacks. Certainly, the subject does not need to have the concept of a (egocentrically characterized) position to locate the object seen egocentrically. But we can put aside this problem here, since this is a general sort of difficulty which any proposal will have to face.

With the same provisos, let us consider description (12) as a candidate for (modelling) the mode of presentation of the object:

(12) The object at position p^* .

What we saw McDowell saying is that if the perceiver is a normal person, who correspondingly has a normal (more or less perfect) ability to locate things egocentrically characterized—especially including himself—in the objective spatial order, then to this perceiver the object being presented as in (11) *counts as* if it were presented as in (12). So, we can say that the object is in fact presented to the subject under the mode of presentation (imperfectly) modelled by (12).

We may ask, so what happens when a subject is lost, so that he cannot effectively integrate egocentric with objective location? This case must also be construed in a way that accords with the foregoing:

Thus, when a subject's perceptual experience places an object for him, his statement 'It's over there' (say) can count as expressing knowledge on his part of where in the

world the object is, even if he is lost. Of course if he is lost he cannot give anything in the nature of a map reference; but even so he counts as knowing, of a certain position in the objective spatial order, that the object occupies it.

(McDowell, *op. cit.* p. 257)

We thus arrive at two formulations of the requirement for the “discriminating conception” of the object according to McDowell's interpretation of Evans, which should be regarded merely as “stylistic variants” of one another:

(i) The identificatory or discriminating knowledge of the object that the subject must have in order to entertain a thought about it is to know where (in the objective order) the object is.

(ii) The identificatory or discriminating knowledge of the object that the subject must have in order to entertain a thought about it is to know, of a certain position in the objective spatial order, that the object occupies it.

For reasons that are fairly obvious, I will call such an account of the mode of presentation of an object in a perceptual situation, or of relating thoughts, a *substantial view* of the mode of presentation, that is, in effect, a *substantial view of perceptual demonstratives*. Moreover, the descriptions at (12) and (13), with all their imperfections as models of the mode of presentation intended, can serve as vivid reminders of the character of this view in front of purely perceptual views of the mode of presentation when they are contrasted with the descriptions at (8), (9) and (10).

Now, if this is the view, what is the argument for it? We might perhaps reconstruct

an argument from McDowell's insistence on the reason for the importance of location:

... location matters because where the object is, at a particular time, is fundamental to its being the particular object (of its kind) that it is.

(Mc. Dowell, *op. cit.* p. 255)

This would then be the (re)constructed argument.

(Premise 1) A perceptual demonstrative "singles out" a particular material object.

(Premise 2) To single out an object, the subject's thought must discriminate or identify it.

(Premise 3) The location at which an object is at a particular time is fundamental to its being the particular object (of its kind) that it is.

(Premise 4) The subject must discriminate or identify an object by what is fundamental to its being the particular object that it is.

(Conclusion) The subject discriminates or identifies the object by locating it.

But if this were really the argument, one would want to know what the grounds are for premise 4. So far as we can see, no reason for this is provided by either Evans or McDowell.

I have already advanced my suspicious of McDowell's account of Evans on the

present issue.¹¹ We noticed that Evans insists on that fundamental Ideas or modes of presentation are *involved* in modes of presentation in general. But there is the issue of how Evans conceived of this involvement in the case of perceptual demonstratives, and I surmise that this is where McDowell is not quite right.

As I have just noted, Evans's thesis concerns modes of presentation in general, and his reasons for it are correspondingly general. They stem from his well known Generality Constraint (cf. *Varieties of Reference*, § 4.3) and although I will try to reconstruct the general argument, this is what I think is the key passage:

It seems to me that the idea of how objects of a given kind, *Gs*, are distinguished from each other and from all other things must enter our very conception of a state of affairs involving a *G*. For there is no thought about objects of a certain kind which does not presuppose the idea of *one* object of that kind, and the idea of one object of that kind must employ a general conception of the ways in which objects of that kind are differentiated from one another and from all other things.

(*Op. cit.* p. 108)

It is not my intention to quarrel with these contentions. Maybe Evans is right here. But the issue we are pursuing now is precisely *how* the idea of one object of the kind at stake must “employ” such a general conception, which is none other than what Evans calls the fundamental ground of difference. We are back, in effect, at the issue of *how* the fundamental Idea of the object is “employed” or “becomes involved” in the mode of presentation.

According to Evans it seems that there are only two general ways in which a

¹¹ “With some trepidation”, as Peacocke puts it in a similar connection, bearing in mind McDowell's privileged connection with Evans's work, and especially his role in the edition of the manuscript of *Varieties of Reference* at Evans's untimely death.

fundamental Idea can get involved. One is directly, that is, the mode of presentation *is* a fundamental Idea. The other happens, predictably, when the mode of presentation is *not* a fundamental idea, and in such a case things get a little intricate. But, at the same time, this is the case that will interest us most, because as will be seen, it turns out that perceptual demonstrative Ideas of material objects are among *non-fundamental* Ideas of objects —contrary to what McDowell’s interpretation seems in the end to imply. So we will proceed slowly here.

Evans’s non-verificationist theory of content makes use of the key theoretical notion of *knowing what is for a proposition (of a certain form) to be true*. As befalls theoretical notions in general, this notion cannot be defined but has to find particular interpretations corresponding to the different forms or kinds of propositions. Thus, an explanation of Evans’s view concerning a certain kind of content, at least when non-fundamental Ideas or modes of presentation are at stake, is best approached in two steps. In *step one* the explanation of the view is approached by making clear the role played by the key notion, without attempting simultaneously to explain this notion; in *step two* what *knowing what is for the proposition of the relevant sort to be true* amounts to for the case at stake is finally explained.

We begin *step one* by glossing the following central text:

When our Idea of an object is of a *non-fundamental* kind, we know what it is for a proposition of the form ‘ $\neg a$ is F ’ to be true, because we know that it is true (if it is) in virtue of some pair of propositions of the forms ‘ $\neg \delta = a$ ’ and ‘ $\neg \delta$ is F ’.

(Evans, *Varieties of Reference*, p. 111)

(Evans uses ‘ a ’ and ‘ F ’, respectively, as schematic letters for a non-fundamental

Idea of an object and a predicative concept, and ‘ δ ’ as a schematic letter for a fundamental Idea of an object.)

What Evans means would be clearer for the reader if the text just quoted continued with the words: “*and* we know what it is for propositions of these forms to be true”. As we are about to see, this is most clearly implied in what actually follows. So, we can rely on the continuation of the text quoted to gloss Evans’s claim.

It follows from Evans’s, or rather, Strawson-Evans’s Generality Constraint that the capacity to entertain the thought (with the content) that a is F is the joint exercise of two separable abilities: the (cognitive) ability *to think of a particular object*, and the (cognitive) ability that consists of knowing what it is for something to fall under the concept F (*op. cit.* p. 103). Our concern is with the first of these two abilities, and as we have noted, according to Evans it requires *identificatory knowledge* of the object. All this is of course still very general and abstract. But let us summarize the situation until now in these very general and abstract terms, before proceeding to bring it to a more specific and understandable level.

We have, in fact, the following *three* claims:

- (i) We know what it is for a proposition of the form ‘ a is F ’ to be true.
- (ii) This is due to the fact that we know what it is for propositions of the forms ‘ $\delta = a$ ’ and ‘ δ is F ’ to be true.
- (iii) Knowledge of the kind described in (ii) gives the kind of knowledge in (i) because we know the (further) fact that a proposition of the form ‘ a is F ’ is true (if it is) in virtue of some pair of propositions of the forms ‘ $\delta = a$ ’ and ‘ δ is F ’.

Briefly put, since $\ulcorner a \text{ is } F \urcorner$ is “composed” as it is (of $\ulcorner \delta = a \urcorner$ plus $\ulcorner \delta \text{ is } F \urcorner$) knowing what is for the “composed” proposition to be true requires knowing what is for the “composing” propositions to be true. All right then, but when can it be said that we know what it is for *these* propositions to be true? Here is Evans’s answer, perhaps still rather disappointing at this level of generality and abstraction:

... our Idea of the object and our concept of the property constitute, respectively, knowledge of what it is for propositions of these forms [namely, $\ulcorner \delta = a \urcorner$ and $\ulcorner \delta \text{ is } F \urcorner$] to be true.

(*Op. cit.* pp. 111-112)¹²

Here an *essential connection* is claimed to exist between

(A) having an Idea a of an object (where a is a non-fundamental idea of an object), and

(B) knowing what it is for a proposition of the form $\ulcorner \delta = a \urcorner$ to be true (where δ is a fundamental idea of the object at issue).

(I am leaving out the parallel connection for the concept of the property, since this is not the present focus of interest.)

If this is still disappointing, it is only because we are moving at a level of

¹² When this text is put just after the previous one (they are connected by means of an ‘and’ in Evans’s book), it is seen at once that the only reason why there is talk of what constitutes knowledge of what it is for propositions of these latter forms to be true in this second part is that it is precisely such knowledge which yields knowledge of what it is for a proposition of the form $\ulcorner a \text{ is } F \urcorner$ to be true. Thus, I hope that the plea for imagining the words “and we know what it is for propositions of these forms to be true” inserted between both fragments is fully justified.

generality and abstraction that does not allow us to see what all this amounts to when applied to the case which interests us, that is, to perceptual demonstratives. I will shortly proceed to *step two*, but let us pause for a moment just to confirm, by quoting the continuation of Evans's text in which it is clear that for him, possession of the kind of knowledge described in (B), *discriminatory* knowledge in a strong sense, so to speak, suffices to satisfy what is required by the Generality Constraint regarding the first of the two abilities required:

Provided a subject knows what it is for identifications like $\ulcorner \delta = a \urcorner$ to be true, a link is set up between his Idea, a , and his entire repertoire of conceptual knowledge, and he will be able to grasp as many propositions of the form $\ulcorner a \text{ is } F \urcorner$ as he has concepts of being F .

(*Ibid.* p. 112)

Let us now proceed to *step two* and finally find out more about knowledge of type (B) for the case we are interested in —(perceptual) demonstrative modes of presentation of physical objects. Here is Evans's key passage:

We are now in a position to answer the question what makes demonstrative identification of spatially located material objects possible. In the ordinary perceptual situation, not only will there be an information-link between subject and object, but also the subject will know, or will be able to discover, upon the basis of that link, where the object is. Given the subject's general knowledge of what makes propositions of the form $\ulcorner \pi = p \urcorner$ true, for arbitrary π , when p is an Idea of a position in his egocentric space, and given that he has located, or is able to locate, the object in his egocentric space, he can then be said to know what it is for $\ulcorner \text{This} = \text{the object at } \pi \text{ now} \urcorner$ to be true (for arbitrary π). Hence he can be said to have an adequate Idea of the object.

(Evans, *Varieties of Reference*, pp. 170-171)

The issue here is to understand clearly the import of the words “the subject will know, or will be able to discover, upon the basis of that link, where the object is” in the first half of this passage. And I hope that this significance will be plain as soon as we focus on its second “technical” part. Evans is in effect saying that if the subject possesses the general ability to align positions in space as egocentrically framed with positions as objectively framed — ‘ π ’ in the foregoing text is a schematic letter for such positions, then knowledge of the egocentrically framed position of the object *suffices* to count the subject as having the required identificatory knowledge. Technically put, this ability suffices to count the subject as *knowing what it is to know a proposition of the form* ‘ $\neg \delta = a$ ’ to be true (knowledge of kind (B) above). To realize this, it has to be understood that the proposition meant by Evans when he writes the expression ‘ \neg This = the object at π now’ is precisely a proposition of the form ‘ $\neg \delta = a$ ’ (or, to be exact, of the equivalent form ‘ $\neg a = \delta$ ’).¹³ Evans has simply chosen to *model* a fundamental mode of presentation, δ , of the object with a descriptive phrase of the form

the object at π now,

which in this context functions as a reminder that a fundamental Idea of a material object identifies the object by its position as objectively framed.

Let us now take stock. Evans considers demonstrative Ideas to be a *primitive* kind

¹³ A comparison of the two proposition-forms — ‘ \neg This = the object at π now’ and ‘ $\neg a = \delta$ ’ — where the ‘this’ in one correlates with the ‘ a ’ in the other, makes it plain that a perceptual demonstrative Idea is a *non-fundamental* Idea of an object.

of mode of presentation. Thus, they cannot be captured by a reductive definition. In the last text quoted, Evans is concerned with giving *a sufficient condition (as opposed to a sufficient and necessary condition)* for counting a subject as possessing an Idea of a material object. It is very simple: you must have the general ability to align egocentric space with objective space, so to speak, and know the *egocentric* position of the object.

So far as I know, at no place in Evans's book is there really a basis to claim, as McDowell does, that, for Evans knowledge of the position of the object as egocentrically framed *counts as* knowledge of the location of the object as objectively framed. It is one thing say that knowledge of the position of the object as egocentrically framed *suffices for the kind of discriminatory knowledge* required and quite another to say that *that knowledge counts as knowledge of the object as objectively framed*. And those two things are to be kept separate, even if the Idea of the object as objectively framed enters the characterization of the discriminatory knowledge required.

But there is more. Until now I have been neglecting the words “or is able to locate [the object in his egocentric space]” in Evans's key passage quoted above. This does not seem a casual slip on Evans's part at all. There are a handful of other places which indicate that *actually* locating the object egocentrically, on the basis of the information link, is not required by him (cf. *Varieties of Reference*, pp. 150, 170-4 and 179). Hence, it seems that according to Evans the subject could in some sense be wrong about the (egocentric) position of the object and still count as possessing a sufficiently “discriminating conception” of it. Evans's *sufficient* condition is, then, still weaker than I have presented it. It is therefore plain on all counts that he did not

require *actual* objective location of the object. *This* is not the discriminative conception of the object that the subject is required to have.

As a result of this we seem to be obliged to conclude that Evans's actual view of the perceptual demonstrative modes of presentation is clearly *weaker* than the one McDowell attributes to him; the "Evans-McDowell" view. Nevertheless, it still seems to be somehow "more substantial" a view than any belonging to the "purely perceptual" approach, just because, in Evans's view, fundamental Ideas are still somehow *involved* in the mode of presentation. It seems fair to say that according to Evans the subject must not only *have a conception of what the fundamental source of discrimination of the object perceived from all others* is, as a general requirement for possessing a perceptual mode of presentation of the object, but that *this conception enters indirectly* —in a way that is admittedly not altogether clear— *in each and every (perceptual) demonstrative mode of presentation*. This is, I take it, what is implied by requirement (B) in the end.

Be that as it may, my claim is only that it is Evans's requirement (B) that makes this view "more substantial" than a "purely perceptual" view, even if clearly "less substantial" than the view attributed to Evans by McDowell and, it would seem, endorsed by the latter.

And now we must ask, what is Evans's argument for (B)? Recall that this is a *general requirement*, not one that is specific for perceptual demonstratives. We should, then, return to the discussion of Evans's view of the *discriminative conception* at the general level.

The relevant argument is contained, I believe, in the following text:

... there is at most one proposition of the form $\ulcorner \delta \text{ is } F \urcorner$ whose truth is capable, as things stand, of making the particular-proposition true. Which fundamental proposition is uniquely relevant to the truth of the particular-proposition must be determined in advance by the Idea a : the Idea a will determine some proposition $\ulcorner \delta^* \text{ is } F \urcorner$ as uniquely relevant to the truth of the proposition $\ulcorner a \text{ is } F \urcorner$ in virtue of the fact that $\ulcorner \delta^* = a \urcorner$ is the only true proposition of the form $\ulcorner \delta = a \urcorner$. Evidently a subject cannot be credited with such an Idea a unless he knows what it is for a proposition of the form $\ulcorner \delta = a \urcorner$ to be true. So we can take the subject's Idea-of-the-object, a , to consist in his knowledge of what it is for an arbitrary proposition of the form $\ulcorner \delta = a \urcorner$ to be true.

(Varieties of Reference, p. 110)

In the last sentence of this passage, Evans (rightly) says ‘can’, while he actually moves on to take the conclusion as having instead the meaning of a ‘should’, as is seen from the fact that the proposal he endorses in his book, as we have had an occasion to note, is that *the subject's Idea-of-the-object, a , consists in his knowledge of what it is for an arbitrary proposition of the form $\ulcorner \delta = a \urcorner$ to be true*, and from the further fact that it is *precisely this claim* which he takes to be the conclusion of the argument in the text just quoted. The claim in italics is, in fact, found *verbatim* in Evans's book preceded by the words “So we can take ...”, which follow the text on p. 110 quoted above. Hence, the argument for Evans's proposal is contained precisely in the lines that precede the formulation of that proposal.

It seems correct to say then that Evans gives his claim the force of a ‘should’, while his actual argument actually justifies the weaker formulation with ‘can’. Hence, I think that his argument's conclusion does not follow from the premises. Indeed, I think that one could agree that a subject cannot be credited with an Idea, a , which is a (perceptual) demonstrative mode of presentation, unless he knows what it is for a proposition of the form $\ulcorner \delta = a \urcorner$ to be true, whatever this might reasonably be taken to

mean, while at the same time disagreeing as regards to taking the subject's Idea-of-the-object, a , to *consist* in his knowledge of what it is for an arbitrary proposition of the form ' $\delta = a$ ' to be true.

Evans's theory has been interestingly criticized by Campbell in "Sense, Reference and Selective Attention". His main point concerns an aspect of Evans's proposal which is closely related to the one we have been discussing. In the same way in which according to Evans's view there is an essential connection between (A) and (B) above (that is, between having an Idea a of an object and knowing what it is for a proposition of the form ' $\delta = a$ ' to be true), there is also an essential connection between possessing the (observational) concept of a property F and knowing what it is for a proposition of the form ' δ is F ' to be true. Campbell's point is that Evans's theory is wrong in assuming that the possession of an observational concept of concrete objects requires to have fundamental Ideas of these objects, because in fact such concepts are first introduced and explained in the context of (perceptual) demonstrative thoughts. The general thrust of the criticism, then, seems to be that in Evans's account perceptual demonstratives are to be explained by appealing to capacities to account for which we need an account of perceptual demonstratives in the first place. (cf. "Sense, Reference and Selective Attention", pp. 62-3.)

Further discussion of the role of spatial location in the perceptual demonstrative determination reference must be delayed for a while (until Chapter 7 in fact), since this issue is related to the development of my proposal. But let me say here that my position will not be in conflict with what I take to be a "feeling" about Evans's position shared by many. As I see it, even if Evans's conception (B) of the knowledge "encapsulated" in a perceptual demonstrative mode of presentation cannot be

sustained, one can still believe that there is something fundamentally right in his concrete requirement for the *ability* to place the object egocentrically, and even for *actually locating* egocentrically the object in normal cases. I hope that, as the view formulated and defended in this dissertation unfolds further, this element in Evans's view can come to be integrated into it in a natural way.

4.3. A “subpersonal” view of perceptual demonstrative modes of presentation.

In the paper “Sense, Reference and Selective Attention” John Campbell presents an intriguing view of perceptual demonstratives. For present purposes we can jump directly into the novelties of his approach by focussing on the criteria he gives for sameness of (perceptual) demonstrative modes of presentation:¹⁴

This problem of the sense of a perceptual demonstrative is a problem about selective attention. To find when two demonstratives have the same sense, we have to look at the principles that the perceptual system uses to select a collection of imagistic information as all relating to a single object. The use of a demonstrative depends on some principle of selection being used to isolate some of one's current imagistic information as all relating to one object. When we have two demonstratives that depend on the same imagistic information having been selected using just the same principle, then we have sameness of sense and the identity statement involving those demonstratives will be uninformative.

(*Op. cit.* p. 60)

¹⁴ Campbell uses here the term ‘sense’ for this mode of presentation; cf. the remarks on the first line of this passage in Chapter 2 § 2.

The method or “principle” of selection that John Campbell is talking about here is one that a correct *empirical* cognitive-psychological theory of selective attention will claim is the one actually used by our attentional system. In the case of visual perception, the “principle” at issue is the one which, according to some psychologists led by Anne Treisman, the visual system uses for “binding” together certain so-called “features” (colours, shapes, etc.) as belonging to one and the same object, namely, *location*. These “features” constitute “imagistic information”, according to Campbell’s views in the above-mentioned paper.

I will explain in some detail the basics of Treisman’s theory in the next chapter as we focus on the concept of attention and theories of attention. And we will be concerned with this “imagistic information” —which so prominently figures in Campbell’s text— in Chapter 6. Finally, I will discuss Campbell’s proposal more closely in Chapter 7, once I have succeeded in formulating my own more fully as a backdrop against which its outline will be more clearly marked. I will restrict my discussion here to singling out the argument which I think leads Campbell to what is probably most striking in his proposal, namely, the fact that it is based entirely on an empirical theory, whatever this turns out to be specifically, and to express some preliminary doubts concerning the argument and its conclusion.

Let us now turn to Campbell’s main example of a “principle of selection”, so we are in a better position to appreciate what some of the implications of taking this step are. Campbell writes:

What are the principles that we use to select a body of information as all relating to a single thing? One fundamental method of selection that we use is location: each of

the pieces of perceptual information we have about various features such as colour, shape and so on has a location implicitly assigned, and information designed as coming from the same location is selected as all relating to a single object. (...) When you try to attend visually to an item on the basis of some other feature that it has, such as its colour and its size, your selection of that item has to be mediated by its location. (...) The implication of this is that demonstratives which depend on spatial attention —attention which uses location as the principle of selection— will have their senses individuated by the locations used in selecting the underlying collections of information. We can use this point to explain the distinction between cases in which trading on identity is legitimate and cases in which trading on identity is not legitimate. The question is whether the same principle is being used to bundle together the underlying perceptual information as all true of a single object.

(*Op. cit.* p. 61)

The direction taken by Campbell is opposed to any *a priori* determination of perceptual demonstrative modes of presentation. Thus, with regard to Evans's theory, we have the following:

The insight in Evans' account is that perception of location is central to grasp of the perceptual demonstrative. But the kind of *a priori* argument he gives seems bound to fail. The centrality of perceived location for the sense of a demonstrative is rather, I have suggested, a consequence of the empirical fact that in vision at any rate, perceived location is of pervasive importance for selective attention.

(*Op. cit.* p. 63)

Notice that Campbell's last claim in this quotation —about the centrality of perceived location for the senses of demonstratives— might be true without this implying that we should opt for a theory of senses in which identity conditions are fixed by appealing to an empirical theory. What then, are the reasons for Campbell's

taking the extraordinary step of proposing an empirical view of perceptual demonstrative modes of presentation?

It seems that Campbell's reasons for his identity conditions on perceptual demonstrative "senses" and with them his theory of the "senses" themselves, are to be found in his earlier paper "Is Sense Transparent?", in which he raises the issue of the need for a criterion of legitimacy for taking for granted that we are perceiving, indeed perceptually-demonstratively identifying, the same object. (We have just seen the beginning of the formulation of one such criterion at the end of the text on p. 61 which I have quoted above, where Campbell uses the phrase "trading on identity" to describe that which should be ruled by the criterion.) He is specifically thinking of the following two paradigmatic cases: demonstratively identifying the same object at about the same time but through different sensory modalities (like sight and touch), and identifying the same object through the same sense —be it sight, touch or hearing— in a brief time span. It seems clear that when such cases appear in an inferential "chain of thought", one is legitimated in *taking for granted*, as opposed to *judging*, that we are demonstratively identifying the same object.

In "Is Sense Transparent?" Campbell claims that it must be the identity of senses, whatever they are, which makes it legitimate to take for granted or "trade upon" the fact that two (perceptual) demonstrative modes of presentation have the same referent.¹⁵ And also that —specifically in the perceptual case— we trade on the

¹⁵ Campbell first advances his proposal on p. 276. Subsequently it would seem to have a *programmatic* character (cf. "the name of the criterion we need is sameness of sense", p. 278). This means that in searching for a theory of perceptual modes of presentation, and especially in looking for a principled necessary and sufficient condition for the sameness of two perceptual modes of presentation one should be guided, according to Campbell's proposal, by the leading idea that perceptual senses or

sameness of reference of the relevant demonstratives when we perceptually “keep track” of the object, an ability that —crucially— must be understood, according to him, as a skill at the sub-personal level. Thus, Campbell says in connection to the perceptual demonstratives which, for the purposes of the present discussion, we may also try to use the expressions ‘that (touched) glass’ and ‘that (seen) glass’ as models, respectively:

It is true that cognitive skills of the thinker are in play here, as he keeps track of the object from [sensory] modality to modality. But these are not *conceptual* skills of the thinker: they do not have to do with his abilities in conceptual reasoning, unlike the ability to engage in mathematical computation, for instance. The cognitive skills in question here belong to a sub-personal level; they are part of the cognitive substratum that makes a conceptual life possible at all.

(Campbell, “Is Sense Transparent?”, p. 283; Campbell’s italics.)

Although pausing to review talk of the “subpersonal level” must be left for the next chapter, and assessing its significance for our problem to the final one, I think that we can now get the first overall impression of Campbell’s argument we need for present purposes by reconstructing it in outline as follows:

(P1) We need a criterion that establishes when it is legitimate to take for granted that two perceptual demonstratives determine the same reference.

(P2) Identity of senses gives us such a criterion.

(P3) But we rely on co-reference when we are keeping track of an object.

modes of presentation are *whatever it is* that makes it legitimate to trade upon identity. But, of course, this is not a *stipulative* decision on Campbell’s part. Thus, it can be discussed theoretically.

(P4) This keeping track must be conceived as a subpersonal ability.

(C1) Therefore, perceptual demonstrative senses are identical when, and only when, we are “keeping track” in that sense. And hence, (C2) identity conditions for senses are to be formulated at a subpersonal level. Since it is obvious that only empirical theories of cognitive science can give us such formulations at the subpersonal level, it is to such theories which we must turn.

For present purposes I will only discuss in detail the claim which most directly concerns the general nature of senses, namely that it is identity of senses which must give the criterion for the legitimacy of taking for granted, or trading upon, co-reference of perceptual demonstratives. (I will tackle the “subpersonal level” premise in the final chapter of the dissertation).

Campbell’s argument for the claim at issue is based largely in discarding two alternatives that on the face of it were not very promising from the start, as Campbell himself recognizes (cf. “Is Sense Transparent?”, pp. 278-80). These alternatives are first, that one could legitimately trade upon co-reference of two perceptual demonstratives just when the two are tokens of the same type, and second, that we can do so when there is *de facto* sameness of reference. Apart from this, Campbell is claiming to be merely making a point for singular terms that Strawson made a long time ago in criticising Quine’s view that it is possible to explain logical truth without appealing to the meanings or senses of the expressions involved (*op. cit.* p. 278). The specific example mentioned by Campbell is that inferring the conclusion, e.g. ‘John is sick’, from the premise ‘John is sick’, is only valid when the word ‘sick’ is taken to have the same sense in both premise and conclusion. However, this case concerns *the ambiguity of a linguistic expression* (as Campbell himself remarks) and this is not at

stake in the present discussion. Hence, whatever Strawson's original views, it is simply not obvious how they generalize to the present case. Therefore, any proposal to this effect should be argued for independently.

Quite apart from Campbell's reasons for his criterion, I think it is not a correct one. This, I believe, is shown precisely by reflecting on how we take legitimately for granted sameness of reference in a *linguistic* case which is somehow closer to present concerns than the case of the ambiguity just mentioned. Consider the following inference:

John came late.

He wore a leather jacket.

Somebody who wore a leather jacket came late.

It seems obvious that, with the proper proviso for the circumstances of utterance of the premises, one could legitimately infer this conclusion. Subjects, by virtue of being competent speakers, know that the same person is referred to twice in the premises, but nevertheless 'John' and 'he', the relevant words here, do not have the same sense, *whatever the senses of these words might reasonably be taken to be*. Thus, Campbell's criterion fails, at least for this kind of linguistic case.¹⁶ And if it

¹⁶ One could be concerned here about the fact that a proper noun and a demonstrative expression are involved in the example, so this does not concern only demonstratives. I believe that the same conclusion could be reached through examples involving only demonstratives, but this would take us a long way from the current focus of interest. Fortunately, I think we can spare ourselves this detour

fails for the linguistic case, I do not see any reason why it should be correct for the case of demonstrative reference in thought.

It is not disputed here that identity of sense is a correct *sufficient* condition for legitimately taking sameness of reference for granted, that is to say that it is legitimate to trade upon co-reference in making inferences when the senses of the singular terms involved are the same. However, I think that cases like the one of the example patently show that it is not at all a correct *necessary* condition.

I do not want to leave this preliminary discussion of Campbell's approach without briefly touching at this point on at least one of Campbell's paradigmatic cases: the case of identifying an object through different sensory modalities (the cross-modal case). The reason for proceeding to a brief discussion of his position on this case at this point is to dispel the impression that his comments could lend any support to a potential verdict against an intuitive position on the case, other than the one that might come from Campbell's general argument, which we have already begun to find problematic.

The intuition at issue is just that the modes of presentation involved in the cross modal case are different. More precisely, a different mode of presentation *type* (or subtype) corresponds to each sensory modality. I think it is fair to say that this is a clear intuition. But Campbell objects that this cross-modal case is very much in contrast with the classical paradigms in that, when it comes to these, subjects lacking the relevant knowledge for accepting the identity *spontaneously doubt* its truth, while no similar spontaneous doubt arises when a subject identifies an object cross-modally

since, contrary to the idea I may have given above, Campbell is really looking for a general criterion that embraces *all* "singular terms" (cf. e. g. "Is Sense Transparent?", p. 276).

(cf. *op. cit.* p. 284). I fully agree with Campbell's observation here, but I think that an explanation can be provided for it that prevents it from counting in favour of (potentially)¹⁷ regarding the senses involved as different. In fact, what seems to

¹⁷ I add the qualification 'potentially' to recall that the verdict is, according to Campbell, transferred directly to empirical theories for its determination.

underlie the classical paradigms is that the knowledge relevant for judging the identities is *easily accessible* to the subject, so that the subject correspondingly also knows easily when he lacks the relevant knowledge, and this explains the “spontaneity” of the doubt. It may happen that subjects in the cross-modal situation are also using knowledge that is accessible to them —as subjects— in some sense, but which is not easily made explicit.

A second objection to the above intuition from Campbell is that the perceptual case contrasts clearly with the use of linguistic demonstratives in another respect. When we think of two occurrences of the same demonstrative type in an identity statement —‘That is (identical to) that’— there is no presumption that the two demonstrative tokens refer to the same individual (think of the statement as being accompanied by two different demonstrations). But there is indeed such a presumption in the cross-modal case. As an example, take the identification which a subject makes of a glass which is visually perceived with the glass he is holding in his hand or touching with it, and which may be modeled thus:

That glass_{visual} is that glass_{haptic} .

Again, I agree with Campbell in that there is indeed a presumption in these cases to the effect that the two demonstrative tokens refer to the same individual. Furthermore, Campbell holds that as long as the subject “keeps track” of the relevant glass, she is legitimate in taking sameness of identity for granted (cf. *op. cit.* p. 283). And again, I think we do not need to quarrel with this claim. What I do not see is why it should carry any implication in favour of the claim that the modes of presentation

involved are (potentially) identical. In the end, however, I would like to suggest that pronouncements using the notion of “keeping track” depend very much on how we understand this notion. If, contrary to Campbell’s empirical understanding of the expression, we take it in the sense of “maintaining (perceptual) attention”, very much in what we may consider its ordinary sense, my own view of perceptual demonstratives would be in agreement with the principle that where there is keeping track of an object the mode of presentation does not change. (I will expand on these matters in the final chapter.)

I have argued against Campbell’s general criterion for identity of modes of presentation or “senses” in the perceptual case and to the extent to which his argument uses this criterion in favour of an empirical approach to the senses’ identity conditions, as reconstructed at the beginning of the present section, I think that we should not find his argument compelling at the present stage. Moreover, I think that there are independent reasons for finding Campbell’s conclusions suspicious. In describing the general idea of a mode of presentation at the beginning of this chapter, I said that modes of presentation characterize objects by means of conditions that are *individuating* and whose satisfaction by an object is *epistemically accessible* to ordinary subjects. It seems to me that, in approaching modes of presentation via an empirical theory, the issue of whether senses as he characterizes them still satisfy the second condition is immediately raised. It is this aspect of the discussion of Campbell’s proposal which will constitute the focus in the final chapter.

I hope that at this point my proposal for the perceptual demonstrative modes of presentation can be seen to occupy a sort of middle ground between the Evans-McDowell view, and Evans’s view proper on one side, and Campbell’s view on the

other. In opposition to Campbell, I hold that it is possible to give an *a priori* account of the identificatory knowledge that subjects apply in perceptual demonstrative thought to a certain extent, and in this I side with Evans and McDowell. However, the way I view this knowledge, it is less or much less “substantial” than Evans or McDowell think. So, I agree with Campbell that there is no *a priori* account of the sort they attempted to establish.

Chapter 5: Attention from a Psychological Point of View

5.1. Approaching the notion of attention.

In the two preceding chapters the word ‘attention’ appears quite frequently, but at no time is its usage questioned. I have been relying on an ordinary understanding of the word, while the suspicion may rightly arise that this reliance is too strong. It is high time for some conceptual clarification.

A common use of the word ‘attention’ picked up in a dictionary characterizes giving attention to something in terms of *looking at it, listening to it or thinking about it carefully*. This agrees to a great extent with the basic use I make of the word here. In turn, this ordinary use is, I believe, related to William James's famous definition of attention in *The Principles of Psychology*:

Everybody knows what attention is. It is the taking possession by the mind, in clear and vivid form, of one out of what seem several simultaneously possible objects or trains of thought. Focalization, concentration, or consciousness are of its essence. (p. 261)

As James states, it is likely that there is a sort of “common notion” of attention, but his choice of key words to convey it is striking. Obviously, James is using the

words ‘taking possession’ in quite a suggestive metaphorical sense here. Notice, however, that this verbal expression is one of *achievement*. If one takes possession of something, one has accomplished what one set out to do. But, of course, one can *try* to take possession of something without succeeding in doing it. It seems to me that we can assimilate the ‘trying’ version of James’s ‘taking possession’ to at least one strand of what the dictionary definition above contains: thorough there is an implication of intentional activity on the part of the subject.

The dictionary definition also suggests a straightforward division between two kinds of attention, as having to do either *with the senses* or *with thought*. And this fits the division James also made between “sensorial attention” and “intellectual attention” exceedingly well.

However, in making the conceptual connection of attention with “focalization, concentration, [and] consciousness” I believe James’s definition goes well beyond the dictionary definition. The words that immediately follow the text quoted may clarify how James viewed the *second* of these notions:

It implies some withdrawal from some things in order to deal effectively with others
...

In any case, these words convey a first sense in which attention can be conceptualized as *selective*, and, indeed, the phrase ‘selective attention’ —with who knows how many different nuances— became famous with the renewed interest in attention in post-behaviouristic psychology.

One very striking feature of James's definition is the strong (essential) association of *attention* with *consciousness*. The problem is, of course, how exactly attention is

associated to consciousness. One thing at least seems clear, without going beyond the notions that James uses; ‘taking possession’ can be associated with consciousness only because of its sense of achieving something. But how is this “taking possession” as it relates to consciousness to be understood?

It seems that this question also divides naturally into two. First, how is “sensorial attention” related to consciousness? And second, how is “intellectual attention” related to consciousness? It is rather in this form than James’s distinction between two kinds of attention survives in the recent analysis of attention by Peacocke in “Conscious Attitudes, Attention, and Self-Knowledge”. Peacocke points out a very significant difference between how attention is engaged in the two cases. In conscious perceptual experience, for example, the focus of the “attentional beam” can be shifted, but this is not at all the case when a thought occurs to a subject, or she makes a conscious judgement. In the latter cases, attention is present not only when the thought or the judgement occurs, but in all the previous necessary moments that a subject needs in order to achieve the thought (cf. *op. cit.* p. 64).

According to Peacocke, both in thought and perception, attention is *occupied*, but only in the second is there an *object of attention* in the relevant sense:

In a normal case of perceptual attention to some physical object, feature or event, there is something to which the subject is attending. The object of attention is perceived: it causally affects the subject. (...) In conscious thought, by contrast, there is no object of attention¹ (...) The notion of an object of attention which is inapplicable in conscious thought is that of an *experienced* object, event, or state of affairs. (...) But thinking is not experiencing. There are objects of thought, but an

¹ Because of this, Peacocke's view of intellectual attention is very much opposed to James's view, which, as Peacocke points out, is very much tied to a perceptual model of introspection.

object of thought is not thereby an experienced object, and is not an object of attention in the sense in question. All the same, in conscious thought, your attention is still *occupied* —as it is also occupied in the perceptual cases, and in cases of imagination. (*Op. cit.*, p. 65)

Our interest in this dissertation is in *perceptual attention* in the sense that Peacocke explains it in this text. We should notice, however, that Peacocke's notion of attention as having (in principle) an object covers more cases than attention to physical objects, events, or states of affairs:

Having a sensation is also an experience. A pain, for instance, can equally be an object of attention. (*Ibid.*)

I do not wish to deny that, in some sense, we attend to pains. But I think we must be careful here. We should think about the extent of the terms 'experience' and 'sensation' in relation to attention. James, for one, would also like to include "sense impressions" in his "sensorial attention", and indeed, as prime examples of it:

In passive immediate sensorial attention the stimulus is a sense-impression, (...) or else it is an instinctive stimulus.

(James, *Principles of Psychology*, p. 270)

This kind of attention is not suggested at all by the dictionary definition, as the ordinary notions of *looking at* and *listening to* apply to physical objects or events. I think that a theory that appeals to internal entities akin to "sense impressions" should clarify the issue of attention to these entities, or, at the very least, should differentiate

it from perceptual attention.² This whole group of issues is involved in thinking of perceptual attention in relation to consciousness, and they will be dealt with in the following two chapters.

At any rate, when speaking of attention it is perceptual attention in the sense described by Peacocke that is meant for most of this dissertation. Thus, when I talk of attention *tout court*, I mean attention to ordinary objects, properties and events, unless otherwise specifically indicated. And in this dissertation it is specifically attention to *individual physical objects* which constitutes the focus of discussion here.

There is one last issue I wish to tackle briefly in this general overview. In the last passage quoted from James, he talks about *passive* attention, in effect, distinguishing it from *voluntary* attention. Passive attention occurs when something attracts or catches one's attention, whereby one suddenly notices it and is interested by it. In this characterization I have used a dictionary definition again, but once more, an ordinary use is not far away from James's discussion.

As noted above, in *giving attention* to something (looking at it, listening to it), as in "taking possession" of an object in James's sense, there are clearly intentional overtones. In the preceding chapters I have emphasized these intentional elements of attention, and this is directly reflected in the use of the terminology 'acts of attention' (an expression which James also uses). It might be thought that in passive attention there is lack of intentionality on the subject's part. But this is not really so. The issue

² The problem does not arise for Peacocke—at least not in this form—because his present views of perception, as opposed to his views in *Sense and Content*, do not seem to recognize entities akin to "sense impressions". But perhaps there is still the question of how the issue of attention fares in relation to the entities (non-conceptual contents) which do the theoretical work of separating perception from thought in his present theory.

is clarified, I think, by appealing to Neisser's notion of the perceptual cycle that was used in Chapter 3. As Neisser says, "the function of an unexpected stimulus is to initiate the cycle of perception proper". Usually, a perceptual state that has been unleashed by a sudden stimulus will be immediately followed by deliberately looking at or listening to something.

5.2. What are cognitive empirical theories of attention about?

When approaching the empirical literature on attention, one is struck by the high degree in which a feeling of unease, puzzlement and confusion penetrates it, at least in the moments of theoretical reflection, and also on those occasions when the attempt is made to put together findings, theoretical tendencies and problems. Among the various testimonies of this feeling that could be given, I have chosen the fairly outspoken pronouncement with which the authors open one of the most extensive and widely referred to surveys of the field to date:

In reviewing the literature on attention we were struck by several observations. One was a widespread reluctance to define attention. Another was the case with which competing theories can accommodate the same empirical phenomena. A third observation was the consistent appeal to some intelligent force or agent in explanations of attentional phenomena. These observations are likely to be causally connected. It is difficult to conceptualize a process that is not well defined, and it is difficult to falsify empirically a vague conceptualization, especially one that relies on a homunculus. As a consequence, the more we read, the more bewildered we became. At a time of despair and panic we turned to William James (1890), where we found new hope and inspiration.

(W. A. Johnston and V. J. Dark, "Selective Attention", pp. 43-44)

To the three factors of bewilderment that the authors mention in this text: the missing "definition"; the ease with which theories that perceive themselves as rivals can accommodate empirical findings, and the uneasy suspicion that too many of the theories in the field contain elements that amount perhaps to little more than to an appeal to *homunculi* which are charged with tasks rather similar to the ones the empirical theories set out to explain, a fourth one should, I think, be added. This is the pervasiveness of attention in recent psychology. At one point it would have seemed as if almost any significant psychological phenomena were "attentional phenomena". This also contributes heavily to making the task of synthesizing work on attention rather unmanageable.

The "solution" which the authors of the survey claimed to have found—turning to William James for inspiration—is also not infrequent. To a extent, I myself have resorted to this source of inspiration. One could turn to James in search of help for conceptual clarification, as the text quoted suggests. But as the survey at issue itself shows, help from James is insufficient to attain a minimal conceptual clarification of the field.

Others in a similar situation have turned to David Marr for help.³ As a matter of fact, I think that both James and Marr's help is welcome to attain some conceptual clarification of the issues that concern us here, even if it is not immediately obvious how one should apply or elaborate their ideas to reach it.

³ This is what Allport does in his own 1989 survey on visual attention. To my mind his appeal does not seem very successful either.

There is a most important aspect in looking at how Marr's ideas about scientific research on cognition relate to actual models of cognitive abilities, including those developed without influence from his ideas, as is the case, of course, with all those which were advanced before his ideas were known. This aspect concerns the fact that Marr's proposal is *essentially* a proposal about *understanding* or *explaining* cognition (cognitive systems), whereas it can also be used, *accidentally*, so to speak, to provide a *heuristic* strategy for research.

Much of the "classical" cognitive psychology was, and still is, conducted at Marr's first level, the level at which a cognitive task is formulated as an information processing problem. Moreover, in practice this formulation chiefly used notions of information handling much at the level of common sense psychological notions. Obviously, this must be related to the fact that for a long time, in fact, until the development of techniques such as high resolution electroencephalography and positron emission tomography (PET), it was at this level of "semantic" or intentional description that theory could meet evidence. Thus, when approaching the study of cognitive phenomena in a certain domain, one could be led to think (and, actually, to think with much justification) that level one was the level for the study to *start*, and indeed this very often happens in formulations which belong rather to a sort of refined folk psychology. Now, whether or not one is clearly aware of the distinction between regarding Marr's levels from the point of view of explanation and regarding them from the point of view of heuristics, using Marr's distinction in the latter way is to proceed as if research were to be conducted in the *temporal* order of Marr's three levels: research at level one comes first, then, when possible, research at level two follows, and finally (ideally) research at level three culminates the investigation.

As a matter of fact, there are actually some passages in Marr's book that suggest this temporal order as the "order of research". For example, the 1-2 order is suggested in the following text:

In order that a process shall actually run, however, one has to realize it in some way and therefore choose a representation for the entities that the process manipulates. The second level of the analysis of a process, therefore, involves choosing two things: (1) a *representation* for the input and for the output of the process and (2) an *algorithm* by which the transformation may actually be accomplished.

(Marr, *Vision*, p. 23)

However, in spite of passages such as this, there can be very little doubt that Marr's target was *understanding*, or explanation, not heuristics, and that the occasional impression to the contrary is due to the choice of example on his part for the sake of explanation, which (as in the text above) may be fitting for an AI application. Marr's own *work* on perception bears testimony of this, as do the most relevant passages in his book:

We can summarize our discussion (...) [on] the different levels at which an information processing device must be *understood* before one can be said to have *understood* it completely. At one extreme, the top level, is the abstract ... theory of the device (...). In the center is the choice of representation for the input and output and the algorithm to be used to transform one into the other. And at the other extreme are the details of how the algorithm and representation are realized physically.

(*Op. cit.* pp. 24-5; Marr's use of spatial terminology here is due to the incidental fact

that he is presenting his summary with the help of a figure; the italics are mine.)⁴

I think that the bulk of work on attention in cognitive psychology until, say, the last ten years, can be seen *as if* it proceeded by *heuristically* using Marr's distinction of levels, by concentrating on level 1 research and making only vague gestures at the other levels.

However, to my mind there is a further characteristic element, especially at the beginning, which is rather independent of Marr's distinction. I hope to be able to

⁴ Another relevant issue here concerns how level 1 is basically conceived. Marr's official denomination for this level is the level of 'the computational theory' (cf. *Vision*, p. 27), but this denomination is widely been regarded as misleading. Marr's "official" description is that it is the level at which *what* is computed and *why* is determined. But his level was pronouncements emphasizing mappings from one kind of information to another (I have just omitted words exactly to that effect from the quotation given in the text). But there is an issue about whether one should or should not understand those mappings in purely extensional terms, as pairing entities in the extension of a property with entities in the extension of another. (In the case of theories of selective attention, which will be the focus of our interest, this would amount to characterizing level 1 in terms of the class of pieces of information which are "selected"; see below.) It seems to me plausible that Marr's examples do not particularly favour an extensional interpretation. But, at any rate, the important point is, as Peacocke remarks in "Explanation in Computational Psychology", that if one opted for the extensional interpretation, a further essential level should then be postulated at which the task that the system performs is not only given by alluding to the extension of the relevant property. The remarks in the text concerning level 1 should be interpreted as taking this into account. Thus, it is only in *not* assuming the extensional interpretation that I can talk of level 1 as essential for understanding and explanation. Were we to assume the extensional interpretation of Marr's first level, we should substitute something like Peacocke's level 1.5 for Marr's level 1. Finally, coming back to Marr's official description, it must be said that Peacocke's has significantly contributed to the analysis of *this* level—whatever it is called—with a *general* clarification of what the relevant information is: it is a question of the information the algorithms rely on. This, in turn, explains in a general way, the "why" part in Marr's description.

indicate both the presence of this other element and its connection to the distinction of levels in the course of a brief exposition of some of the historically important models of attention in cognitive psychology.

Broadbent's original filter theory of attention in his 1958 book *Perception and Communication*, and his 1971 extension in *Decision and Stress*, could be seen as taking its point of departure from the folk psychological idea of selective attention, which we saw formed an important part of William James's analysis of the notion. Only that the "selection" that was meant to be performed was not meant to be a selection of which the subject was aware at all, but was assigned to a mechanism that "filtered" the incoming information.

Broadbent's central idea was that in perception the amount of information that our perceptual system can take up and use at any given time is only a small amount of the total information available. In other words, our perceptual system has, in fact, strong *limitations* for processing information that requires to "select" or "filter" the incoming information. Thus Broadbent's original model postulated two systems. The first was a limited-capacity perceptual system through which the inputs which acquire control over behaviour must necessarily pass. This system transmits only a small part of the available sensory information at any one time. The limitation is due to the action of another system that precedes the limited-capacity system, which acts as a "filter" which accepts some inputs and rejects others. This filter does not behave randomly, but "selects" information which is relevant to current behaviour, and thus, there must be a connection between long-term memory—which presumably holds, among other, information concerning current behavioural concerns—and the filter.

At this point, it is useful to employ Dennett's celebrated *personal/subpersonal*

terminology for clarification purposes (cf. Dennett 1981 and 1989). Notice that, as already suggested, the processes postulated by the model are processes of which the subject is unaware. In this sense, we could say that is *not* the *person* which performs anything that is postulated by the model. However, although the contents of the model are given in a *subpersonal* way, as just explained, the model must have implications for what is actually observed, and *this* consists of actions or performances carried out by experimental *subjects*, which are invariably described by the use of descriptions at the *personal* level.

It is at this personal level that we can find the word ‘attention’ roughly used in the dictionary sense. I am, then, suggesting that in connection to cognitive theories of attention such as Broadbent’s, this word is used *in at least two* different but related senses. On the one hand, we have the notion as used in experimental settings and protocols. This is the word as ordinarily understood; roughly, the dictionary definition. On the other hand, however, a more sophisticated notion —such as a notion that contains at least some conceptual element of James’s characterization of attention— can be used to perform a *heuristic* role. In the case of Broadbent’s original model it is specifically the (personal folk-psychological) notion of *selective attention*, or James’s notion of “withdrawal from some things in order to deal effectively with others”, which plays a heuristic analogical role in the introduction of the theoretical notion of *filter* in the specific theoretical proposal.

It appears that the heuristic role played by the idea of (something like the Jamesian idea of) selective attention in Broadbent’s theory, is played by a common or “folk-psychological” notion of *effort* in another very influential early theory of attention: Kahneman’s model in his 1973 book *Attention and Effort*, where a

mechanism which influenced a distribution of energy necessary to realize concrete perceptual tasks was postulated. This energy —theoretically dubbed ‘effort’— is assumed to be in some way a distinguishable part of the general level of activation of the organism, and it is just this distinguishable part which is associated with attention.

Kahneman himself thought of this theory as somehow complementary to a theory which takes into account (as Broadbent’s theory does) limitations of structures involved in processing, and so his theory is not to be thought of simply as an *alternative* to the theories of attention that follow this lead. But he did open the alternative view which consists of associating attention with some (energetic) limited resources to be allocated into cognitive tasks. These were at first thought of as a unique amount of non-specific resources (as in Norman and Bobrow 1975). However, a number of experimental findings seemed to be incompatible with this assumption. For example, it was found that skilled pianists, after short training, could perform efficiently at sight while repeating orally prose passages transmitted to them at a certain pace through head phones. This and other experimental evidence showed that there was little interference when, as in these tasks, the sensorial input came through different channels and the behavioural output was in two different modalities (manual and vocal). Still other experimental results found other compatibilities in carrying out dual tasks (as they are called in the specialized literature), and all this led to the idea of multiple, independent resources.

These developments pose a problem or, rather, make an already existing one more acute. We can approach this problem by raising at this point the question of what those resources and their distribution have to do with attention at all. At first sight it might seem that this question has an easy answer and that there is no difficulty here at

all. Take, for example, the experimental findings just mentioned about skilled pianists being capable of playing at sight while at the same time reproducing prose passages. This seems to be a case in which the subjects have to divide their *attention* between the two cases, and indeed, it is usually classified in psychological literature as a case of *divided attention*. In thus applying the term ‘attention’ to the phenomenon, it is meant to be given a use that conforms to its ordinary “folk-psychological” meaning. But now, surely, a theory that explains this and other *attentional phenomena* —where phenomena are classified as *attentional* by the lights of the ordinary or folk-psychological meaning— clearly seems to merit the name of a theory *of attention*. This use of the expression ‘theory of attention’ presupposes that the reference of the term ‘attention’ is fixed by either its ordinary or its folk-psychological meaning or both: a theory of attention is a theory which accounts for attentional phenomena —in the sense of this expression just explained, which resorts to the ordinary or the folk-psychological meaning— by means of certain mechanisms (it does not matter which). Hence, to return to the multiple resources theory, if this theory accounts for the attentional fact described properly —a case of divided attention— and other similar attentional phenomena, that theory seems to deserve to be called a theory of attention.

In raising to prominence the ordinary or folk-psychological notion of attention in the way described, a central place is given to this *personal* notion of attention, since attention in that sense is something that a *person* does. For, consider the mechanism eventually postulated by such theories; they are often called ‘attentional mechanisms’. Why so? Because they are the mechanisms used to account for attentional phenomena (the personal or folk-psychological notion) according to theories of attention in the sense explained.

Now, I think that if there were no other sense in which we could make the expressions ‘theory of attention’ or ‘attentional mechanism’ plain, we should say that attention is only unified at the personal level, and something like this is, indeed, what some writers on attention feel inclined to say.

Something analogous holds for the more specialized labels that are frequently used in the literature. Most especially, the same would hold for the theories called ‘theories of selective attention’. Here the thinking would be that one such theory is a theory that purports to account for phenomena of selective attention, where *this* expression should be taken in the personal or folk-psychological sense that we saw explained by William James in the preceding section.

So far so good. Is there then any real problem? In fact, we would appear to be quite a long way from the picture of the situation that is reflected in the following text by Kahneman:

[T]he main function of the term ‘attention’ in post-behavioristic psychology is to provide a label for some of the internal mechanisms that determine the significance of stimuli and thereby make it impossible to predict behavior by stimulus considerations alone. (cf. *Attention and Effort*, p. 2)

This seems quite a “nominalistic” use of the term ‘attention’ indeed. Perhaps not a *flatus vocis* altogether, but almost. We seem to avoid the emptiness of that use by appealing to the folk notion in the way described. Nevertheless, we may be deceiving ourselves here. Perhaps, after all, the situation we have been describing is not very different from the one described by Kahneman. Let us first take the attentional mechanisms. Surely not every mechanism which is postulated by an empirically

supported theory of attention is an attentional mechanism. We do not want to call, for example, a short-term memory store an attentional mechanism only because a theory of attention appeals to it. What is then distinctive of *attentional* mechanisms? Maybe it is that they are postulated by empirically sound theories of attention —always in the sense of this expression that has been described— while they are *not* postulated by theories of other cognitive phenomena. This would exclude short term memory stores from the list of attentional devices. But, of course, this would be no solution to our problem. Firstly, a characterization that is purely negative does not do much in the way of characterizing anything, and secondly, and even more importantly, because this would automatically exclude attentional mechanisms to be postulated by the theories of other cognitive phenomena. It is in this way that we may begin to see the real force of postulating that attention is only unified at the personal level.

Moreover, an account that relied on ‘attentional phenomena’ in the way we have explained, would be much too naive. In real life and in experimental settings also, attention intervenes intermingled with many other factors. A little more than a casual examination of the evidence for many so-called ‘theories of attention’ would make it plain how diverse and varied the empirical problems that those theories are trying to account for are. So much so in fact that these empirical problems seem to deserve little more than the very vague label of ‘attentional problem group’, by which some recent commentators have referred to them (cf. Tudela, “Atención”, p. 136).

I believe that what are basically the same problems as those we have been discussing mark the noteworthy attempt by Allport to argue for a reorientation of the whole research field in the paper “Visual Attention”. Allport’s discussion explicitly proceeds at Marr’s level 1 of scientific theories of attention instead of focussing on

the relevance of a personal notion of attention. It is at that level that he wants to locate the reorientation he is proposing. To be specific, Allport concentrates mainly on the fact that it is at this level that the characterization of a cognitive item by its *purpose* is assumed to take place. He is, thus, focussing on a task commonly assumed —on good grounds— to be also the job of Marr’s level 1 theorizing, which is different from the particulars of that level that were discussed earlier in this section.

Allport finds that the assumption of a “limited capacity system” is common to the majority of the theoretical work on attention in cognitive psychology in the 1960’s, ’70’s and ’80’s. All the work that has been mentioned above would be included here, and much else besides. Of course, the nature and workings of this limited capacity system vary enormously with the different authors, but “the idea of the *limited capacity*, in one form or another, as the basis of attentional limitations has remained a central (in some cases unquestioned) assumption in otherwise very diverse theoretical approaches to attention” (*op. cit.* p. 633). More specifically this predominant view is characterized as the view according to which:

the basic function or *purpose* of [selective attention] is to protect the brain’s limited capacity system (or systems) for informational overload.⁵ (*Ibid.*)

⁵ Allport quotes Broadbent at this point: “Selection takes places in order to protect a mechanism of limited capacity” (cf. *Decision and Stress*). Actually, in the text quoted, Allport says ‘attentional mechanisms’ instead of ‘selection’ or ‘selective attention’. I have used this latter expression, which coincides with Broadbent’s formulation, because I think that there are specific problems with a formulation that alludes to “attentional mechanisms”, as will be seen below. In contrast, I think that Broadbent’s formulation, or the modified formulation in the text, may be seen as statements linking attention as conceptualized at the personal level to happenings that occur at the subpersonal level, since I take it that the words ‘selection’ and ‘selective attention’ that occur in those formulations refer

As I will explain shortly, Allport's proposal is to substitute this conception of the purpose of attentional mechanisms.

In stating the function of attention according to the predominant view, Allport is quite clear that he means that protecting the limited capacity system at issue is causally related to the existence of selective attention itself, and the "shutting out" from processing of part of the information (cf. p. 632-3).⁶ The same causal use must therefore be attributed to his proposal that the function postulated by the predominant view be substituted by a number of different functions corresponding to the diverse "attentional mechanisms". But here our problem is highlighted again.

My concern is related to Allport's initial description of the theoretical level at which he formulates his proposal. This is as follows:

Understanding any complex mental function no doubt requires explanation at many different levels. David Marr (...), particularly, emphasized the importance of clear, explicit formulation at the level (...) at which the overall *purposes* or goals of a *given category of cognitive processes* are to be specified. (*Op. cit.* p. 631; only the first emphasis is Allport's.)

My concern is, then: do attention or attentional phenomena constitute a *category of cognitive processes*? Essentially, I think the same question can be put in terms of "attentional mechanisms": do "attentional mechanisms" constitute a category of

to the folk notion and the rest of the sentence alludes to subpersonal processes. I do not find anything wrong with the formulations at issue.

⁶ Conceptual work by Larry Wright and others have clarified the meaning of such claims. Cf. Wright 1976; cf. also Pérez Otero 2000.

cognitive processes?

The problem seems to be that as long as we do not have any good reasons for giving an affirmative answer to these questions, the class of “attentional mechanisms” remains unbounded —we do not know what is *distinctive* of “attentional mechanisms”— and therefore, our attributing any purposes to such mechanisms seems to be empty as a proposal that aims to reshape theoretical thought in the area.⁷

Is there no way one should proceed here? Notice that if one *had* a *bona fide* attentional mechanism, so to speak, and one were trying to theorize about *its* function (or functions), the problem would not arise. But such a mechanism should be an anatomically and *functionally* characterizable system of the brain (however complex). And how can one have such a mechanism without previous knowledge of its *function(s)* —function(s) that one has good reason to tie conceptually to the ordinary or folk notion of attention? The solution to such an apparent circle must lie in seeing it not as a circle but, so to speak, as an spiral. There must be some “feedback” here, some moving back and forth between proposals for such a mechanism (or even, maybe, several mechanisms) and proposals about its functions.

I do not really know whether at least a significant part of the research on attention in recent years can be seen as proceeding in this overall direction, but I suspect that

⁷ In discussing the multiple resource theories we have mentioned above Allport says: “... to the extent that more and more specific resources are postulated to account for each new pattern of interference, the approach becomes increasingly little more than a redescription of the data, lacking in explanatory power.” (*Op. cit.* p. 641) I am suggesting that something similar may be the case with Allport’s postulation of a whole variety of “attentional mechanisms” serving a whole variety of “attentional functions”.

there is some basis for thinking this.⁸ And it seems to me that we can find an important illustrative example in the work by Posner and his collaborators and followers.

In its early stages, epitomized by the 1978 book *Chronometric Exploration of Mind*, Posner's theoretical work on attention does not seem to proceed in a way that is completely dissimilar to the way found in Broadbent's filter theory. At its base we find a notion, that of *being aware* or *being alert*, which seems to provide the heuristic drive for the theory (much as this was provided by the folk notion of selection in Broadbent's theory). It also seems to maintain a conceptual link to James's analysis, even if to a different element this time (indeed, we have seen James saying that consciousness is of the "essence" of attention). And, as Allport points out, there was also the idea of a limited system. Out of these materials, Posner elaborated a level 1 cognitive theory of attention to account for some data. But as soon as experimental techniques allowed it, he and his collaborators increasingly proceeded to try to find evidence for a neuropsychological architecture that would postulate a unified neurological mechanism for attention.

Postulating a unified mechanism somehow makes it easier to find a way to introduce this mechanism as a (the) mechanism of *attention*. This is, I believe, true even of Broadbent's filter theory.⁹ But work by Posner and his collaborators can, in

⁸ Something in that direction seems to be suggested in Allport's paper, § 16.3.

⁹ If Broadbent or Posner are right, attention is not only unified at the personal level. Brewer makes the opposite claim—that attention is only unified at the personal level—in the course of trying to clarify a long-standing dispute in the neuro-psychological literature concerning the nature of the disorder called 'unilateral neglect' (cf. his "Unilateral Neglect and the Objectivity of Spatial Representation"). He claims that the dispute is clarified as soon as one realizes that, in claiming that the disorder is due to a

effect, be seen as increasingly driven by the theoretical aim of providing a theory of attentional phenomena which emphasizes Marr's *level 3*, and tries to establish explanatory connections between level 3 and level 1¹⁰ in a way that, as far as I can see, seems to fit well the above "going back and forth" description.¹¹ An example of

failure in attention, one party —the "attentionalists"— is in fact claiming that it is an effect of spatially biased attention in the *person*, the patient himself, while the other party —the "representationalists"— is in fact claiming that the disorder is a consequence of failures in the *subpersonal* mechanisms building spatial representations (cf. *op. cit.* pp. 224-225). In this way —since the two parties are in fact focussing on different aspects of the phenomenon— a conciliation of sorts would seem possible. Now, Brewer's contention about how the dispute has been confused may be right, given the evidence he presents on that dispute. But there is a claim concerning the postulation of a unitary attentional mechanism —Brewer specifically mentions Broadbent and Posner in this connection— that I do not understand, or if I understand it, it seems to me to be wrong. It is that, in the context of the dispute, postulating a unitary attentional mechanism would be "simply to recast attention as *one* among many components in the subpersonal computation of spatial representations, and so to undermine any principled distinction between attentionalism and representationalism as interpretations of UN [unilateral neglect]" (p. 225). It is the second part of this claim that worries me. I do not see why, to the extent that we could count on a distinctive attentional mechanism, it would not be possible in principle to claim that it is *failure in this* mechanism —and not in other mechanisms that *also* contribute to the building of representations— which explains the disorder, and why, therefore, the dispute between this position and a position that located the failure in the *other* mechanisms would not be a dispute driven by a "principled distinction between (...) interpretations of UN".

¹⁰ Cf. Posner and Petersen, "The Attention System of the Human Brain" and Posner, "Attention: the Mechanisms of Consciousness".

¹¹ It seems increasingly obvious that the approach driven by research at the neurophysiological level which has been made possible by techniques as high resolution electroencephalography and positron emission tomography constitutes the most promising approach to the study of attention when it is conducted with due regard to the level of computational theory. Nevertheless, I am going to concentrate in Treisman's more classical work as it is the most immediately relevant for the purposes of the present dissertation.

this is provided in the following statement about functions:

[I]t is important to divide the attention system into subsystems that perform different but interrelated functions. In this chapter, we consider three major functions that have been prominent in cognitive accounts of attention (...): (a) orienting to sensory events; (b) detecting signals for focal (conscious) processing, and (c) maintaining a vigilant or alert state. (Posner and Petersen, ‘The Attentional System of the Human Brain’, p. 26.)

I, for one, find a very different spirit in the claim that is made here to that in Allport’s talk about functions and mechanisms. The claim, in the context of Posner and Petersen’s paper, is a claim about a mechanism that one thinks, with good reason, *to have been already identified*, even if perhaps somewhat tentatively, and whose claim to be a unified *attentional* mechanism is now tested by being faced with functions that have been traditionally regarded in specialized scientific research as functions of attention.

Therefore, this new theoretical approach has fully abandoned the traditional heuristics in cognitive psychology altogether. The word ‘attention’ is used much more substantially than as a term for some varied observational syndrome or as something dubiously covering the seemingly *ad hoc* postulation of “attentional” mechanisms and functions.

5.3. Treisman’s feature integration theory

In this section and the next we will deal with one particular cognitive theory of

attention in more detail, namely, Anne Treisman's feature integration theory. This special treatment familiarise us with several traits of theories of attention which were mentioned in the previous section. Moreover, the particular theory at issue is that referred to in John Campbell's account of perceptual modes of presentation; the account in relation to which I will further develop my own account. Most importantly in the present context, I will use this specific theory to illustrate in more detail the relation between folk theories and philosophical reflection, on the one hand, and empirical theories of cognition on the other which I have been suggesting in general outline, and will do this in a way that will allow me to put forward certain elements which will prove central to my description of the perceptual demonstrative character of perception of physical objects, as further articulated in Chapter 7.

We may see Anne Treisman's first theoretical endeavours on the subject of attention as a flexibilization of the framework set up by Broadbent's filter theory, or perhaps as a way to broaden a perspective that she considered to be too narrow. In the 1969 paper "Strategies and Models of Selective Attention", Treisman argued for the "need to draw some logical distinctions between attention tasks" and wanted to "discuss their implications for explanatory models of attention" (p. 283). The distinctions at issue were traced to an equivocation in the word 'attention' itself:

Words like 'attention,'(...) have been used to cover a variety of logically different concepts. Clarifying these may help to explain the conflicting experimental results and to throw light on the underlying mechanisms. (*Op. cit.* pp. 296-7)

Specifically, Treisman wanted to put forward *four* different notions of attention, although it is not completely clear to me what these four notions are. Jointly they seem

to cover roughly the same conceptual area that was later to be covered by the three functions of attention distinguished by Posner, namely orienting, detecting and alerting. Even if the internal distribution of the area does not coincide with Posner's, at least some of Treisman's notions also had a functional character (Treisman called them 'attentional strategies').¹²

As suggested by the above quotation, Treisman linked her conceptual distinctions to the postulation of different mechanisms. In tracing these distinctions she intended to oppose Broadbent's unified account of attention. As we will see, however, her later work on attention would concentrate, somewhat ironically, on aspects of the subject that were to bring her closer to Broadbent's well known perspective of filtering and limited capacity mechanism.

In this later work Treisman embarked on a systematic investigation of subjects' performance in a wide range of tasks involving identifying objects with distinctive traits or features from among other objects that partially shared those traits and also from among objects that completely lacked them. Part of this work led to the formulation of Treisman's most characteristic theoretical standpoint, her *feature*

¹² In explaining her fourfold conceptual division in connection with the example of the task consisting of detecting a particular type of letter among a display of coloured letters of different size and orientations, Treisman says: "[The experimental subject] must first direct his attention to the display and not elsewhere in the room, that is, he must select the class of sensory data coming from one particular area as the *input* to the perceptual system. Second, he must attend to the shapes of the letters and not their colors, sizes, or orientations, that is, he must select *the analyzers* for shape and reject those for color, etc." (*Loc. cit.* p. 284, Treisman's italics). Both notions of attention seem to be covered by Posner's orienting function (cf. Posner and Petersen (1990), pp. 27-33). Incidentally, Treisman's quoted text is representative of the psychologists's habitual overlooking of the distinction between personal and subpersonal levels of analysis or theorizing.

integration theory; most of the remainder was conducted to test this theory and eventually led to several modifications.

In a nutshell, Treisman's theory is as follows. At some stage our visual system processes a number of features of objects present in a scene automatically and in parallel.¹³ These features are spatially located and organized into types (colour, shape, orientation, etc.). This automatic pre-attentive stage is temporally followed by an attentional stage in certain situations, e. g. when carrying out tasks that require it, at which an integration or "binding" of features present at the location attended takes place, finally building a description or file with the defining features of the object present at the location at issue. This representation of the attended object is built up by perception before any name or semantic characterization takes place.

[Dibuix 1]

The evidence for the independent parallel processing of features of objects comes from experiments such as the following. Firstly, when subjects are made to identify a particular object that is like all other objects in a display except for one distinctive feature, the identification is found to proceed without the increase in the number of objects displayed having a significant effect on the time needed. The objects may be geometrical figures sharing a shape (e. g. they are all round), but all but one are the

¹³ Treisman was uncertain about the stage in the process in which this automatic parallel processing takes place. According to the model in Treisman (1986) this parallel processing takes place from the very beginning of visual processing, while in the model in Treisman (1988) single representations that conjoin features of several kinds precede the separate analysis or "splitting" of features by types. Eventually she found evidence that favoured the latter model (cf. Treisman (1988), p. 204).

same colour (e. g. one is red and all the others are green) or the other way round. Or the objects can share a shape (rectangular, say) and all but one also share orientation (e. g. all are vertical, only one is inclined) or the other way round, and so on. The independence of the number of objects displayed shows that the objects are not examined “one by one”, or even “one group by one”. This conclusion is reinforced by the fact that the target object is usually absent in part of the tests, that is, there is no object with a distinctive feature. If subjects proceeded by searching for objects individually or in groups, significantly more time should be required to give an answer in cases where the supposed target object is absent.

Another type of experiment seems to give even more direct evidence of the parallel processing of features. Objects displayed can vary randomly within the same category of feature—or, as the jargon has it, along a “dimension”—(e. g. can be presented in a number of different shapes and in varying quantities for each shape) while sharing—with the habitual exception—a feature belonging to another “dimension” (e. g. colour). Again there is no significant varying effect in performance time as the number of object displayed increases (cf. Treisman (1982), (1985), Treisman and Gormican (1988) for experiments of the kinds described). Apparently, then, features belonging to one type or dimension do not interfere with features in other dimensions. If the perceptual system was distracted by the different shapes of the objects when “looking for” a distinctive colour, for example, a significant effect should be expected as the number of shaped objects or the variety of shapes increases.

A variation of this type of experiment which was not carried out by Treisman or her associates, is as follows. Objects displayed, similar to the ones in the experiments referred to are shown to subjects one by one very briefly—the relevant time is in the

order of milliseconds. After each presentation *two* questions are put to them, each with two alternative answers. Each question concerns a kind of feature or dimension of features in the object (e. g. colour or orientation), and the alternative answers present two possibilities about the concrete feature present in the object (e. g. vertical vs. horizontal). It is assumed that the object is shown to the subject for too short a time to enable conscious recall, but the subject has to pronounce on the features at issue even if he is not consciously aware of these features. The results of these tests are compared with the results obtained when only *one* (two-alternative, and always within the same dimension) question is put to subjects after object presentation. The result of this comparison is that, again, there is no significant difference in performance —this time with respect to accuracy— between the groups of subjects (cf. Duncan 1984). Again, processing features in one dimension does not seem to interfere with processing features in a different one.¹⁴

Other types of experiment concern the processing of “conjoined” features, that is, they concern objects that differ in one feature with respect to objects from *each of two* groups differing in turn with respect to *two* features. For example, one group of objects may be red triangles (sharing any other features except of course location) and the other may be green circles while the “target” object is a red circle. In this sort of display it is found that the time of search varies approximately proportionally (lineally) with the number of “non-target” objects —also called ‘distractors’— in the display. It is thought that these results occur because the subject has to orient his attention to the objects' locations in succession until the target is found (serial search).

¹⁴ Apparently, the attributes or kinds of features tested in these experiments include shape, colour, location, orientation, spatial frequency, motion, texture, and brightness (cf. Duncan (1993), p. 56).

[Dibuix 2]

The relation of the ability to identify objects which present “conjoined features” in the sense described above has with being able to locate such objects is further tested in experiments where subjects are shown very brief displays involving several objects. While the target object is only different from *all* the rest in one feature; in cases where there are no conjoined features, subjects are able to tell whether there is in fact a different object in a display and what the difference consists of, and can do this even if they cannot tell *where* that different object was in the display due to the brevity of the presentation. But when the target differs in one feature from each of two groups of objects as described above —cases of conjoined features— then the subject is not able to identify the target unless he is given enough time to also find out *where* the object is.

The result from this kind of experiment support the hypothesis that the identification of objects showing feature conjunction requires attention on the subject's part, and that attention in this case has to do with attending to the locations of objects. This is the second, indeed the most characteristic, half of Treisman's feature integration theory.

Further evidence of the dependency of identifying feature conjunction targets on being able to locate such targets is found in “illusory conjunction” experiments. Treisman's theory predicts that when subjects are not (properly) attending, be it due to distraction, to having to attend to too many things at once or, simply, to being allowed insufficient time, they will make mistakes in attributing (conjoined) features

to objects. These predictions have been borne out by experiments of several sorts, for example, in one type displays containing a (short) alphanumeric series were very briefly presented to subjects. Those series would begin and end with a black numeral—to which the subjects were instructed to attend for later reporting—and would also contain objects of other kinds—e. g. coloured letters—in between. The subjects were then asked to identify the numerals and also to identify any other occurring objects by their features (say, letters in their corresponding colours). Subjects were frequently able to correctly identify (at least some of) the features of the objects in between belonging to one dimension but not to the other. For example, they were able to correctly identify (at least part of) the objects' shapes—say the shapes of the letters, and thus the letters themselves—but they were typically wrong about their colours. Even more importantly, the subjects would frequently *interchange* the features of the objects, say letter type and colour (stating, for example, that a green 'c' and a red 'b' were in the display when in fact it was the other way round). This latter kind of mistake is called an 'illusory conjunction' in the literature.

It seems then that attention in visual perceptual tasks—or, as we may as well say, (visual perceptual) consciousness—is essentially related both to the (correct) integration of features and to the spatial location at which that integration takes place, where these two factors are not independent of each other: integration has to take place *at* a location. These aspects of the theory are shown in the model represented in Fig. 1 by postulating a 'master map' of locations to which an 'internal spotlight' is directed, corresponding in the model's subpersonal level, to the activity of attention, as we put it when describing what takes place at the personal level.

The fact that Treisman's model places the 'master map' at an early stage in

processing reflects a theoretical decision motivated by some empirical research. As shown in Houck and Hoffman (1986), certain kinds of post-effects (a subset of so-called McCollough post-effects), require that conjoining features are present even without attention,¹⁵ which according to Treisman is best explained by postulating that the features belonging to an object are to a certain extent represented in a unified way before “analysis by features” takes place, especially since there seems to be independent evidence of early processing in these cases of “conjoined features” (cf. Treisman 1988, pp. 223-224).

The integration or “binding” of features that takes place when subjects focus attention on locations in the displays according to Treisman’s theory, has as a result, according to the same model, the building of a unified representation of the object—a “mental file” of an object. Kahneman and Treisman obtained evidence which apparently showed that those object representations bore a contingent relation with the (semantic) categorization of the object:

We propose the notion of an object file as the representation that maintains the identity and continuity of an object perceived in a particular episode. The identity of the object is carried by the fact that information is entered on a particular file, rather than by a name or a particular enduring set of features. ”

(Kahneman and Treisman (1984), p. 54)

¹⁵ When the subject looks for a certain time, e.g. a minute, at patches of green vertical stripes with red horizontal stripes, then there is a post-effect consisting of appearing to see patches of black and white vertical stripes tinged with red with black and white vertical stripes tinged with green (thus reversing, so to speak, the colours of the original patch). The inverse effects are obtained when the colours of the stripes in the patches are inverted (red for the vertical, green for the horizontal). What was shown by Houck and Hoffman is that those post-effects occur even when distractions of attention are produced in different ways so that the subjects cannot attend to the patches.

They may be momentary or episodic representations that track an object independently of its having been assigned to a definite category, or independently of a change in the category to which it has been assigned. For example, something categorized as a distant plane is not lost track of “even when we see it flap its wings and alight on a nearby tree, thus forcing us to change the label we initially assigned” to it (Treisman 1988, p. 219).

A whole series of experiments belonging to the same generic class of experiments from which feature integration theory arose suggest a very different story about how the mental files of objects are built up. Those are experiments which show that for certain combinations of features serial search is not required to find the target object. For example, when the target is a red bar moving up and down that must be identified among a group of bars of the same size, part of them green and moving up and down, and part of them red and moving left and right, subjects have no difficulty in quickly spotting the target, quite independently of the number of distractors. There is now a very wide range of results in this direction, coming from the work in Nakayama & Silverman (1986), Wolfe, Cave & Franzel (1989) and Treisman & Sato (1990).

To account for these new findings Wolfe, Cave & Franzel suggested an alternative algorithm to find a conjunctive target which is alternative to Treisman’s original algorithm —cf. Wolfe, Cave & Franzel (1989). Instead of integrating the features at successive locations (corresponding to successively orienting attention to different locations), the procedure was to first shut out any objects in the entire display that lacked one of the features of the target, and then to shut out from the remaining objects any which lacked the other feature, finally leaving only the target as the

“surviving” object. This, of course, makes a quite different claim about the capacity and action of attention.

We will not need to go into further detail here on which conjunction feature tasks seem to be carried out by serial search and which ones are not. Nor will we enter into the discussion of the modifications Treisman introduced in her model to account for the new findings (for which cf. Treisman 1998, pp. 226-7, and Treisman 1993, pp. 19-20 or the alternative advanced in Wolfe, Cave & Franzel (1989)). I think that enough details have been given by now to give a feeling of the nature of the research in the field, especially because our interest lies in the trait common to all the theories which have been mentioned, namely, their postulation of features.¹⁶ In the next section we turn to the issue of just what these features are.

5.4. Features and qualia.

What are the features spoken of in Treisman’s theory? Reflecting on her work, Treisman raises the question of whether features are “real world properties” or are mental representational items:

¹⁶ It could be said that the models and theories considered differ at the algorithm level of a cognitive theory (level two of Marr’s hierarchy). This is true with regard to the algorithms proposed, but the algorithm level also includes, according to Marr, the choosing of representation, and it seems that on this subject there seems to be great agreement on the postulation of features as representations (or properties thereof) on which the different algorithms work. (An explanation of this kind of discussion of features is given in the next section.)

So what *are* features anyway? Back in 1980, they were the colours, orientations, and shapes on my ink-drawn tachistoscope cards. That saved me some difficult decisions about whether they are the features of the 2D image as coded by retinal receptors, or the features of real world, three-dimensional objects. (Treisman, 1993, p. 7; her italics)

Of course, ink marks or printed colours on cards, or even shapes and colours in screen displays are, in some obvious sense, “real world properties”, even if they are not the properties of three dimensional physical objects. Hence, the way in which Treisman uses this term in the quotation above serves only to emphasize that it is properties of three dimensional physical objects which are one of the main possibilities from among which a choice should be made.

For our purposes, however, the relevant contrast here is between features as real world properties in a properly wide sense, and features as mental entities, that is, features as (properties of) mental representations. And in this respect it is quite obvious that Treisman makes use of *both*. Indeed, when a subject is trying to locate an object in a card or a screen display which is, say, green in colour and square in shape, he is trying to identify a (two-dimensional) physical object with two different physical properties. But, it is clear that according to Treisman’s theory the subject is using a mental representation of these properties in trying to zoom on an object that has them. It is only that Treisman chooses not to mark terminologically the two kinds of entities that are involved here, using the term ‘feature’ to cover both, and leaving it to context to indicate the right interpretation. The following passages testify to this.

When we perceive and identify any complex object, we normally register not only its features (its particular shape, size, color, etc.), but also the fact that they are conjoined in a particular configuration. (Treisman & Schmidt, 1982, p. 107)

The basic claims made by Treisman and Gelade (1980) were (1) that there is an early stage of perceptual processing at which separable dimensions are coded, independently of each other, and form regions defined within separate maps by the presence of particular sets of features. (Treisman & Schmidt, 1982, p. 110)

I raised the possibility that whereas detection could be triggered by simple features, conscious awareness might depend on feature integration ... (Treisman, 1988, p. 201)

In any case, beyond any concrete quotations that one might provide here, Treisman's whole theoretical model would not make sense without features being — in the corresponding sense of the word— part of mental representations and on which algorithms operate to build *integrated* representations of the object (remember the “object files” in Treisman’s theory). This much is clear from the very title of her theory: experimental subjects do not first integrate physical properties of the objects—they are, of course, already integrated in the physical object. What they—or rather, subpersonal processes occurring in them— do integrate are mental traits into a mental representation of the object.¹⁷

¹⁷ I think that there is a very close link in Treisman’s mind between the technical theory-bound use of the key terms of ‘selection’ and ‘binding’, on the one hand, and the folk-psychological sense of selecting and “binding” traits that belong in the phenomenology of perception. At least, I believe thinking this leads to a better understanding of the metaphor in Treisman and Kahneman’s proposal of a (mental) “object file”. I think this notion is first introduced as a metaphorical notion at the level of folk psychology, but, to the extent that it helps in the configuration of empirical models supported by experimental findings, it ends up as a theoretical notion of the cognitive psychological model. This is a way of linking a notion of “phenomenal trait” —that is, something that can be an object for philosophical discussion, or something that is assumed to occur in any case at the personal level— with a subpersonal trait. For an explanation of how can this happen, see below.

On the other hand I believe it is equally clear that Treisman needs the objective sense of the term ‘feature’. To begin with, her description of the *experimental tasks* the subjects are asked to carry out would not make any sense without this other use.

There is a moral, I think, to be drawn from this situation that is relevant to the interpretation of the following pronouncement by Treisman in the course of her attempt to answer the question we saw her formulating (what are features?):

I have always insisted that this is an empirical question to be answered by converging operations designed to diagnose the functional features in the visual dictionary. Functional features are defined, in terms of the theory ... (Treisman 1993, p. 7).

As we have seen, we can say something about features which comes from reflecting on the uses of the term in descriptions of the experimental tasks as opposed to the empirical-theoretical explanations of the results. In other words, that the *contrast* I have mentioned between two kinds of things called ‘features’ in Treisman’s writings exists is not an empirical question. What is right in what Treisman says is that determining what kinds of mental entities are involved in the attentional recognition of objects, and also what properties are represented by those mental items is an empirical question.

Concerning the mental entities at issue, Treisman mentions in the first of the passages quoted in this section “features of the 2D image as coded by retinal receptors”. She could also have mentioned the possibility, in principle, that a theory of visual attention to objects postulates the sort of features of representations which are called ‘2¹/₂-D sketches’ in Marr’s theory of vision, suitably extended to provide for colours and other properties (cf. the brief explanation of these representations in

connection to Tye's work on pictorial representation in the first section of the next chapter). What is an issue that empirical research has to decide is whether, for the explanation of visual attention, features as representational parts of the first kind of representations —“2D images as coded by retinal receptors” should be postulated— or features as representational parts of representations of the second kind —2¹/₂-D sketches. Or whether, perhaps, it is a different kind of representation which is involved. Finding out what the specific kinds of features belonging to one of these to be postulated are, is also of course an empirical task. As a matter of fact, this is the issue that Treisman turns out to be more concerned with in the paper in which we saw her raising the issue of what features are.

I will next try to clarify a little further what kinds of mental entities we should consider features to be (thus taking the word in its “mental sense”), independently of the concrete decisions of the empirical theory concerning the kinds of features specifically postulated.

A theory like Treisman's theory of selective attention can be best seen, I believe, as a theory of the ability of *certain way* —the attentional way— of perceiving physical objects, or the ability to perceive “things” —in the vaguely delimiting sense of the word ‘things’— as physical objects. According to the theory, this way of seeing consists of a *systematic* ability, in that the abilities to so perceive diverse objects involves more basic abilities, namely the abilities exercised in recognizing or discriminating between certain properties in the “things”, each of which may be involved in the perception of many different objects. Carrying out these more basic abilities requires states which are representational —just because they carry out *recognition* or *discrimination* of properties of objects. We can identify these states,

which in their physical realization presumably consist of complex patterns of neuron cell activation, when taken *as* representational, as the *features* postulated by the theory (in the mental sense of the term ‘feature’). Or alternatively the features can be identified, not just with the representations or representational states, but with their respective representational properties. Deciding between these two alternatives is not important for my purposes.¹⁸

For the sake of clarity, it is convenient at this point to use the device (first introduced by Peacocke in *Sense and Content*) of marking the mental usage of the word ‘feature’ to graphically distinguish it from the objective use, and also marking concrete features in the same way as representations or representational properties to distinguish them from the “real world” properties those representations represent. But instead of Peacocke’s apostrophes I will use the symbol ‘#’ as a mark, at the beginning and end of the term for ease of recognition (as in García-Carpintero (1996)). Thus, for example, I will use the term ‘#feature#’ for Treisman’s mental usage.

Notice now that when Treisman makes it clear that the sense of ‘#features#’ is to be linked with her theory, she is at least partially defining the term by the causal or functional role that the theory assigns to the #features#. This is shown by the character of her theory, which is not one considering the physical implementation of the postulated mechanisms (in terms of Marr’s distinctions, it is not a theory at level three, nor includes one as a part). According to the theory, #features# are produced by

¹⁸ This explanation draws heavily on the views on theories of cognition put forward by Fodor and Pylyshyn. For the concrete version of these views I use more immediately cf. García-Carpintero (1995), § 1.

physical objects in perception, and they are integral to the process of perceiving those objects. It is the process called ‘integration of #features#’ —such as #green# and #square#, say— that takes place when the subject focusses attention, which results in a unified representation of the object which is used in the production of judgements as to whether that object has the properties of the required target in the experimental setting or not, which finally leads to an action —mostly a pointing or a verbal report in experimental settings— when the target is eventually found.

Now, according to some *philosophical* theories of perception and phenomenal consciousness, we have to allow for the qualitative aspects of the way in which perception makes us conscious of objects in the world, to which the name ‘qualia’ is usually applied. We will have occasion to dwell at length on the status of these qualitative aspects and/or qualia in the next chapter, but at the moment, and without properly entering into this issue we may notice that there seems to be some sort of kinship between qualia and the #features# postulated in a cognitive psychological theory as Treisman’s —such as #green#, #round#, #square#, and so on. Hence, it makes sense to raise the question: what exactly is the relation between the #features# of such a cognitive theory and qualia?

I will try to answer this question with regard to a conception of perceptual qualia that requires them to have a representational function. In this view, these qualia are the subjective aspects of experience representing properties of its causal antecedents, and/or its causal consequences. I will expand on the foundations of such a view on the next two chapters. For present purposes I think it will suffice to mention that this representational relation would be partially grounded in the fact that systematic variation in the properties of the objects perceived or acted upon (say, for visual

perception whether they are red or green, square or round) also produce systematic variation in definite aspects of perceptual experience (whether this appears to be, say, #reddish# or #greenish#, #squarish# or #roundish#), and these in turn normally lead to the formation of correspondingly different perceptual judgements (or perhaps to different desiderata for action).¹⁹

¹⁹ This rough account aims to occupy neutral ground between pure representationalist views of qualia, according to which qualia are *exhausted* by their representational role—that is, qualia are just a kind of representational contents—whether this should be conceived entirely in terms of causal antecedent or should take into account also causal effects, and views which regard their representational function as a necessary but not sufficient defining trait. More on all this in the chapters mentioned above.

This is enough perhaps to realize that a properly characterizable kinship in function may underlie the more or less vaguely perceived affinities between the #features# postulated by a cognitive psychological theory like Treisman's and the qualia of philosophical lore. In view of this, I suggest that we are dealing here with essentially the same kind of thing, that is #features# can be regarded essentially as qualia, with just one main difference which stems from the fact that the respective sources of their recognition are quite different, and brings with it consequences for their respective epistemological status. The difference lies in the fact that, as we have seen, #features#, so to speak, find their ground in scientific theory, and so they are individuated at least partially in terms of that theory, and hence in terms that are more demanding than the conditions —whatever these are— which are required in the individuation of qualia, whose recognition belongs in philosophically elaborated folk psychology.

When thinking about the folk-psychological notion of attention to objects in perception, or possible philosophical elaborations of it, one should not find it odd, I think, that there is this relation between qualia and #features#. The remarks on that notion in previous sections of this chapter may yield a view of attention in which this is recognized as a systematic ability *also at the personal level articulated by philosophical reflection*. An ability in whose exercise the identification of properties is again involved as a set of more basic abilities. And, from the viewpoint of philosophical theories of the analysis of perception which postulate qualia, the identification of those properties is mediated by the tacit awareness of qualia whose instantiation is caused by them. Thus, according to this view, Treisman's theory is just a more detailed theory of essentially the same systematic abilities.

Chapter 6: “Imagistic content” and Phenomenal Aspects

6.1. Imagistic content: a *desideratum*

Visual perception has a well marked distinguishing aspect which is somehow captured by common intuition, which has a positive part and a negative one. To wit: when one looks around, the nature of what is displayed is *like* a colour picture of it; it is not at all *like* a linguistic description of it.

Whether this nature of visual perception can be extended in some sense to perception in other sensory modalities is another question. But this central feature of visual perception gives us enough material for reflection, and in what follows I will be concentrating on visual perception unless the context of discussion makes it clear to contrary.

The issue is not so much the extent to which perception has this “*picture-like*” *nature* but whether it has anything to do with the *demonstrative condition* we are trying to bring out in the present work. The purpose, then, is to start with the simple intuition that (visual) perception is rather picture-like, to try to pin it down and work from it. This will mainly be done in the present chapter. But if, as it seems, it is unlikely that such a “picture-like” nature of (visual) perception is an indifferent matter to a theory of the demonstrative condition of (much of) the presentation of

objects in perception, at some point both conditions or natures must be reconciled or articulated together. I will begin this bringing together of both traits of perception at the end of the present chapter, and pursue it in the next.

The first thing is to acknowledge that until now nothing in our analysis has taken into account this simple intuition about visual perception. Thus, when talking of the content of perceptual judgements, I have considered several ways of modelling these contents with *sentences*, and in concentrating on the way physical objects are presented in perception we have taken into consideration several *descriptions* to which this way of presentation might relate.

One natural way of looking for help in trying to account for the putative picture-like character of perception is to turn to other kinds of mental states which would also seem to have a picture-like nature. Specifically, what also seem to present the same trait are the cases in which we imagine seeing something, that is episodes of what are called *experiential imagination*, as opposed to propositional imagination —imagining *that* something is thus or so.

Although important contemporary philosophers have warned against mixing traits of perception and imagination, it is, I believe, widely recognized by present day philosophers that (experiential) imagination shares central features of the presentation of objects with perception.¹ The hope now is that perhaps by concentrating on mental episodes and states of imagination we may learn something about picture-likeness

¹ Thus, it is true that contemporary philosophers like Ryle, Sartre or Wittgenstein have pointed out important differences between both phenomena. But, on the other hand, the similarities are again brought up in more recent accounts, for which one can refer e.g. to the similarities in the otherwise different accounts in Peacocke (1985) and Hopkins (1998).

that will be useful in clarifying the sense in which perceptual states also possess the intuitively felt “picture-like” trait, even if, duly instructed by the warnings of those contemporary philosophers whose emphasis is on the differences between both phenomena, we proceed with caution and avoid deriving consequences that we have no reason to endorse. Thus, it does not follow from the alleged picture-like trait of both perception and imagination that this condition is present in the same way. In particular, in imagining we may be aware of a mental entity of some sort that represents something much in the way that a picture represents something. But, however it is with imagination, it does not follow that our primary object of awareness in perception is a mental entity that represents something in that way. It may even be true, but it does not follow at all from the intuitively felt “picture-like” character that both have.

My proceeding to try to characterize the “picture-like” nature of perception in such an indirect a manner might seem odd.² But I think that, on the one hand, the picture-like trait of (visual) imagination is comparatively less doubtful, and hence it would seem a good place to start. On the other hand, there is a tradition of discussion about the pictorial trait of images in the scientific study of imagination which I would like to bring to bear in some way on my inquiry into the phenomenological aspects of perception. Once the proper warnings have been issued, the question is how to account for the “picture-like” trait of imagining, and whether we can transfer

² In the work alluded to in the previous footnote, Hopkins uses the similarities to account for the differences between visual and tactile imagination from the differences between vision and touch. My strategy for the present purpose of characterizing the “picture like” character of perception runs in just the opposite direction.

something from this account to the similar issue about perception.

In beginning to look for an account of the pictorial trait of imagining, I first want to look in this section at the difficulties for an approach that seeks clarification in a *direct appeal* to the sort of recent scientific research on imagery that I have just alluded to. This approach begins by drawing attention to empirical findings that seem to show clearly that “imagistic representations” intervene in episodes of imagination, or mental images are “manipulated” in them. Most famous of these are the processes in the carrying out of tasks in the experiments by Shepard and collaborators on whether two figures can be made to coincide via bi- or tridimensional rotations, and hence are of the same shape.³ It was found that the angle of the rotation necessary to bring the figures into coincidence (when they can be brought to coincide) is the factor determining the time required to reach a positive right answer —indeed, the time required is a linear function of such an angle. Apart from apparently lending experimental support to the introspective judgements of the subjects, to the effect that what they do to reach an answer is to “rotate in imagination” one of the figures to try to fit it to the other, these results provide very good evidence indeed of the reality of mental representations of such figures, and maybe also suggest that the representations themselves are in some sense “picture-like”. The experiments, however, do not make it clear in what sense, if any, the representations have this nature.⁴

³ Shepard, R. & Metzler, J. (1971). “Mental Rotation of Three-Dimensional Objects”, *Science* 171, pp. 701-703.

⁴ There is some empirical evidence to support the claim that imagination and perception are similar, although it is not always clear whether what is found to be similar are the processes or the

Again, there is good evidence of the mental representation of figures in other well known experiments by Kosslyn and his collaborators (Kosslyn's *Image and Mind* summarizes this work). The initial experiments concern figures with well delimited areas —like islands for example— where other appropriate figures of objects are placed; for example, in the case of the island, a hut, a well, a tree and a lake, set at varying distances in different directions. These experiments found that the time for saying whether (a picture of) an object is present in the picture or not, when the subject is required to “fix the imagination” on a previously determined object in the area, increases with the distance between both objects. Here the experiments are also suggestive of the “picture-likeness” of the mental representation of the figures involved, but again, the issue of in what sense, if any, these representations are “picture-like” is left open.

Now, a good guess at the difficulties involved in making the sense in which representations may be “picture-like” or pictorial precise can be made by looking into the problems of a simple proposal for explaining this sense, which at first would look promising. According to this proposal, a necessary condition for a representation's having a “picture-like” nature is that *parts* of what is represented —at least one of them— must be represented by parts in the representation. Other conditions could be

representations involved (cf. Block “Mental Pictures and Cognitive Science”, pp. 507-8). In any case the fact that they are similar does not imply in itself that there is a sense in which both are “picture-like”. This remains true when not only experimental results but also theoretical considerations are taken into account. Thus, David Marr's account of perception (cf. *Vision*) reveals representations — called ‘2^{1/2}-D sketches’— that may be similar to representations postulated by cognitive theories of imagery like Kosslyn's. But further considerations —mainly conceptual— must be made to link this to ‘picture-likeness’. I pursue this issues in the context of the commentaries about Tye's proposal below.

added to this as typical (although not strictly necessary) of pictorial representations: that some of the relations among parts of the representation, R , represent relations among the parts of what R represents, and that some relations between parts of R and the whole of R represent relations between the parts and the whole of what is represented. A view of pictorial representations along these lines underlies the work on imagery by Kosslyn, and several refinements have been advanced by Tye as proposals to make these ideas more precise (cf. *The Imagery Debate*, § 3.1).⁵

The proposal above may initially seem promising until we realize that we have “packaged” the difficulties with the original problem into the notion of a *part* of a representation, and indeed a *representing part*. In the problem of accounting for the sense in which representations have parts, and parts that, moreover, represent something, we might be facing difficulties like the ones we originally had.

This issue can be made clear for the purposes at hand by using certain computer representations and their processes as models of mental representations and processes. Take a matrix n squares wide and m squares high, drawn on a sheet of paper. If we fill in a certain number of squares, say nine, in the same column by shading them with a pencil, and a smaller number of squares in the same row, say nine, symmetrically on both sides of one of the squares of the column not too far from the top, say the third square in the column, we get (an image of) a (Latin) cross. If we take the filled arrays

⁵ A very similar proposal is given by Block in his “Mental Pictures and Cognitive Science”, p. 513, but it is by no means endorsed by him because of difficulties like the one I am about to mention. Due precisely to these difficulties Block claims in the paper that fundamental difficulties lie ahead for cognitive science. However, I do not see that such difficulties follow, but I cannot enter into this matter here.

of squares to be a physical representation of a cross there is a clear sense in which we can talk of parts of the representation representing parts of the cross. So far, so good. But now think about how the information about which squares are filled and which are not (the information about the image, indeed) might be stored in the data base of a computer running a graphics programme. It may be that there is a set of sentences written in the format $(l, k, 0)$ or $(l, k, 1)$, where the letters l, k are schematic for numbers which identify a square by column and row, and the 1 and 0 signify, respectively, that the square at issue is filled or not filled. An appropriate set of sentences might contain information about a cross analogous to the one we drew originally. If the computer system is set appropriately the information contained in the set of sentences would be used to make the drawing of a cross appear in the computer screen. Thus, we can accept that the set of sentences is a representation of a cross.

Now, is it true that some part(s) of the cross is or are represented by some part(s) of the representation? What is true is that parts of the cross are represented by *subsets* of the original set of sentences (triples). Thus, we seem to be confronted with two unpalatable options. One is to identify (in a rather *ad hoc* way, it must be allowed) the parts of the representation with such subsets. But then we would be on our way to declaring the set of *sentences* itself to be a *pictorial* representation, which does not seem to make any sense. The other option is to disown altogether the claim that we have a pictorial representation at this stage—that is, without looking at the details of any possible refinements of the original proposal.

Tye has proposed what seems *prima facie* a way out of this impasse. The suggestion is that the way mentioned is by no means the only possibility for

programmed computers to “hold” images. The following seems to be an alternative possibility. The images can be stored in the computer's long-term memory in as descriptive a way as you like (as a set of sentences or triples of the kind indicated). The computer system can be so set that when the description —the set of sentences— is “activated” in the course of running a programme, the computer enters into a state in which some units or “cells” —*physical* regions in the machine— are altered (by charging them in a certain way), the cells at issue being those identified by the individual sentences or triples in the list. Should we not begin to regard the set of *activated* cells as an image or pictorial representation?

This seems to open up a new perspective, to which details could in principle be added if it really is found to be promising. As the author of the proposal says: “The crucial distinction is between, on the one hand, the sentences we use to describe various filled cells or the sentences the computer uses to identify certain cells to be filled and, on the other hand, the cells so described or identified” (Tye, *The Imagery Debate*, p. 47)

And now from computers to humans. This should not be a difficult step in principle, since our interest in computers is as models of what may happen to us. Thus, we can be also seen to have “activated cells” —this time perhaps activated groups of neurons, one group per cell— representing the properties of an image. The details are discussed by Tye who turns to Marr’s 2^{1/2}-D sketches for inspiration. These are representations, postulated in Marr’s theory of visual perception, which contain certain information about patches on surfaces of a scene. Each 2^{1/2}-D sketch can be seen as an array of cells and for each patch on a surface of the scene there is a

cell in the $2^{1/2}$ -D sketch of the scene that contains information about its orientation and depth. In the case of imagery, Tye proposes representations with cells having information about similar properties of the images, adding other properties like colour, since images may be coloured (cf. *op cit.* § 5.4). The main difference between $2^{1/2}$ -D sketches and the pictorial representations of imagery, apart from the details of the information carried by the cells, would then be the source of the representation. While in perception $2^{1/2}$ -D sketches are formed by the mechanisms of vision from the excitatory patterns in the retina, the pictorial representations of imagery are generated from long-term memory.⁶

What is to be learned from Tye's approach to pictorial (mental) representations about the sense in which mental images have a "picture-like" nature? Not much, I think. Indeed, it seems to me that an intuitive grasp of that sense is already *presupposed* in being disposed to judge a representation with the features postulated in Tye's approach as 'pictorial', and hence, in an important sense, it cannot contribute to clarifying the sense in which images are intuitively regarded as "picture-like". Let me explain.

Pictures, particularly realistic, coloured pictures with resources allowing for perspective, represent something in a peculiar way. They are *similar*, we say, to the scenes pictured. It is not difficult to expand on the sense of this, even if it is difficult to capture this sense precisely: pictures represent figures by sharing shapes; in

⁶ Tye regards it necessary to append a disambiguating sentence 'This is an *F*' to such representations which makes the image an image of an *F* (rather than one of, say, a *G*). I leave aside this aspect of the proposal because it is not relevant for the critical remarks I am about to level at Tye's proposal. If anything, this aspect would confirm the features of Tye's proposal that I find troublesome.

pictures things are represented as having spatial relations by means of identical or similar spatial relations between the figures that represent them; pictures may have colours just like things, and in fact much the same colours (we think). Thus, pictures could be taken to a certain extent to be the things pictured. Indeed, in some extreme cases we can be so taken by a picture, that we may in fact *mistake* the picture for a real scene.

Now, we feel mental images represent things *in much the same way* as pictures do. And we are guided by this idea in trying to make the sense in which representations postulated by certain cognitive theories of imagery can count as *pictorial* representations precise. No wonder then that discussions about pictorial representations in cognitive theories do not help us in *describing* the sense in which a mental image is “picture-like”.

Nevertheless, there is a sense in which such theories can contribute to our understanding of how it is that mental images are “picture-like”. Even if my short description has not given much of an inkling of it, Tye’s discussion of pictorial representation is to a very large extent driven by the attempt to account for the experimental and other empirically more accessible facts concerning imagery. This is clearly seen in Tye’s text. Indeed, in presenting his decisive objections to descriptivist theories of imagination he resorts to experimental findings by Ronald Finke and Steven Pinker (cf. *The Imagery Debate*, p. 90), and before presenting his own version of the pictorialist theory, he rejects versions more directly inspired by Kosslyn by resorting to Pinker's experiments (cf. p. 85).

Moreover, as even my quick review of Tye’s proposal indicates, his discussion

moves within the level of *representation* and *algorithm*. ‘Cells’, one of his central theoretical concepts, are functional units, and ‘filled cells’ —Tye’s most characteristic concept— are “symbols”, that is, representations. He makes some allusions to physical realizations, but in the main sections of the book, in which he discusses proposals by other theoreticians and advances his own, these serve only “local” clarificatory purposes. In short, if Tye is right, his is a contribution to some aspects of the explanation of empirical phenomena of imagery at Marr’s level 2.

The way in which this contributes to our understanding of the “picture-likeness” of mental images is, I think, roughly as follows. Our naturally describing images as picture-like, trying to make out features of how they are intuitively felt, if it is not spurious, must be of some consequence for the explanation of the empirical phenomena of imagery. What we describe as holding and modifying “picture-like” mental images must find at least a partial, and to a large extent causal *explanation* in cognitive theories of imagery, in ways that should be made more precise. And if successful Tye’s proposal is a contribution to such theories; but it does not contribute to our description of those mental images as “picture-like”.

If this is correct, the sense in which *perception* is also picture-like cannot be much illuminated by an approach like Tye’s. His explanation of the similarities of (visual) perception and imagination proceeds at the same level as his discussion of pictorial imagery itself. Indeed, in Tye’s case this immediately follows from his taking Marr’s theory of perception —and, indeed, the “level 2” part of it— as his model for imagination. And it cannot by itself illuminate our intuitive ideas about the picture-likeness of (visual) perception for the same reasons that his proposals about pictorial

representations do not contribute to clarifying the sense in which we describe mental images as similarly picture-like.⁷

Quite a different approach to the explanation of pictorial likeness in mental representations comes from Shepard's idea of "corresponding likenesses", or as he calls it, 'second-order isomorphism'. I quote a well known passage:

[I]somorphism should be sought—not in the first-order relation between (*a*) an individual object, and (*b*) its internal representation—but in the second-order relation between (*a*) the relations between alternative external objects, and (*b*) the relations among their corresponding internal representations. Thus, although the internal representation for a square need not itself be a square, it should (whatever it is) at least have a closer functional relation to the internal representation for a rectangle than to that, say, for a green flash or the taste of persimmon.

(Shepard and Chipman, "Second-Order Isomorphism of Internal Representations: Shapes of States", p. 2)

Although not incompatible with this, I do not find anything in Tye's approach that picks up this idea of "second-order isomorphism". The idea may strike us as attractive, but if we have learned from Tye's case, we will not adopt it for the purpose of characterizing the sense in which both perception and imagination —mental images— are picture-like.⁸ On the contrary, a solution to this desideratum must come

⁷ In her vigorous and most useful review of Tye's book, Naomi Eilan shows her scepticism about relying on empirical theories for answering the question whether images are in any important respect like pictures, and criticizes Tye's approach of trying to account for pictorialness in a way that is "restricted to issues of form (syntax)" (p. 138). Although neither what Eilan means by the latter terms nor the reasons for her scepticism are entirely clear to me, I hope that the foregoing can be taken as a (small) development of the stand she takes on Tye's approach in her review.

⁸ To my mind Campbell makes a false, unjustified step of this sort when he moves from talking of "propositional *contents*" to "propositional *representations*" (my italics), which immediately leads him

from an analysis of how “things seem to us” in perception (or imagination), for which we might perhaps find some *inspiration* from Shepard’s idea. I now turn to attempts to do this.

6.2. Imagistic content and isomorphism

If we want to make the picture-like trait of visual perception clear and concurrently try to clarify the way in which imagining an object or situation also has something of the nature of sketching a picture, it seems we must take as a basis “the way things seem to us” in perception and imagination. Thus, it appears that this “way things seem to us” has to be made to fit with some idea of resemblance.

The most significant proposal along this path would seem to be that advanced by Peacocke in two very closely related papers: “Analogue Content” and “Perceptual Content”.⁹ In those, the distinctive way in which “things seem to us” in perception is accounted for by *manners* in which objects and properties, including magnitudes, are perceived. Furthermore, these manners are regarded as specifying the *content of perceptual experiences*, a kind of distinctive content which is qualified as *analogue*

to talk by way of contrast of pictorial *representations* and to look for support for the latter in the cognitive sciences (cf. “Sense, Reference and Selective Attention”, p. 56). This is the very same step that Peacocke conspicuously avoids in the way that will be seen in the next section.

⁹ Although the first paper was published in 1986 and the second in 1989, the latter comes from a conference held in 1984, and there is also internal evidence that “Analogue Content” is in fact a *revision* of the first (and longest) part of “Perceptual Content”. For the most part I will quote from ‘Analogue Content’.

content. Finally, the fitting of these contents with an idea of likeness or resemblance is accounted for through the idea of a certain type of “second-order isomorphism”.

I regard Peacocke’s proposal as supplying the central “Fregean-oriented” account, in relation to which we can best discuss the issues involved in considering the intuitively felt “picture-like” nature of perception (and imagination), and the sense in which this trait is related to a distinctive kind of content. To my mind it also supplies the standard against which other approaches, including other accounts by Peacocke himself, are to be measured.

Manners are first introduced by Peacocke quite straightforwardly: “Whenever someone perceives something—an object, a property, a magnitude—he perceives it in a particular way, or, as I shall say, in a particular *manner*” (“Analogue Content”, p. 5) When objects and properties or magnitudes are perceived in the same manner on different occasions they are perceived to be the same. This is a minimal necessary condition on manners, which are therefore subject to the type-token distinction. What is the same on different occasions is the type, not the token: the *same* manner can be instantiated on different occasions and manners are, thus, *repeatable* traits of perceptual experiences.

Manners of perception, says Peacocke (*loc. cit.* p. 6), can be described as *analogue* in a certain sense. Very roughly: manners are “dense” or “continuous”. More exactly, take a domain where there is some dimension of variation (e.g. size or pitch). For each two things (physical objects, sounds, properties, magnitudes) situated at different points along the dimension, there are different manners m , m' of the same kind, such that m is either the manner in which the first thing (but not the second) is

perceived or the manner of perception of something which includes the first thing (but not the second), and m' is either the manner in which the second thing (but not the first) is perceived or the manner of perception of something which includes the second thing (but not the first) (*ibid.* p. 7). The alternatives in the formulation — signified by the term ‘includes’— are meant to account for the fact that for any sensory modality and in any domain our perception has limitations of acuity, and hence the objects of perception are properly *sets* of properties or magnitudes which, given such limitations, we perceive as “matching”.

I will not go into the discussion (which certainly exercises Peacocke) of how this sense of ‘analogue’ relates to other uses of the word here. For present purposes it is enough to record the fact that in the present sense the term ‘analogue’ is applied to some sort of *content* of mental states, while the most frequent uses in the literature apply either to *representations* —especially the mental representations postulated by explanatory cognitive theories, or to *processes* —especially the mental processes contemplated by such theories.

I will concentrate on a central property of such analogue contents (the manners): they are, in a sense, *second-order isomorphic*. In presenting this notion, Peacocke makes it clear that he is following the lead of Shepard’s notion —mentioned in the previous section— but he is careful from the start to avoid the sort of pitfall implied in directly transferring a notion meant to apply to the mental representations postulated by empirical cognitive theories of perception and imagination to the problem of clarifying the intuitive sense of resemblance that is at work in both cases. Thus, after the quote by Shepard and Chipman that I reproduced in the previous

section, he comments:

The present paper is not about internal representations, claims about which need experimental investigations, constrained as they should be by their ability to explain empirical psychological phenomena. The present paper is concerned rather with the correct description of some of the more familiar phenomena themselves.

(Peacocke, "Analogue Content", p. 8)

And it is then that he proceeds to introduce the idea of second order isomorphism. Since I will be discussing Peacocke's idea of the kind of "second-order isomorphism" that is present in our intuitive sense of resemblance in some detail, I quote here in full the corresponding text:

Consider manners of perception of directions. If one such manner is of a direction d and another is of a direction d' , and d is sufficiently above d' , then the perceiver will have the impression that the first direction is above the second direction. In the case of directions, this will hold for a range of spatial relations, not just that of being above; for other things presented by analogue contents, there will be a comparable range of relations. Here we have an isomorphism between some of the relations really holding between what the contents are *of* and the relations of which the subject has the impression that they hold between the perceived objects; in fact formulated that way, in successful perception, it is not just an isomorphism, it is an identity.

(*Loc. cit.*)

The first thing to note is that this notion of second order isomorphy adds something to the definition of manners as explained above. That definition restricted itself to the *existence* of different manners in which objects of perception are perceived, so that assuming perfect acuity for simplification when the direction of something, say, is different to the direction of something else, there is a manner in

which the first direction is perceived, and there is a different manner in which the second direction is perceived. But in that characterization nothing was said about *the relation* between these two manners. Now, what is added by the notion of second-order isomorphism is a requirement of the relation between both manners. If this is the correct way to look at the characterization of manners,¹⁰ *on top* of responding to the criterion of existence that is set up by the definition of analogue contents these also comply with the criterion of relation between them encapsulated in the notion of second-order isomorphism. In fact, the latter criterion seems to be stronger, because if manners are related according to it, it seems they must satisfy the existence criterion.¹¹

Now, it is important to fully realize which, according to the relation criterion, are the cases where the relation that is claimed to exist between on the one hand, the relation between the things perceived, and on the other, the relation between the impressions the subject has of those things, is *identity*, and which the cases are where

¹⁰ I am not able to discern Peacocke's intention at this point: the relation criterion meant to be part of the sense of 'analogue' is or not? On the one hand, the text certainly reads as if the explanation of this sense is complete after the introduction of a modification to the definition I have explained, a modification motivated by the need to account for some special cases which need not concern us (*ibid.* p. 7). But, on the other hand, the introduction of the isomorphy criterion is prepared just after this and culminates a few lines afterwards, and, all this happens just before Peacocke proceeds to discuss how "the present sense of 'analogue' relate to others' uses of the term" (p. 8). Be that as it may, whether part of the definition or not, the relation criterion between manners proves to be most important.

¹¹ In effect, take two "points" along a dimension such that the subject has the impression that one is "further along" it than the other —e.g. above the other. These "points" are then perceived by the subject in some manner (because of the definition of 'manner'), and hence, due to the necessary condition on the identity of manners, the manners in which these "points" are perceived must be different.

such relations will *differ from identity*. In short, when are the relations between the respective objective and subjective relations *identical* and when are they merely “*isomorphic*”? The criterion given by Peacocke says that this division coincides with the division: successful versus unsuccessful perception. Let us pause to consider some examples to realize the implications more fully.

First, take the relation between distances or lengths, which is very much like the relation between two directions. Assume that one length is sufficiently *longer* than the other (we say ‘sufficiently’ again to allow for limitations of perceptual acuity). If the subject perceives the lengths correctly, he will have the impression that this length *is longer* than the other. Moreover, this result may well be thought to apply to the distances themselves, since these can be regarded as relations between points or places: if two points are separated (and so related) by a certain distance, our impressions in successful perception will be that they are *identically* separated (related), or separated by the *same* distance.

Let us now radically change our example and consider properties of sounds, like pitch. The case is now that if a sound has a frequency sufficiently higher than the frequency of a second sound, a subject will perceive it—if he does not suffer from an illusion—as *higher in pitch* than the second one. Should we then consider *higher in frequency* as literally the *same* relation as *higher in pitch*? This is exactly what the relation criterion, as formulated by Peacocke, says. But is it right in this case? How should one go into this matter? *Prima facie*, it does not seem from an intuitive standpoint that we should regard them as the same relation *type* at all. Yet I am unaware of deeper reasons why those relations should be regarded as non-identical. I

feel myself unable to enter into the discussion of the ontological issues that would be involved in trying to decide in a principled way about the (type-) identity of such relations at this point. So I will not take a definite stand against Peacocke's criterion.

Let us look at one final illustration of the criterion. If a certain colour is *lighter* (enough) than another one, and the subject is perceiving properly, he will have the impression that the first colour is *lighter* than the second. Again, the same relation is (postulated to be) involved here. This conclusion however does not seem to be so straightforwardly applicable to the colours as it does to the case of the distances. But we may note that the possibility of reaching it would be open—it seems—if we were prepared to regard colours as relations.

At any rate, the picture that emerges from the relation criterion seems to be as follows: on one side are the properties, magnitudes and sounds that we perceive. These belong to different types: spatial properties (subdivided into direction, lengths etc.), other visual properties like colours, auditive properties (subdivided into frequency, intensity, etc.). On the other side are our *impressions* of such things, or the *manners* in which we perceive them; they too may be grouped into classes. There is then an isomorphy between the first types and the second classes, in that the properties of the things perceived and the ways in which they are perceived—relative directions of things, on the one hand and impressions of relative directions on the other—are isomorphic in the strict sense that relations among the first and relations among the second are *identical*.¹² I will delay further discussion of this picture of the

¹² Or, at least, there is systematic correspondence among the variation in the properties, and modifications in the manners (cf. the case of frequency and pitch described above).

correspondence between the “ways” of perception —conceived as the imagistic or analogue contents specified as manners in this chapter— and the things perceived until the next chapter, once I have tried to clarify the relation between manners and the phenomenal aspects of perception.

6.3. Imagistic content and phenomenal properties

Peacocke regards the *manners* of the perception of objects and properties as accounting for the *phenomenological* aspects of perception; indeed, as what accounts for the kind of “individuation of the content of perception [that] is answerable to considerations of phenomenology in the first instance” (“Analogue Content”, p. 12). Matters of phenomenology in experience, however, were introduced to present day philosophy to a great extent through Thomas Nagel's reflections and his famous phrase: “What is it like?”. The question is now: how does Peacocke’s attempt at capturing phenomenology relate to this perspective? I will argue that it is sensible to regard manners as at least part of the *phenomenal aspects* of experiences in a sense which fits Nagel’s intentions and meaning. Moreover, to experience something in a certain manner should, it seems, be regarded as a *phenomenal property* of the corresponding experience, again in a Nagelean sense.

For the present purpose, Nagel’s centrally relevant passage is this:

[T]he fact that an organism has conscious experience *at all* means, basically, that there is something it is like to *be* that organism [...]—something it is like *for* the organism.

(Nagel, “What Is It Like to Be a Bat?”, p. 166)

As can be seen, here Nagel is trying to describe what having experiences is in a general way or generically. And he associates constitutively this having experiences with the “subjective side” of what it is *to be an organism*. This is a general feature of his paper, since Nagel is interested in “the facts of experience —facts about what it is like *for* the experiencing organism” (*op. cit.* p. 172).

In contrast to Nagel, we are presently interested in a Nagelean formulation that would try to capture the “subjective side” of *a single* experience (of a subject). But we find that there is no application of the “it is like” phrase to a particular experience in Nagel’s paper. Nevertheless, it does not seem unreasonable to make up one which seems to be at least very close to Nagel’s thought. What we are interested in, we should say, is *what it is like for the subject when he/she is undergoing a particular experience*.

Now, we are more specifically concerned with *perceptual* experiences here. And we think that perceptual experiences are typically characterized, at least partially, by the fact that something is *represented* in them. By substitution in the phrase above we obtain the Nagelean formulation we were looking for by saying that for the view at issue *there is something that it is like for the subject when he/she is perceptually representing things* on a particular occasion.

This formulation leaves open to determination the bearing *the things represented* may have on what it is like for the subject when he represents them mentally. This is

as it should be, since any further position on this issue needs more argument.¹³

We can examine other formulations and compare them to see how they stand in relation to the Nagelean formulation, especially in regard to the respect mentioned. For convenience, I will them all in the form of questions (question (i) corresponds of course to the Nagelean formulation).

(i) What is it like for subject *S* when he is perceptually representing *X* on a particular occasion?

(ii) How does *X* look to *S*?

(iii) How does the thing *X* that *S* represents to himself look or seem to *S*?

(iv) What is it like for *S* to represent *X* to himself?¹⁴

¹³ In *Sense and Content* Peacocke argued that not all the phenomenal properties of experiences are possessed by these in virtue of the things —objects, properties, relations, states of affairs— those experiences represent (cf. pp. 8-26). Peacocke calls the theorists that hold the contrary view ‘extreme perceptualists’. He call the rest of the phenomenal properties ‘sensational properties’. It is not clear how the distinction of these two kinds of phenomenal properties fares in relation to the new framework of non-conceptual content on which Peacocke worked after *Sense and Content*, and in particular in relation to manners.

¹⁴ For simplicity, we may take *X* to stand for a single physical object in all these formulations, but in principle we might also take it to stand for a couple of objects, or for a single scene containing several objects. Formulations (iii) and (iv) are suggested in García-Carpintero (1999), p. 106. The reflexivity in them only seems to play the role of making a formulation shorter in terms of the perceptual experience *S* is undergoing (an experience which represents *X*). Formulation (ii) is perhaps suggested by the assertive formula (‘*X* looks *F* to *S*’) employed by Jackson in *Perception* for the “phenomenal use’ of ‘looks’ (cf. p. 33). Jackson claims indeed that there are at least two different uses of the verb ‘looks’, a phenomenal and an epistemic one. Whatever it is with this semantic thesis, however, I must confess that I do not find the formula and the instances of it given by Jackson perspicuous for the purpose of revealing the phenomenal use, since it is not at all clear that the ‘*F*’ in it should not cover physical predicates, which would distort Jackson’s aim. See the main text immediately below.

Now, the interpretation of these questions is not clear as it is. We need to attend to the kind of answer they will receive. Take (ii) for example. We might think that an appropriate answer to this kind of question is of the form ‘ X is F to S ’, where ‘ F ’ ranges over predicates like ‘triangular’, ‘red’ or ‘longer than Y ’. But these predicates seem to express physical properties of physical objects. These may be regarded as the properties of the perceived physical objects and events have if perception is taking place (if it is successful); in other words, the properties which the perceptual experience represents as instantiated in the objects and events at issue. Hence, if the predicates ‘ F ’ is meant to cover are physical predicates, in answering a query of the type (ii) as presently understood, one would be characterizing the experience S undergoes in terms of the properties represented by that experience. There is nothing wrong with this, as far as it goes. But someone who took such answers as *the* answers to queries about the *subjective aspects* of experience would clearly be taking an extra step: he would be, in effect, putting himself in the position of claiming that such aspects are exhausted by the representational properties of experience.¹⁵ And I do not want our question (ii) —nor any of the four questions above for that matter— to be interpreted so that they presuppose that this extra step should be taken.

We may perhaps see what is at issue here in a different way. Take one of Peacocke's examples in (*Sense and Content*, p. 12). Someone is standing on a road which stretches from her in a straight line to the horizon. There is a tree at the

¹⁵ This is the position taken by “extreme perceptualists” —in Peacocke’s denomination— like Tye in *The Imagery Debate*; cf. chapter 7.

roadside, one hundred yards from the person, and a second tree two hundred yards away, also at the roadside. Let us suppose that those trees are seen as equally tall — the experience represents them as of the same physical height. Now, it seems that questions of types (ii) and (iii) can be readily interpreted so that from this information about how trees are seen we obtain straightforward answers to those questions. Take (iii) for example. We may well imagine this exchange taking place:

- A. How do the two trees that *S* represents to herself look or seem to *S*?
- B. They look (seem) of equal height to *S*.

But take now the corresponding question of type (iv). The following exchange does not seem out of place:

- A. What is it like for *S* to represent the two trees to herself?
- B. It is not the same for *S* to represent the first tree as it is to represent the second tree.

The difference at issue here is the one pointed out by Peacocke: the first tree occupies a larger portion of the visual field than the second tree (in the example it is assumed that the trees are at least similar in dimensions other than height).

It seems that the Nagelean question (i), designed to ask about the subjective aspects of perceptual experiences is also meant to encompass such aspects as the one that differentiates the experience *S* has of one tree from the experience *S* has of the

other in the example mentioned. In this sense, type (iv) questions would seem to stand closer to type (i) questions.

I am not claiming that it is not possible to interpret type (ii) and (iii) questions as we are presently interpreting type (iv) questions. On the contrary, I think they may be so interpreted. This can be made clear by using the handy word 'way'. I think the following is a possible answer for appropriate questions of all these three types:

- (1) The way in which the first tree is represented is not the same as the way in which the second tree is represented.

This seems similar to a corresponding (admittedly more strained) answer, to a type (i) question using the word 'way':

- (2) The way it is like for *S* when *S* is perceptually representing the first tree is different from the way it is like for her when she is representing the second one.

Thus, it is not that type (i) and (iv) questions should be unequivocally grouped in opposition to type (ii) and (iii) questions. Rather, my discussion of questions (i)-(iv) is meant to make it clear that they do not have a single interpretation, and that we must be careful in determining how we understand them when inquiring about the *phenomenal* aspects of experiences.

Now, how does this bear on Peacocke's manners? First of all, some precaution

seems in order here. The semantic proximity of the words ‘way’ and ‘manner’, and the ease with which the formulations in (1) and (2) could be redone by substituting ‘manner’ for ‘way’ might suggest a quite straightforward assimilation of Peacocke’s imagistic or analogue content with phenomenal aspects in the Nagelean tradition. But this would be too quick. I have already qualified the word ‘way’ as ”handy”. Too handy, in fact.

We may confront the Peacocke of “Analogue Content” with his own example in *Sense and Content*. As it turns out, the visually perceived trees' matching in height is not sufficient for concluding that their height is perceived in the same manner. An additional match in other dimensions is not sufficient for concluding that their sizes or forms are perceived in the same manner. And an additional match of colours is also not sufficient for concluding that the trees themselves are perceived in the same manner. All this is due to the fact that, although matching is necessary for identity of manners, it is not sufficient (“Analogue Content”, pp. 5-6). But the reason that Peacocke gives for matching not being sufficient has to do with reasons of limitation of perceptual acuity, which are responsible for the nontransitivity of matching (cf. *loc. cit.*). Thus, we are left in the dark about whether Peacocke would still contemplate a different source for the non-sufficiency of matching. In other words, we do not know whether he would still regard a factor like the one mentioned above—the difference in the portions of the visual field occupied by the respective trees—as a relevant factor in the new theoretical context, that is, as a factor to be reckoned with in differentiating the content of the experiences *at the level of manners*.

But, whatever the case is with Peacocke himself, I cannot see any *prima facie*

reason why the contents he tries to highlight should not involve this additional factor. And if we admit this we will in fact be allowing imagistic or analogue contents, more or less as they become definite in Peacockean manners, to constitute at least part of the phenomenal aspects of the Nagelean tradition.

Moreover, if we were prepared to regard these phenomenal “aspects” as *bona fide* properties of experiences, and if we were prepared to use the traditional term ‘qualia’ to cover all these phenomenal properties,¹⁶ I do not think that it will be wrong to cover Peacockean manners with the traditional name of ‘qualia’ as well.

6.4. Attention, phenomenal aspects and demonstrative intentional content

Perception has a distinctive phenomenal character; of course, each sense modality carries with it its own distinctive phenomenology. What *seeing* something is like is clearly different to what *hearing* something is like. Nevertheless, perception as a whole presents a distinctive character when compared to thought, at least when thought is not underpinned by images or perception itself. The contrast is akin to that between understanding the thoughts or propositions that the speaker conveys to us when reporting the news on TV, and seeing images of the reported events.

In the previous section we found reasons to include imagistic and/or analogue

¹⁶ That is to say, this use of the term ‘qualia’ does not presuppose that it is *not* applied to a property of an experience if the experience has the property somehow in virtue of what it represents.

contents among the phenomenal aspects of perception. Moreover, I suggested the use of the contemporary traditional designation for these aspects —namely, ‘qualia’— which would then include such contents in the way indicated. What I still want to leave open is the question about the relation of these qualia to the representational properties of perceptual experiences. I have claimed that we should not assume without further argument that the subjective aspects of experience are to be accounted for entirely by such representational properties of perceptual experiences. I might even have hinted at the surmise that the phenomenal aspects of perceptual experience cannot be *reduced* to representational properties of it. But I have not taken a definite stand on the relationship between both things —phenomenal aspects and representational properties of experiences— and to recall this I will continue to use the words ‘phenomenal aspects’ instead of the more connotative ‘qualia’ occasionally. (I will have to commit myself to one or the other when considering a possible charge of internalism in the next chapter.)

Now, in visually attending to an object, in auditive attending to a sound, or in the tactile exploration of the surfaces of objects we find, respectively, the same distinctive phenomenal character as in visually perceiving the object, in auditive perceiving the sound or in perceiving the surfaces of objects by touch.¹⁷ This much

¹⁷ The link between attention and phenomenal aspects is somewhat reinforced by the considerations made when subjecting empirical work on attention to analysis in the last section of the previous chapter, at least, if we were prepared to make stronger commitments to these phenomenal aspects. Indeed, I claimed there that the phenomenal aspects or qualia of folk psychology and conceptual analysis and the #features# of cognitive theories of attention correspond to each other by their functional roles, the main —or only— difference being in the fine grainedness with which such functional role is characterized. Thus, when we say that, at least for certain cognitive theories of

would be obvious, of course, if attending to objects or sounds is essential to a way of perceiving them. And I think we can safely assume this, although this assumption is not strictly necessary to the claim about the phenomenal aspects of attention just made.¹⁸

Consider now what these thoughts lead to when we put them in the context of our main conjecture (formulated in Chapter 3, §1; cf. also Chapter 4, §1) that (perceptual) attention to an object is constitutive of the perceptual demonstrative intentional content of a perceptual state directed at that object or a perceptual belief about that object: we reach the conclusion that phenomenal consciousness of an object—in a sense in which this involves phenomenal aspects is (constitutively) required for the perceptual demonstrative intentional content of a perceptual state directed to that object.

Let me make this inference clearer in the following way:

- (1) (Perceptual) attention to an object is constitutive of perceptual demonstrative intentional content of a perceptual state directed at that object.
- (2) Phenomenal aspects are necessarily involved in (perceptual) attention.

attention in cognitive psychology, attention also has phenomenal aspects or that in attention qualia are instantiated, we are claiming something that bears very close relationship with the corresponding claim based on conceptual analysis of folk psychology. Nevertheless, for current purposes I do not need to appeal to the results of the previous chapter.

¹⁸ In *Perception*, pp. 26, 27, Jackson claims that we “may see something without noticing it” (p. 26), and that “being conscious of seeing a tomato [say] involves seeing a tomato”, so that the question about what it is to be conscious of seeing a tomato “presuppose[s] what it is to see a tomato” (p. 27). This might be so. But the kind of awareness of objects that is involved in perceptually attending to them comes short of the reflexive consciousness involved in the states Jackson mentions.

(3) Phenomenal aspects are constitutively involved in perceptual demonstrative intentional content.

I think that some independent plausibility for the claim made in the conclusion of this inference comes from the well known phenomenon of blindsight, that is the existence of people who lack vision directed at a part of the visual field, subjects who sincerely deny that they are able to see anything there, but who when experimenters insist in that they make a conjecture about the situation of objects or lights in the blind field are found to be right in a proportion which is significantly higher than chance¹⁹.

In this phenomenon of blindsight, I think that attention, the absence of the relevant phenomenal aspects in the subject's experiences, and the lack of perceptual demonstrative intentional contents go together. It is quite obvious that blindsight patients lack the phenomenology of vision when they make their conjectures about objects in the blind field. It is also widely agreed that they cannot be properly said to visually perceive or *see* the object or light at issue (something that is presumably connected with the former fact). It is perhaps not so frequently remarked that they cannot be properly said to attend (perceptually) to an object. Certainly, in trying to

¹⁹ The classical reference for experimental details is Lawrence Weiskrantz, *Blindsight: A Case Study and Implications* (Oxford: Clarendon Press, 1986). Ned Block in 'On a Confusion About a Function of Consciousness', *Behavioral and Brain Sciences* 18 (1995), pp. 227-87, addresses interesting questions about consequences of blindsight in relation to our understanding of consciousness.

make the conjectures that are required of them, they are attentive in some sense: they are not distracted and they direct their eyes purposefully to a region of the surrounding space. Nevertheless, they cannot be said to attend perceptually to the objects as neither can they be said to see the objects or lights at issue.

What should be added to the foregoing is that blindsight people are unable to *demonstratively address* themselves objects or lights. Indeed, there may be little doubt that such subjects lack the capacity to point to an object and say ‘*That* is in front, on the right’ or ‘*That* is such and such’ (and of course it is not a linguistic deficiency which is involved here).

Certainly, these remarks fall short of providing a full independent justification for the conclusion of the inference, but they seem to suggest an intimate connection between the phenomenal aspects in perception on the one hand and attention and demonstrative content on the other.

The conclusion of the above inference states quite generally that phenomenal aspects are (constitutively) involved in perceptual demonstrative intentional content, but it does not say anything about *how* they are involved in it. In the next section I will examine a partial answer to this question, one which I do not think is on the right track, and this will give us a basis for a new attempt to develop an account of the relationship between phenomenal aspects and perceptual demonstrative modes of presentation in the next chapter.

6.5. An attempt at “separating” demonstrative contents

and imagistic or phenomenal contents

We have seen that phenomenal aspects are essentially involved in perceptual demonstrative intentional content and the issue now is to find out how they are involved. Our central point of interest is how perceptual demonstrative modes of presentation are related to phenomenal aspects.

Everything we have said about the involvement of phenomenal aspects in perceptual demonstrative intentional content in the previous section points to the acceptance of what I will call *Peacocke's thesis*: Phenomenal aspects contribute to the individuation of the perceptual demonstrative modes of presentation of objects and properties (including magnitudes).

If phenomenal aspects contribute to individuation, one (extreme) possibility is that this is due to the possibility that those aspects could be *identified* with perceptual demonstrative contents. Peacocke investigated the matter rather thoroughly with *manners* acting as the phenomenal aspects at issue, and concluded that those phenomenal aspects —the manners— were not in one-to-one correspondence with such demonstrative modes of presentation, and so, *a fortiori*, were not identical with them (“Analogue Content”, p. 12; “Perceptual Content” p. 310). Indeed, according to Peacocke, “manners of perception constitute a genuine level of content in their own right” (*ibid.* respectively pp. 9 and 306).

Peacocke's argument for these latter claims uses a sort of inverted Müller-Lyer situation (cf. *ibid.*, pp. 10-11 and 307-310, respectively): two “segments” (a column and the side of a window, a line and a bar on a wallpaper pattern), which are

approximately the same length and which moreover are *perceived as* if they are the same length, although the perceiver *suspects* that they are in fact *not* the same length (not even to a degree of approximation within which the subject is able to discriminate).²⁰ In the case at hand Peacocke assumes that the lengths at issue are perceived in exactly the same manner. But he reasons that because of what the perceiver suspects the modes of presentation of the lengths must be different, since modes of presentation are essentially governed by Frege's criterion (as the context makes clear, Peacocke is thinking specifically of *demonstrative* modes of presentation as the best chance for his thesis's opponent). Applying the criterion to the present case, if the lengths were presented through the same mode of presentation, the thought that both lengths are the same —'This length is the same as that length'— should be uninformative. However, in the imagined situation, that thought would be anything but uninformative since the perceiver in fact suspects it to be false. Since the manners are thought to be the same, but the (demonstrative) modes of presentation involved could not possibly be identical, it follows that these are not in one-to-one correspondence and hence they cannot be identical.

Now, any claim that such-and-such class of things correspond on a one-to-one basis with such-and-such class of things can be denied in either of two different ways (or in both ways simultaneously): either more than one thing in the second class corresponds to one and the same thing in the first, or more than one thing in the second class corresponds to one and the same thing in the first, or both. As we can

²⁰ Taking into account the limitations in the subject's perceptual capacities adds a complication which is not relevant to the argument, so, I will largely ignore talk of approximation while discussing Peacocke's argument.

see, Peacocke's argument denies one-to-oneness by arguing in favour of one specific possibility: *two* different (demonstrative) modes of presentation can correspond to *one and the same* manner. Hence, (demonstrative) modes of presentation cannot supervene on manners; thus, while manners play a role in the individuation of (demonstrative) modes of presentation (Peacocke's thesis), the bond between them is a weak one. According to this view manners cannot be constitutive of perceptual modes of presentation.

However, it does not seem to me that we should accept that the manners can be identical in the kind of case adduced by Peacocke while the modes of presentation *in a perceptual judgement* are different. My reason for saying this is not that we really know what conditions are implied in the identity of two Peacockean manners and that we can see that those conditions also suffice for the identity of modes of presentation, because, to begin with, it is not clear what the sufficient conditions for the identity of manners are.²¹ But if the manners are identical, the lengths must seem visually as to

²¹ Taking into account the non-transitivity of matching for apparent magnitudes has the consequence that, at least for the case of magnitudes, matching exactly the same things—the Goodmanian criterium—does not suffice for identity of manners. Take apparent length, for example. Let l_1 and l_2 be two lengths such that, for any length which the subject perceives as matching l_1 , she also perceives it to match l_2 . Applying the Goodmanian criterion, the corresponding manners, μ_1, μ_2 , should be identical, as should be manners μ_2, μ_3 , when this last corresponds to a third length l_3 , such that everything that matches l_3 as things seem to the perceiver also matches l_2 . Because of the transitivity of the identity, we then have $\mu_1 = \mu_3$. As is well known, however, l_1 and l_3 need not match in length according to how the things seem to the perceiving subject. And, if they do not, $\mu_1 \neq \mu_3$. The contradiction shows that the sufficiency criterion is wrong. (Cf. "Perceptual Content", p. 303: "We know from the nontransitivity of matching that this necessary condition of identity of manner cannot also be sufficient".)

be patently the same to the subject. If this is the situation, I fail to see how the perceiver can spontaneously doubt, much less thoughtfully *suspect*, the lengths to be different. If she suspects or doubts that they are different she must have some sort of grounds for the suspicion or doubt. Perhaps she knows or believes that the concrete situation of perception makes one prone to illusion in perceiving lengths; or perhaps she has the general information —or believes it to be a fact— that she is unusually unreliable at visually estimating distances. However, in any of these and similar cases, her judgement “This distance [the line’s distance] is not likely to be the same as that [the bar’s] distance” is not a *perceptual* judgement, but a judgement made (partly) on the basis of an inference from what she knows, or thinks she knows. Put positively, as far as the content of the subject's perceptual state is such that the identity of lengths is manifest to her, and her state is isolated from interference from other contents, it should play a role akin to the judgement “This distance is the same as that distance”. Thus, I do not think that Peacocke has successfully argued that manners “are distinct from the components which enter the content of judgements based on perceptual experience” (“Analogue Contents”, p. 9).

Peacocke provided a rationale for this putative distinction:

The distinctness of the contents of perception at the level of manners from the contents of attitudes seems ultimately to derive from the different demands made by the two very different notions which individuate the two kinds of content. Individuation of the content of perception is answerable to matters of phenomenology in the first instance, while the content of attitudes is answerable to matters of epistemic possibility —and these two notions can come apart.

(Peacocke, “Perceptual Content”, p. 314)

Our criticism of his argument suggests a revision of the rationale. Maybe such two forms of answerability are after all more intimately linked than Peacocke's line of reasoning suggests. Finding more about this is a task also facing us.

In the work under scrutiny here, Peacocke concentrates on manners of properties—mostly magnitudes—and in their relation to their putative demonstrative modes of presentation of them, and I have followed his lead in this section. But in this dissertation we are primarily interested in the perceptual presentation of objects, and so it is primarily manners of presentation of objects that interest us. Or rather, since Peacocke's remarks on this issue are so scant that we cannot decide with a reasonable degree of certainty what his thinking about manners in circumstances that interest us would be, what interests us is the way in which *our own* representatives of imagistic or phenomenal aspects are involved in the individuation of perceptual demonstrative modes of presentation of objects. At this point our criticism of Peacocke's argument suggests that, at the very least, perceptual demonstrative modes of presentation *supervene* over phenomenal aspects. I will examine this matter in the next and final chapter of the dissertation.

Chapter 7: Attention, Consciousness and Perceptual Demonstrative Thought

7.1. Bringing phenomenal properties closer to propositional content

In this section I will sketch a proposal for making phenomenal properties play a role in the determination of the propositional content “linked to” perception, which, as I hope will become clear, can be seen as a development of the “Searlean proposal” I suggested in section 1 of Chapter 4. My purpose is for the outline of this proposal to act as a foil to the development of my own proposal, as introduced in the first sections of Chapters 3 and 4.

As we saw in Chapter 3 Searle himself made a proposal for the whole intentional content of the perceptual states or perceptual judgements which are the focus of our interest. As we know, the most clearly underdeveloped aspect of Searle’s proposal came from the fact that it was formulated with the help of a demonstrative expression apparently referring to an experience, while Searle does not explain how such experience should be conceived in detail, nor what the nature of this apparent reference to it was. As we saw —§ 4 of that chapter— McDowell suggested that the ‘demonstrative’ element in Searle’s proposal should not be understood, as a *reference*

to anything at all, but as signalling the fact that some kind of access to the current experience was being postulated in the proposal, indeed something which he described as an access to it “simply in virtue of being enjoyed”.

I now want to build on the phenomenal aspects of experience discussed in the preceding chapters to give some details both on what perceptual experiences are and what this enjoyment of experiences amounts to. To this end I will use the notion of a *quale* as a qualitative *property* of experiences. The usual view of *qualia* holds them to be *intrinsic* qualities of experiences, where the word ‘intrinsic’ is given an internalistic reading. This view would certainly fit Searle's internalistic leanings (mentioned in section 3 of Chapter 3) and so it would be fitting to use them in developing a “Searlean proposal”. However, as I also want to use *qualia* in the development of my own externalistic proposal, I will leave open the possibility that they may be coherently conceived as non-intrinsic in that sense in this section proceeding to examine this possibility in the next.

Another element which I will use here is the idea of “second-order isomorphism” that we saw in the last chapter, but giving to it a more definite and committed twist. There are certain obscurities contained in this notion and as I see it the idea is very similar, if not identical, to Frank Jackson's idea of *functional dependency*, even if this idea has been developed within the framework of a sense-data (internalist) theory of perception while Peacocke's notion of “second-order isomorphy” was inspired by developments in the cognitive sciences (cf. § 2 of the previous chapter).

In Chapter 7 of his book *Perception*, Jackson argued that a key condition for perception—he was talking more specifically of visual perception—is roughly that

the properties of a sense-datum, of which the subject is aware, are *functionally dependent* on the properties of an object as a consequence of the way in which an event involving this object causes the subject to have the sense-datum at issue. The properties of sense-data are exactly the qualia we are ready to discuss, and the more fully-developed idea of functional dependency seems to be as follows.

On the one side, there are the “manifest” or observable properties of the physical objects that we perceive (basically various kinds of spatial properties and colours). These are systematically divided into classes and systematically related within each class, forming “spaces” of properties. On the other side there are the *qualia* which are properties of our perceptual experiences. They too may be grouped into classes and form spaces.¹ The spaces of corresponding properties —say, colour properties and

¹ For the procedures and techniques for the configuration of such spaces cf. Austen Clark’s *Sensory Qualities*, Chapters 4 and 5. I do not find a clear differentiation of the manifest or observable properties in things or the corresponding phenomenal properties in experiences in Clark. Whether such properties are different is, indeed, a disputed question; Jackson himself maintains that they are the same (cf. *op. cit.* pp. 74-81 and 103), while, I certainly believe that it is very difficult to swallow the proposition that colour properties of things are the very same properties as colour qualia. We normally conceive of colours as being “in the things”, and analysis can keep this view even if we come to conceive of colours as dispositional properties of things —dispositions to refract light in different ways— affecting us in definite ways. On the other hand, colour qualia are qualities in our experience of things. Certainly, in the dispositional view, our effects come into the definition of colours, but these definitions do not consist entirely of our effects, something which is the case for colour qualia. Also, in a physicalist development of these views both properties are as different, the first ones being reflectance properties of things causing determinate neurophysiological reactions, while the second would consist of neurological states of our brains. I do realize, however, that I have stepped on very difficult terrain here. It seems as if the *spatial* properties of things and the spatial-qualia have clearer chances of being regarded as (type) identical. But again, the ontological issues here are difficult, and I would not like to commit myself to any definite stance on this issue. The general idea of a correspondence —more or less of the sort indicated— between the “field of sensations” and the range

colour qualia— are roughly isomorphic in the sense of there being systematic structural correspondences between them.

The old empiricist idea of the “resemblance” between our sense impressions and the properties of things is thus captured by the idea of systematic correspondence — functional dependence, second-order isomorphy— between observable properties and qualia; or at least this is the intention of the philosophers propounding this idea. I do not think that I can avoid committing myself to a version of the latter idea, even if trying to ascertain exactly which goes beyond the scope of this dissertation.

Traditional theories of sense-data such as Moore’s have conceived these as mental particulars in the category of objects, and Jackson follows this line. It might be more plausible to regard a sense-datum as a particular sensory event.² These are characterized by their properties: the instantiated qualia phenomenally characterizing the consciousness of an individual subject—in particular an individual perceiver— at a moment in time.

Making use of this apparatus García-Carpintero has tentatively advanced a specific proposal for the intentional content of perceptual states. Suppose, for example, that the perceptual state or perceptual experience is one that we would

of observable properties seems to be an old one. In contemporary philosophy it appears in Husserl in a version where the place of properties seems to be occupied by tropes or “moments” (cf. § IV of Mulligan’s study of Husserl’s theory of perception for an exposition and for references). I take the particular version in the text from García-Carpintero (2000a), pp. 73-74, 80-82. García-Carpintero may have modified some aspects of his views on these issues later.

² García-Carpintero sometimes marks this move by using the German term ‘Erlebnis’—a term used by philosophers such as Husserl and Carnap— instead of ‘sense datum’ or the more indeterminate ‘sensory event’.

intuitively describe as having the content that there is a medium-sized pink cube one foot in front (of the subject, say S). Then:

[T]he truth-condition constitutive of the intentional content of E (and determining that E is indeed a *perceptual* experience, as opposed to a merely apparent one) is fixed in this way: (i) S is related, by a (typically) non-intentional relation of phenomenal awareness, to a complex sensory event as of #medium-sized# #pink# #cube# #in-front#, and (ii) the truth-condition of E is realized if and only if the event causing E is of a type of events actually being in a causal-explanatory relation, in normal conditions, to sensory events phenomenally experienced by S as of #medium-sized# #pink# #cube# #in-front#.

(“Putnam’s Dewey Lectures”, p. 216.³ Italics in the original).

We can distinguish at least three elements in this theoretical specification of the intentional content of the perceptual state or experience. First, the *purely representational element* given by the fact that the state at issue represents things correctly when the event causing it is of some specified sort. Second, the *way of cognitive access element*, given by the subject’s relation to the sensory event or *Erlebnis*, a relation of awareness which García-Carpintero conceives as non-intentional and which he calls ‘noticing’ in other writings (García-Carpintero (2000a), p. 74). The two are linked in the truth-condition which determines the sort of event represented, when things go well, by the relation which García-Carpintero calls a “causal-explanatory” relation. However, this should not be thought of as a *mere* causal-explanatory relation because, as we already know, it holds between events —

³ In the formulation quoted the author uses Peacocke’s prime convention for referring to phenomenal properties. Here I have substituted García-Carpintero’s own version of that convention (as explained in Chapter 5 § 4).

“external” events and sensory events— which are systematically related by a relation of “resemblance”, that is, by the kind of isomorphism or functional dependency mentioned above. For this reason the third element in the proposal could be called the *external significance element*.

I will discuss several aspects of García-Carpintero’s position, especially those concerning the second element of his proposal —the awareness of qualia and the character of the qualia of which the subject is thus aware— in the next section, when dealing with the issue of which aspects of those ideas I will incorporate to my own proposal. My concern now is whether a proposal about *the demonstrative trait* of much of our perceptual awareness with objects in perception can be formulated from this proposal about the intentional content of an experience, or from a (natural) development of it. For this purpose, I will assume here that there is no problem in attributing awareness of a sensory event or a quale to perceivers, even awareness of a sort that could be described as being had “simply in virtue of enjoying it”, to use McDowell’s words. If we have a satisfactory explanation of the awareness of sensory events or qualia it might be thought that we would have the only key element that was missing for the development of a proposal along the lines of the Searlean viewpoint as explained in section 1 of Chapter 4 —a “Searlean proposal”, so to speak— to explain the demonstrative character of perception.

García-Carpintero explicitly claims that “experienced phenomena can [serve] as a sort of ‘modes of presentation’ which contribute to determining the objective contents of perceptions and other mental states” (“Putnam’s Dewey Lectures”, p. 215). The issue is then how we are to understand exactly the way in which such “experienced

phenomena” can serve as a (sort of) mode of presentation of a physical object in perception, for the specific case that interests us: a *demonstrative* mode of presentation, and I see a difficulty here which I will now try to explain.

Recall that the relation with a *particular* sensory event plays a key role in García-Carpintero’s proposal for the intentional content of an experience. Thus, by the way the intentional content has been intuitively characterized in the example used in his definition, one should not be mistakenly led to think that such intentional content, described from the subject S’s point of view, could be modelled by the sentence:

(1) There is a pink cube of medium size one foot in front of me.

It is rather sentence (2) which might serve as a model here:

(2) There is a pink cube of medium size one foot in front of me causing *this* sensory event (noticed by me).

At this point it would be not completely unreasonable to say: here we have an answer to the question of what it is for an experience to demonstratively present an object in perception. This would run as follows: take E, the perceptual state alluded to in the description of García-Carpintero’s tentative proposal above. For E to demonstratively present an object is for it to have an intentional content which is roughly modeled by (2) and is theoretically explained by the definition quoted above (García-Carpintero’s definition).

This answer would, I believe, be sufficient to fulfil a strong desideratum García-Carpintero himself seems to accept for the intentional content of a perceptual experience:

Evans and McDowell have notoriously contended that the content of a claim involving demonstratives and other indexicals is individuated in part relative to the significations of the indexicals in it. A claim made with a sentence featuring the same “purely qualitative” meaning might nonetheless be a different claim [...] Analogously, an account of perception which subscribes to the characteristic tenets of representative theories is nonetheless free to claim that the perceived object is an essential element in the individuation of the content of perceptual experiences.

(“Searle on Perception”, p. 35)

Although the text is not entirely clear —at least to me— on this point, it would seem that the analogy of the perceptual case with the semantic case which is made here is also meant to embrace the case of a perceptual experience with a different object which is qualitatively alike. If this is correct, García-Carpintero’s proposal seems to fulfil the desideratum since a different object, however qualitatively alike, would imply a different experience, and a different experience —again, no matter how qualitatively alike— would imply a different content, since according to the proposal the intentional content of the experience is responsible to the experience itself (to its quantity, so to speak, not only to its quality).

But even if the proposal satisfied the strong externalist requirement mentioned, our problem seems to remain unsolved. It appears that there is something lacking in the explanation of exactly how the proposal can be up to the task. For García-Carpintero holds that unlike the case of Peacocke’s manners the intentional content of

a perceptual experience is not separate from the perceptual judgement, but it is rather the qualitative or phenomenal character of the experience which contributes to the characteristic kind of intentional content of the experience and the judgement alike, by constituting the subject's "modes of presentation" or cognitive perspective in both cases. Specifically, it would seem, that a judgement is articulated into components with their own content, and an experience contributes to the content of those components with its phenomenal or qualitative character. According to García-Carpintero, it is in virtue of this contribution that the modes of presentation of objects are both *tacit* and *analogue* in perceptual judgements.

The "modes of presentation" of the objects and manifest properties represented in those judgements (modes of presentation in which the experiences themselves play the fundamental role) differ from those involved in other beliefs in at least two aspects: they are *tacit* (they can be possessed in the absence of the capacity of verbally articulating their nature in an explicit way, their nature being, moreover, ... partially ineffable), and they are *analogue* (they represent in virtue of specifically spatial and temporal resemblances). These maybe are reasons to deem the constituents of perceptual judgements different in relevant aspects to the constituents of other judgements, and perhaps to single them out by calling them 'percepts', while reserving the term "concepts" for the second.

(“Las razones para el dualismo”, pp. 86-87, footnote 39)

Thus, according to García-Carpintero, thanks to the role played by the experiences (the *Erlebnisse*? their notings?) modes of presentation in perceptual judgements (and in the intentional contents of the experiences themselves) are tacit (due to the way in which they are accessible), and analogue (on the basis of the isomorphisms existing between the qualitative spaces of phenomenal properties and

the qualitative spaces of manifest properties)⁴. What we do not know is exactly what role the experience plays in *constituting* the mode of presentation.

One obvious *prima facie* possibility here would be that the mode of presentation is a sort of *qualia* conglomerate, the relevant *qualia* being those instantiated in the corresponding sensory event. But this would not do, since it would give a “purely qualitative” content which does not seem adequate for making a contribution to the whole intentional content of the judgement or experience in a way that gives this an opportunity to change if the perceived object were different but caused qualitatively identical impressions. In short, trying for this solution does not seem compatible with the “claim that the perceived object is an essential element in the individuation of the content of perceptual experiences” (cf. the above quotation from “Searle on Perception”).⁵

Thus, I do not see how a natural development of the elements introduced by García-Carpintero to account for the intentional content of perceptual states could yield an acceptable proposal about the “demonstrative character” of much of perception, even if these elements were used in conjunction with Searle’s ideas to tie

⁴ García-Carpintero’s talk of “specifically spatial and temporal resemblances” here is not, I believe, to be given a special significance, given what I explained when talking about the isomorphisms between the spaces of qualities above.

⁵ I suspect that this problem has something to do with the fact that understanding the predication of a property to an object in a verbally expressed perceptual judgement does not require attending to that particular property but only having the general capacity of being able to focus on it, while understanding the perceptual reference to an individual object requires specific attention to that object. This contrast, which is fundamentally not linguistic, is alluded to in Campbell’s “Sense, Reference and Selective Attention”, p. 58.

perceptual intentional content to the token perceptual experience undergone by a perceiving subject. (Of course, no criticism of any position García-Carpintero has actually held follows from this.)

7.2. Qualia as non-fully intrinsic properties

In the previous section we looked at a proposal for the intentional content of an experience which involves sensory events and phenomenal properties. And in section 4 of the last chapter we saw reasons for thinking that phenomenal aspects were involved in *demonstrative* phenomenal content, but hesitated to raise those vague “aspects” to the status of *properties*. This hesitation came about because I was proceeding slowly, following in the steps of theories of intentional content, like Peacocke’s based on manners, which did not overtly embrace phenomenal properties or qualia. However, as we shall see the commitments of the proposal to be presented in the next section about how phenomenology is involved in perceptual demonstrative modes of presentation are not less than those in the proposal about the intentional content of experience with which we dealt in the last section. Hence, I feel it is time to make clear what those commitments are. This is also independently required by the tentative remarks in the last sections of Chapter 5 about the functional role of qualia, which were the bases for their partial “assimilation” to the #features# postulated in empirical theories of attention like Treisman’s.

Nevertheless, even a reasonably detailed sketch of an overall theory of the

phenomenology of perceptual experience is beyond the scope of this dissertation. Because of this, I hope to succeed in highlighting only those aspects that clarify my commitments just enough to locate my position, even if this involves some simplification. One major simplification upon which I will comment at the outset but will not mention further concerns the fact that in focussing on qualia I might easily give the impression that I think phenomenal properties are atomistic elements and that the phenomenology of perception consists to a great extent of the instantiation of such elements. I wish to disclaim any involvement with this overly simplistic view here.⁶

To concentrate on what fundamentally interests us, in section 3 of Chapter 6 we saw reasons for including the representational properties of experiences—or at least those of which the subject can be aware—among the phenomenal aspects of experience, and now that we are ready to talk of phenomenal properties or qualia there seems no reason not to include those properties among the properties that characterize the “what it is like” of experience. There would not appear to be any issue here. From this point of view, the issue lies rather in whether those representational properties exhaust the properties that characterize the phenomenology of experience.

I think that this issue can be more exactly formulated in the following way. The representational properties of experiences must be properties that experiences have at least in virtue of the inputs from the environment when subjects undergo such

⁶ I think that a theory of phenomenology must deal with the grouping phenomena dealt with by Peacocke at the end of Chapter 1 of *Sense and Content* (pp. 24-26), the kind of phenomena treated in work by the *Gestalt* school of perception. I do not see that postulation of qualia, by itself, can provide an account of such phenomena.

experiences, and their consequences for the formation of beliefs and for action. According to this view those experiences are defined by their having a functional role, part of which is a certain informational or (distal) representational role, and thus the issue about phenomenal properties of experiences is whether they are exhausted by such kinds of (externalistically defined) functional role or, in other words, whether this kind of functional role of the phenomenal properties characterizes *completely* or only *in part* the phenomenal properties of experiences.⁷

There is a group of philosophers for whom this whole perspective is ill-conceived. To this camp the truly phenomenal properties of experiences are *intrinsic* qualities of them, *entirely* characterized “from the inside” of consciousness, and recognizable *only* from one’s own case through introspection. This is the view which corresponds to classical conceptions of “sense-impressions” in modern philosophy, and to theories of sense data in contemporary philosophers, and it is outstandingly represented nowadays by philosophers like Block or Chalmers. For this view of course there is no question at all of qualia being characterized *even partially* by a supposed functional role; in an “externalist” conception of this they might be. This conception is entirely consistent with the view that it is conceptually completely coherent to think

⁷ The first is precisely the position of the “extreme perceptualists”, in Peacocke’s perhaps not entirely fortunate terminology. Extreme perceptualists sometimes prefer to avoid terms like ‘qualia’ or even ‘phenomenal property’ altogether because of the fact that their connotations are attuned to the position which I will explain shortly. And indeed, there is some issue about whether the position which I will endorse here does not go so far in recognizing tenets of those philosophers so as to imply a revision of those connotations which turns out to be too strong for referring to it as a view which *accepts* qualia (as opposed to a view that *rejects* them).

of the possibility of being in a state of consciousness where perceptual qualia are instantiated without there being any physical things at all around the perceiver, not only on a particular occasion —something that the theoreticians in the rival camp would easily agree with— but *in general*. Or, in other words, it is a position for which there is no *generic* dependency of the instantiation of qualia upon the presence of physical things in the perceiver's environment (the lack of dependency is not only *specific* for the concrete case). This is just the kind of fully *internalist* conception that we saw Searle endorsed in Chapter 3.⁸

Contrary to this, the position I endorse maintains that functional roles like the ones mentioned above are essential for qualia. Specifically, it holds that the instantiation of any perceptual qualia (type) depends (generically) causally on the instantiation of a corresponding manifest property in the environment —that is, a property of the kind that the subject's sensorial equipment enables him to discriminate— and that this dependence can be established by conceptual reflection.

A compelling argument for this position has been provided recently by García-Carpintero (cf. “Por la ‘quineación’ de los qualia cartesianos”). The argument is based on attributing a controversial property to qualia, namely that they are

⁸ The defining characteristic of the internalist position is that the instantiation of qualia does not depend *constitutively* on properties of subjects' external environments. The lack of dependence is *conceptual* and can be determined *a priori* by philosophical reflection from our notion of qualia. Thus, Block, who denies this sort of dependency —which the kind of separation he establishes between *phenomenal* consciousness and *access* consciousness implies— is fully in the internalist camp, even if he holds that there may be a *nomic* dependence (to be discovered *a posteriori*) between the first and the second (cf. Block, “On a Confusion about a Function of Consciousness”, pp. 232 y 245, n. 10).

corregible, or more exactly, that *ignorance* and *error* about them on the subject's part are possible, at least in a certain specific sense or to a limited extent (perhaps one should rather say that they are not absolutely incorregible as the traditional theories of consciousness had held). This is indeed a controversial property, but García-Carpintero shows that the claim has intuitive plausibility and moreover (following Dennett in applying ideas of Wittgensteinian inspiration) argues that there is no reason to believe in entities that do not have even the sort of minimal corrigibility — ignorance and error— that qualia are held to have on that view. Although the property at issue is controversial it has been independently accepted by current champions of an internalistic view of qualia like Block. Hence, first combining the adduced intuitive reflections that would show a certain plausibility for the thesis, second, the inviability of the alternative and its acceptance by significant defenders of an internalist view of qualia, the controversial view that the instantiation of qualia are subject at least to a minimal sort of ignorance and error turns out to be a good basis for the argument after all. On this basis García-Carpintero convincingly argues that such a sort of incorregibility is incompatible with an internalist view of qualia. More specifically: that qualia are not *intrinsic with regard to the objective*, that is that generically speaking their instantiation necessarily implies the instantiation of objective properties (i. e. physical properties in a broad sense). (Cf. *op. cit.* pp. 128-135). It is in this way that qualia have, constitutively, *external significance*.

This brings me back to the perspective at the beginning of this section, for if qualia have “external significance” in the sense mentioned, it might be thought that they are *exhausted*, as it were, by that external significance. I confess that I regard this

as a much more attractive position than the one that holds that qualia are *intrinsic* (in the sense mentioned) in the particular case of perceptual qualia and especially visual qualia. I also think that for the defence of my proposal (which I will present in the next section) I could remain uncommitted on this issue. I am not, however, completely sure about this and should at least mention the reasons for a more “substantial” view of qualia. In fact, I will go into this issue in some detail because some key considerations intervene in reaching a decision that also find an application to the different case raised by my proposal.

I would like to look at the whole matter in the context of a discussion of what Peacocke calls the “adequacy thesis” in *Sense and Content* (cf. p. 8) and hope that this will allow me to present my position somewhat more clearly. For the time being I will not distinguish between physical or objective properties and among the latter the focus is on the observable or manifest properties whose instantiation our physical make-up allows us to (fallibly) determine. I will use the letter φ to refer to these latter properties (φ can express complex conditions). The “adequacy thesis” is meant to describe the position of an “extreme perceptualist”. In effect, he or she would subscribe to the following thesis:

(AT) A complete phenomenological characterization of a perceptual experience can be given in the form: ‘It appears (looks) to the subject that φ ’ (for some φ).

Now, (AT) may be rejected for different reasons. One possible reason is that a complete phenomenological characterization of a perceptual experience does not even

generically imply a statement of the sort mentioned. According to this kind of opponent to (AT), it is not necessary for a phenomenological description of a perceptual experience to have as a general rule the consequence that the experiencer finds himself in an epistemic state with respect to external or environmental conditions describable by a sentence of the sort which appears in (AT), even less in a *certain determinate* state describable by a specific condition (which depends on the specific quale Q). This is the kind of internalist position we described above, which may be present in a more exacerbated form if the internalist at issue holds that there is something totally out of place in even suggesting that the phenomenology of experiences might imply such epistemic conditions.

As the above implies, the reason mentioned is *not* the reason for which I would reject (AT). The position I favour here subscribes to the claim of a generic dependence of qualia on external properties. This would be approximated by the requirement that, for conceptual reasons, the following condition holds:

- (1) As a rule, if quale Q is instantiated in subject S , then it appears to S that ϕ (for a certain ϕ).

This amounts to holding that thinking that the implication in (1) could always or in general be false makes no sense.⁹

⁹ Condition (1) is too strong. On the one hand, it seems that some kind of (non-perceptual) attention to the instantiation of qualia on the part of the subject is necessary for claiming his certain corresponding epistemic condition to be true. (An independent problem, of course, would be explaining this kind of attention, but the phenomenon does not seem to be in question.) Thus, conditional (1) should be

Another possibility for opposing (AT) would be to admit (1) in the form suggested but to reject the notion that sentences of the sort at issue in the characterization of (AT) could ever give a *complete* characterization of the phenomenology of a perceptual experience. According to this motive for rejection something is *missing* from the description of an experience when it is given in the form of the sentences of (AT). But it is hard to say what exactly is missing. Philosophers like Jackson have claimed that the verb ‘appear’ —or ‘look’— has both an epistemic and a phenomenal sense (cf. *Perception*, Chapter 3), and that moreover the second is not reducible to the first. If that were true, and also assuming that the construction ‘appears ... that’ would stand unequivocally for the first use,¹⁰ a thesis like (AT) would be objectionable from

understood as subject to some “normality conditions”. More importantly, it does not seem that the ‘that’-clause in condition (1) can be satisfied without the subject possessing the concepts expressed by the predicates stating the epistemic condition at issue. It seems sensible to maintain that no epistemic condition of the relevant kind can be truly asserted of a subject that is instantiating a certain quale — #square#, say— if the subject does not possess the concept *square* (or at least a minimal knowledge of this concept). I would not like to require so much because I share the very strong intuition that subjects less cognitively sophisticated than normal adults can share representational contents of perception with these. Hence condition (1) should be reformulated in a way that such conceptual capabilities are not presupposed. On the other hand, if it is correct that (1) carries with it the implication of concept possession, (AT) itself carries it also, and for this reason alone, it would turn out to be too strong. Thus, a supporter of non-conceptual content would not endorse (AT). This would hold, for example, for someone that accepts Peacocke’s manners as supplying the contents of perceptual experiences. In fact, I think that (AT) is too strong for the reason explained, but I do not want to use this to support my criticism of the thesis.

¹⁰ Jackson associates a non-propositional construction with the phenomenal use and a propositional construction with the epistemic use, albeit a different one: ‘It looks as if *p* (to *S*)’ (*op. cit.* pp. 30-31). It needs to be said that he does not use the two-uses hypothesis as a premise in his argument in favour of

the ordinary usage perspective, since one could then presumably postulate that the entities talked about in attributions with the *phenomenal* use are the ones which are missing in characterizations of the phenomenology made solely with the help of physical predicates of things. But I doubt very much that there is such a kind of well established and generally understood ambiguity, and that, consequently, ordinary usage is of much help in establishing the falsity of (AT).

The most direct strategy for this kind of opposition to (AT) would be to argue by counterexample, like Peacocke himself did in *Sense and Content*.¹¹ But it is uncertain that his counterexamples cannot be met by an adequate reply from the “extreme perceptualist”. Take for example the case mentioned in § 6.3 of the trees at different distances by the roadside. I suggested there that the difference in the perceptual

immediate sensory events (sense data) of consciousness in perception, but rather to clear the way towards such a position.

¹¹ Peacocke’s counterexamples in *Sense and Content* are used to argue against (AT) by maintaining that in addition to representational properties perceptual experiences have a different kind of property as a matter of phenomenology (cf. p. 8). His view not only implies the distinction between those properties, but also the logical independence of experiences having properties of the different sorts. That is, not only is it clear that according to the view defended in such work there can be experiences which share all their representational properties while differing in their sensational properties, but Peacocke also argues the converse: there can be experiences which share all their sensational properties while differing in their representational properties, and this happens not only because one of them lacks representational properties (cf. pp. 13-15). Thus, as Tye has noticed (cf. *The Imagery Debate*, p. 165, n. 31), there is a clear sense in which for Peacocke sensational properties are not properties in virtue of which perceptual experiences have their (representational) contents, which makes his position different to classical theories of sense data or qualia. I do not feel Peacocke’s position on this issue in his work after *Sense and Content* is clear, as was glimpsed at the end of section 3 of the last chapter.

experiences of those trees could be accounted for by a kind of representational content, to wit, and ironically, Peacocke's manners. Whatever manners are, I now want to suggest that such a difference could be accounted for by including the *distance* from which the two trees are respectively seen to be the same size; roughly, one size from one distance would not appear to the subject as the *same size* at a *different distance*. If we like, in the two cases we could have different spatial qualia of the general form #size-at-a-distance#,¹² and such qualia seem to be clearly *representational* properties of experiences. We do not seem to be forced to abandon (AT) or the position of the "extreme perceptualist". This and similar arguments against Peacocke's counterexamples might not be definitive, but at least they should make us seriously doubt that they give us solid grounds to criticize (AT) in the way we are examining.

The famous cases of inverted qualia would be a sufficient ground for rejecting (AT). These cases would make the following conditional *false*:

(2) If it appears to *S* that ϕ , then a certain quale *Q* is instantiated in subject *S*.

According to cases of inverted spectrum, it is true that it appears to two different subjects that ϕ (for some ϕ), but in one of them quale *Q*, say, is instantiated while, in

¹² Cf. Clark's *Sensory Qualities* for such qualia. Tye in *The Imagery Debate* § 7.2.6, and Hill in *Sensations*, pp. 198-199 give two slightly different versions of this argument against Peacocke's first counterexample. Tye generalizes the argument to the other counterexamples, although he avoids characterizing his position in terms of "representational qualia" for the reasons suggested in footnote 7 above.

the other, quale Q' ($Q' \neq Q$) is instantiated instead.

I am ready to admit the intuitive plausibility of such cases, or even that they are backed by argument, or even that they actually happen.¹³ But I do not think that the case against (AT) should be regarded as closed at this point. This is not because I think that philosophers that try to maintain (2) or some kind of equivalent opposition to the force of the qualia inversion cases have a good case with the strategy of proposing physical conditions ϕ for which (2) would hold, because even if they succeed in this, not all physical conditions are relevant when what is at stake is the truth of the (AT) thesis (cf. Tye, *Ten Problems of Consciousness*, pp. 201-206, for such a strategy). I think that this is a thesis about *appearances to a subject*, in a common sense interpretation of this expression. If one proposed epistemic conditions based on similarities or discriminations expressible in the technical apparatus of experimental psychology, the sense of the expression ‘appears to the subject that’ in the thesis (AT) would be, I think, unduly forced. And the application of the strategy tends to flout the restrictions this imposes on the conditions ϕ which are relevant.

But even if this strategy fails, I think that it can help us to see the need to satisfy a symmetrical requirement as an urgent task for the defender of qualia-inversion. Because the different qualia that are supposedly instantiated by two different subjects of qualia-inversion are qualia of which the subjects can be said to be aware. Thus, when we admit that two individuals are in perceptual states whose intentional content

¹³ For a conceptual defence, cf. Shoemaker, “Functionalism and Qualia” and “The Inverted Spectrum”; Jackson, *Perception*, ch. 2; and for a defence also from empirical considerations: Clark, *Sensory Qualities*, pp. 168-172 and Nida-Rümelin, pp. 146-148.

share a certain property, say *green*, while two different qualia are instantiated in them, say #green# in one and #red# in the other, we should be ready to explain where the difference lies between being aware of the intentional content of the experience — being aware of *green*— and being aware of (the instantiation of) a quale, say #green#. Without this, the bare appeal to inverted qualia cases is a rather empty affair.

It is in this requirement that a great difficulty for the kind of critic of the (AT) which I am considering here lies. In answering the question, “What is lacking in the description of perceptual experiences that the (AT) contemplates?”, one cannot simply resort to introspection because in plain introspection of a perceptual experience we find ourselves conscious of the intentional properties of the experience, that is (if we are externalists), of the objective properties of things. In other words, as most philosophers agree, when we (simply) introspect about our usual perceptual experiences “all we find is the world”.

At the same time this is where the (AT) critic's opportunity lies. If he succeeds in explaining what it is to be aware of (the instantiation) of qualia as something different from being aware of intentional properties of experience, he will be in a position to point out what is lacking in (AT), since what (AT) maintains in the end is that one can characterise perceptual experiences “from the inside of a subject” completely by the consciousness the subject has of the intentional or representational properties of his experience.

Explaining what it is for us to be aware of qualia as opposed to being aware of the representational properties of experiences is not straightforward. Especially for a view which aims to maintain at the same time that instantiation of qualia should normally

go with instantiation of a representational property of the experience because of the functional role of qualia. The argument should proceed by finding clear cases in which experiences are alike with respect to their representational properties but nevertheless still phenomenally different —i. e. different in respect of the “what it is like”— or the other way round. Now, qualia inversion cases offer this case of dissociation, and if we could rely on them this “dissociation problem” would be solved. But a sceptic may quickly point out that we cannot rely on them in the present context on pain of circularity, because we have just been trying to explain the kind of awareness of qualia that appealing to such cases presupposes.

Besides appealing to inverted qualia, other cases have been adduced in the literature to persuade us that there is such a disassociation: Twin Earth cases and Molyneux cases. But, as Shoemaker has said, even if all these cases have merit, we may feel still the pull of those who would like the dissociation argued without appealing to such “out of the way examples” (“Qualia and Consciousness”, p. 134). And, in this respect, the best cases which I know of appeal to similarities and differences in the perception of colours.¹⁴ Suppose a subject sees two objects A and B as similar in colour, and a third object C as dissimilar in colour. Now assume that colours are dispositional properties in things —surfaces of physical objects in the simplest cases— to produce certain reactions in subjects with an specific physiological constitution, reactions which are detectable and discriminable by them.

¹⁴ The argumentative line I follow here was developed by Shoemaker in the above-mentioned paper. He generalized the argument and provided further context and details in “The Phenomenal Character of Experience”, “Self-knowledge and ‘inner sense’. Lecture III”, especially pp. 258 ff.

If we allow this, it will not be adequate to try to *explain* the similarity in how A and B appear to the subject with respect to colour and the dissimilarity in this same respect with regard to C simply by saying that this pattern of similarity/dissimilarity is due to the fact that the subject is aware the experiences at issue *represent* objects that are similar with respect to colour (in the first case), or dissimilar with respect to colour (in the second). For being conscious of this is possible only in virtue of the subject being aware of experiences which are similar. The experiences of A and B are intentionality similar *because* they are phenomenally-but-non-representationally similar (and analogously about the dissimilarity with regard to C).¹⁵ But these similarities/dissimilarities in the experiences cannot consist solely of the fact that those experiences represent their respective objects as similar/dissimilar in respect to colour (cf. *op. cit.* p. 136). Thus, there are respects in which experiences are similar or dissimilar which are not representational features of the experiences after all.

This argument obviously depends on a certain view of what the colours are, but I

¹⁵ My terminology differs from Shoemaker's because I insist on using the term 'phenomenal' to embrace any aspect of the "what it is like" (cf. Chapter 6, § 3), be it merely representational or not (I say 'merely' because, due to the functional role of phenomenal properties all are representational). In contrast, Shoemaker chooses to keep 'phenomenal' only for the second kind, which I find myself forced to denominate by the cumbersome expression 'phenomenal-but-non-representational'. In some undeniable sense Shoemaker's terminology facilitates exposition, but it has the drawback of dissociating 'phenomenal' from 'phenomenology', since it seems inescapable that how things appear to subjects (in the ordinary sense) should be counted as belonging to the phenomenology of experience. This, in turn, might perhaps be the source of some misunderstanding. However, nothing substantial hangs on these terminological differences, although they should be reckoned with when reading passages from Shoemaker such as the one quoted below.

do not think that it incurs a strong liability here, because any view that recognizes colours and does not regard them as primary properties would do here, and the latter view seems rather discredited nowadays.

If we now come to believe that although the argument has appealed to colours its conclusion can be extended to other qualia, we will conclude more generally that various or many sorts of phenomenal properties are not exhausted by representational properties. Or, equivalently, that qualia are not exhausted by the kind of functional role we attributed to them.¹⁶

Reflecting on the argument again we see that in reaching the conclusion that there are phenomenal properties of experiences over and above their representational properties in the sense explained, we have resorted to (what we took to be) the best explanation of the similarities and differences. Because of this, we can see that we have finally come to be aware of the non-representational side of qualia by means of a theoretical argument. We may then side with Shoemaker in saying that qualia are in some sense primarily objects of “theoretical awareness”.¹⁷ Nevertheless, I think it

¹⁶ In the terms of conditional (1) above, this is equivalent to saying that the property characterizing these qualia is not type-identical to the property contemplated in the condition ϕ in the consequent for all qualia contemplated in the conditional. As anticipated in the previous chapter, trying to determine for which properties or qualia—if any—this identity would hold is not central to this dissertation. Or, in my terminology, which qualia—phenomenal properties—have non-representational aspects. Because of the argument above, we have reason to believe that at least some have, and, as also suggested above, there may be good reasons to extend the argument to qualia other than colour qualia.

¹⁷ There is an independent argument against (AT) that, to me at least, has some force. However, I doubt whether it should be classified with the “out of the way” cases. It is based on the scientifically well-documented phenomena of blindsight. It seems very hard to deny that blindsighters find

would be paradoxical to say that ordinary subjects (who do not possess the theoretical wisdom to reach the conclusion of the argument) in ordinary situations are not aware of qualia (or of the non-representational aspects of qualia). Indeed, if someone wanted to assert this, he would thereby have a reason to deny the existence of qualia altogether, for qualia are precisely meant to be something that characterizes experiential *consciousness*. Fortunately, there is a way out of this quandary, which, far from being *ad hoc*, has clear intuitive support. This has been superbly expressed by Shoemaker:

I see that this piece of paper resembles that one. Reflecting, but with my gaze and attention still fixed on the pieces of paper, I “see” that this piece of paper looks similar to

themselves in perceptual states which may strike them as representationally similar (that is why they are able to point to the location of light in front of them both when the light is located in their field of vision, and when it is located in the blind field), and hugely different in the phenomenal-but-non-representational sense. Something analogous might be said when comparing the experiences of a normal person and a blindsighter. Of course, to *articulate* this difference, and even to *recognize* it, in some sense, these persons should be taught what the kinds of similarities and differences at issue are. Thus, the argument seems to be subject to the same kind of reflection that I am explaining in the text. Tye has tried to dispose of that “blindsight argument” by pointing out that the contrast between a normal person and a blindsighted person is that the first “is introspectively aware that [he] is undergoing a *visual experience* with a certain content, whereas [the second] is aware that he is undergoing *thoughts* with that content”. He adds: “This difference is a felt difference —it is given in introspection” (*The Imagery Debate*, p. 124; italics in the original). I cannot see how one can discover the differentiating feature supposedly revealed by introspection —that one is undergoing a visual experience— without precisely appealing to the phenomenal-but-non-representational character of it. The fact that Tye chooses to describe the difference as one that is *felt* seems to increase the difficulty rather than being of any help. To me at least, Tye's reply might be read as an obscure appeal to implicit awareness of phenomenal (but-non-representational) differences.

that one, and hence that my experience of the one is intentionally similar to my experience of the other. Reflecting still further, and again with no shift in my gaze and attention, I “see” that while there are cases in which intentionally similar experiences are phenomenally different (...), the present case is not of this sort—it is the standard case in which experiences are intentionally similar because they are phenomenally similar. All of these judgements stem causally from the qualitative character of my experience, but only the last is explicitly about it. It seems reasonable to me to say that if an experience issues in judgments of the first or second of these kinds, and fails to issue in a judgment of the third kind only because the subject did not bring to bear on it the appropriate concepts, then its qualitative character is accessible to the subject’s consciousness, and is some sense an object of awareness.

(Shoemaker, “Qualia and Consciousness”, pp. 140)

I think it is fair to distinguish the kind of awareness which, according to these reflections, ordinary subjects have of qualia—in comparison with the “theoretical” or “explicit” awareness of qualia of which we spoke above— by saying that the first kind is a *tacit* awareness, although, for reasons to be touched upon shortly, we must apply this term with caution. This kind of awareness of qualia is not a state in which qualia are represented; it is in this sense non-intentional, whereas the explicit awareness is *conceptually* mediated. Furthermore, it is clear that the tacit access to qualia that we have attributed to ordinary subjects is not access to qualia by introspection, in the ordinary sense. In contrast with this, I think we may agree that subjects that are informed about what relevant similarities or dissimilarities to “look for” are aware of the (non-representational aspects of) qualia by introspection in the usual sense. The conceptually sophisticated subject can discriminate up to a certain point the sensations or impressions that constitute a particular experience via

introspection; he can compare experiences in different respects, make likenesses and qualify, and also recall or anticipate qualia.

Tacit awareness of qualia has a similar status as the awareness of our own states of attention to physical objects in perception, which I dealt with in the last section of Chapter 3. They can both be regarded as some sort of achievement. (I mentioned this point with regard to qualia above, and I made the point with regard to awareness of attention in Chapter 3.) On the other hand, attention itself is an achievement in a fuller sense than awareness of attention, just like awareness of qualia, which is not the representation of anything, is not subject to the hazards of representation as perception undoubtedly is.

A new reflection, which at first sight seems to bring new complications but which seems to me to contribute to our (tacit) awareness of qualia is *cognitive* awareness. García-Carpintero insists on this feature of our awareness of qualia. To my knowledge he has not explained the grounds for claiming this in full.¹⁸ But I think that the claim is intuitively plausible and that bringing this intuitive plausibility to light may reinforce somewhat the claim about the awareness of qualia. Take a normal subject confronted with the task of saying (in good light) whether he has a green

¹⁸ However, I think that he has travelled a considerable part of the way by using Loar's proposal on phenomenal concepts. Loar claims that a conceptually sophisticated subject has what he calls *phenomenal concepts* of qualia, that is, notions of them acquired by each such subject from his own case which allows her to recognize qualia when they instantiate again or anticipate their instantiation. García-Carpintero proposes a move similar to the one we have seen Shoemaker made suggesting that ordinary subjects can be attributed with the *tacit* possession of such concepts (cf. "Por la 'quineación' de los qualia cartesianos", pp. 126-127).

object —no matter which kind— somewhere in front of him and approximately where that object is in relation to him. Contrast his situation with that of a second subject with blindsight. It is not only the case that the task is easiest for the first subject while being difficult (the second part of the question) or plain impossible (the first) for the second subject, but it seems to me that the first is justified or entitled in his answer in a way that the second is not. For the second subject the answer concerning the position of the object “pops out” from nowhere, so to speak; it just “strikes” him. This does not seem to be so for the first subject to whom things appear just as they should for him to be in a position to deliver such an answer. His answer does not come “out of the blue” but seems to have some sort of rational support which the blind-sighter's answer is totally lacking. This subject —as he would be quite ready to allow— is making an arbitrary statement concerning the whereabouts of the object in a sense in which the first is not.

These reflections seem to lend support to the claim that ordinary subjects have a sort of knowledge of their own qualia; a cognitive awareness of qualia. And since possessing knowledge entitles subjects to confer knowledge, if the awareness of qualia is cognitive it is also (implicitly) “*entitling*”, that is “*reason*” *conferring*, thus we can also say if we empty this term of the implication that the subject has reasons at his disposal without further ado. (Even if it can be said that the reasons are “at the disposal” of the subject because in some sense he possesses justification —as opposed to merely been guided by the workings of a subpersonal mechanism, it has to be noted that they are only *implicitly* at his disposal.) Entitling or reason-conferring, to what? Entitling or reason-conferring to the objective significances of those qualia.

In other words, following this line of thought we are lead to think that awareness of qualia endows subjects with reasons for perceptual judgements. It is, then, a line of great epistemological relevance, an issue whose discussion, however, lies entirely outside the scope of this dissertation (cf. García-Carpintero, “Las razones para el dualismo”, p. 84). (As will be seen, I will simply *appeal* to this line of thought in Section 4 to dispel a potential objection to my own approach.)

We may pause to reflect that we have again been confronted with claims about the subject's *tacit* capabilities (*tacit knowledge* and *tacit reasons* on this occasion; *tacit awareness* and *tacit possession of concepts* above). Now, in applying the term ‘tacit’ (or ‘implicit’) to these capacities it is very important as García-Carpintero has repeatedly emphasized to be careful not to confuse this sort of capacity arising from the sense of ‘tacit’ or ‘implicit’ used in the cognitive sciences, for which Chomsky’s claim that a speaker has a tacit or implicit knowledge of his grammar provides the paradigm (cf. García-Carpintero, “Por la ‘quineación’ de los qualia cartesianos” pp. 106-109). In the present usage we are dealing with capabilities which can be “brought to light” or made explicit above all by the sort of *a priori* intuitions-plus-argumentation which is characteristic of philosophy, which is crucially related to the fact that they are capacities attributed “at the personal level”. In the Chomskian usage, in contrast, the term refers to abilities which are sub-personal and only accessible as a result of empirical-experimental research. As will be seen, I think that recognizing the first phenomenon as a separate and significant kind turns out to be the key to understanding the demonstrative character of perception and its relation to

phenomenal properties.¹⁹

The general conclusion of this section is that I am ready to take on board the thesis that perception of (external) things is cognitively mediated by awareness of qualia, with the emphasis on the tacit nature of such cognitive awareness, more or less in the way that this thesis was introduced by explaining a tentative proposal by García-Carpintero in the first section and further expounded in the present section. Indeed, I think that once one is prepared to endorse an externalist view of qualia, and the thesis of (at least) tacit awareness of them, it is not a big step to arrive at a satisfactory proposal for bringing together perceptual attention and the phenomenal properties of perceptual experience to account for the demonstrative character of perception in a way that does justice to the peculiarities of perception. But, as I argued in the previous section, there is indeed still a step here, and I turn now to my proposal about

¹⁹ Because of the importance of this difference between the two usages of the terms ‘tacit’ and ‘implicit’. García-Carpintero has proposed rescuing a term from the not-so-distant philosophical tradition —the term ‘unthematized’— for the first usage (cf. *loc. cit.*). One important model for reflection on tacit or unthematized capabilities is provided, I think, by Peacocke in “Implicit Conceptions, Understanding and Rationality”. For the case of phenomenal consciousness, García-Carpintero refers instead to the elucidation in Crimmins’s “Tacitness and Virtual Beliefs” (cf. “Las razones para el dualismo”, p. 84). However, as Peacocke notes, Crimmins takes himself to be elucidating a notion of tacit knowledge such that when the subject is confronted with an explicit formulation of his knowledge it does not appear to him as if he was learning something new. This is not the case with the notion of tacit knowledge which is at issue here, or for the “implicit conceptions” elucidated by Peacocke in the work mentioned (cf. “Implicit Conceptions, Understanding and Rationality”, pp. 49-51). Nevertheless, I think there may be no real contrast here but rather a matter of degree (cf. *op. cit.* pp. 53-54). In any case, as will be seen, I will appeal to Peacocke’s notion of tacit knowledge in the development of my proposal in the following sections.

how it should be taken.

7.3. Qualia and demonstrative modes of presentation: a proposal

My immediate task now is to explain the role that *qualia* play in perceptual modes of presentation of singular objects. In Chapter 5 we saw that *qualia*, so far as they are conceived of as being partially functionally defined by the properties that cause them—manifest or observational properties—were akin to the #features# postulated by empirical theories of attention like Treisman's. We are now in a position to use the fact that we seem to be dealing with essentially the same entities here to make a proposal about the way in which we should understand the relation between the phenomenal and the conceptual-demonstrative aspects of perception, akin to the proposal expounded in § 1 which postulates a more intimate relationship between them—and so, on this respect quite different from Peacocke's (and Evans's)—but that succeeds in being faithful to the demonstrative character of perception.

My proposal follows Campbell at a decisive turning point. Like Campbell, I hold that the perceptual awareness of objects which allows demonstrative reference to them is centrally a matter of *attention*. But contrary to Campbell I conceive this attention much as common sense and/or folk psychology conceives it. As applied to the case at hand, attention is a matter of selecting an object from its perceptual background (or perhaps more than one simultaneously, but let us stick to the simplest

case). And selecting it for the sake of finding out something about the environment—a kind of activity inserted in something like Neisser’s perceptual cycle (cf. Chapter 3, § 4).

The initial intuitions in favour of the claim that this kind of attention is essential to reference achieved “on the strength of perception” are simple intuitions to the effect that an object’s being clearly visible is not sufficient for being aware of it, and about the need to draw one’s audience’s attention to perceptible objects to be understood when communicating information about things in the perceptible environment. Campbell has expressed these intuitions in the following way:

There are many ways in which we can refer to concrete objects, but the most basic sort of reference is when you can see the thing, or perceive it somehow, and refer to it on the strength of that perception. If you and I are looking out of the window, then we may discuss the castle before us, identifying it as ‘that castle’, the one we can see. But just having the castle in your field of view does not seem to be enough for you to refer to it. If you are to refer to the castle, you must do more than have it in your field of view: you must attend to the thing. And if you are to talk to me about that castle, you have to draw my attention to it, so I get some clue as to what you are talking about.

(“Sense, Reference and Selective Attention”, p. 55)

Now, I agree with Jackson, García-Carpintero and other upholders of a sense-data theory of perception, that we perceive objects by being (tacitly) aware of qualia in the perception of those objects. I also agree that (as we have seen in the previous section) experiencing qualia is a *cognitive* achievement—a more basic cognitive achievement than perceiving objects. Furthermore, it seems to me that it is plausible to identify the background from which an object is “made to stand out” or “selected” in some way

with the current perceptual qualia. My claim is that when we “select” an object from this background, we do it in virtue of “binding” qualia whose instantiation is caused by that object. What I have in mind is as follows.

On the basis of the foregoing, it is accepted that there is (cognitive) awareness of single qualia.²⁰ But it is one thing to be aware of single qualia as in the stream of consciousness or “the manifold of sensation”, and quite another to be aware of that quale *as belonging to the (physical) object*. For, in the second case we recognize a (cognitive) *systematic* achievement, roughly in this sense: first, the same quale belongs to different objects; second, awareness of qualia as belonging to an object is an achievement which presupposes awareness of single qualia as a simpler achievement, and third, the first sort of awareness does not simply reduce to the

²⁰ The explanation in the text is admittedly a simplification in various ways. As remarked above, I do not consider the atomism suggested here as definitive. In particular, qualia may be basically presented as instantiated properties in complex sensory events (*Erlebnisse*) in consciousness. Or they may be part of other complex phenomenal properties. Moreover, the possibility of relational phenomenal properties has to be taken seriously (as for example in the case of distance mentioned above (cf. the text to which footnote 12 is appended). Another very significant limitation of my treatment lies in not taking account of the dynamic aspects of perception which as Evans and Campbell have recently argued, are very relevant to demonstrative thought and which have even been taken as essential to the perception of objects (cf. Mulligan, “Perception”, p. 197; I referred to this limitation in Chapter 3). As I remarked at the beginning of section 2 of the present chapter, even an overall theory of the phenomenology of experience is beyond the scope of this dissertation. On the other hand, these simplifications do not appear to seriously affect the fundamental point that there exists the kind of *systematic task* that is acknowledged in the text. This is the central point. At the very least, it would seem to require the recognition of something like single qualia. But, more importantly, systematicity stands whatever the elements that constitute it from a philosophical viewpoint ultimately turn out to be.

(simultaneous or successive) awareness of single qualia, but involves additionally some sort of “combining” or “synthetizing” operation of the mind. This is what I am calling the *binding* of qualia.

This proposal is closely related to Jackson’s analysis of perception. As part of this analysis, Jackson formulated a necessary and sufficient condition for a sense datum to belong to a material object. Our task here is not that of analyzing perception *per se*, but only its demonstrative trait. That is, we are focussing on the kind of perception that allows the sort of awareness of objects that we recognize as “demonstrative”. And we have identified this awareness with (perceptual) attention to the object. It is then in the context of explaining this kind of awareness that Jackson’s notion —or, in our version, the notion of *a quale belonging to an object*— intervenes. The characterization of this notion is as follows:

A quale Q belongs to a physical or material object M in an episode of (demonstrative) perception by a subject S , only if

(i) an event involving M causes the awareness of Q in S .

(ii) there are other qualia Q 'whose awareness is also caused by the event involving M and which are bound with Q by S .²¹

²¹ The basic differences with Jackson’s formulation are as follows (cf. *Perception*, p. 171). First, Jackson’s definition concerns a *sense-datum* instead of a quale, where this sense-datum seems to be conceived as a complex mental object. For comparative purposes we may think of it as a sensory event whose (phenomenal) properties are the qualia. The definition given in the text introduces the subject explicitly, but otherwise is very close to Jackson’s first condition which is as follows: “[A]n M -event causes the having of [sense-datum] D ”, where an M -event is an event involving the material object M .

Now, because of the external significance of qualia, the binding of qualia is not something that the subject does arbitrarily, but which corresponds —when perception is successful— to (manifest) properties of the object which are “bundled up” in it. Hence, because of the external significance of qualia, the binding that constitutes selecting has both a *subjective side* —the binding of qualia proper— and a corresponding *objective side* —the “binding” or “tying together” of properties in the objects which, in fact, are already bundled up in it.²² Because of this, being aware of the qualia caused by an object *as belonging to this object* involves being aware of the observable properties of the object *as properties of a single object*. For this reason I equate being aware of the qualia caused by an object as belonging to that object — which is essentially constituted by the binding of such qualia— with the kind of awareness of the object that we call (perceptual) *attention to the object* and which in my mind is defining of the (perceptual) demonstrative access to physical objects: the

To this condition, Jackson adds just a second condition: “[T]he spatial properties of *D* are functionally dependent on those of *M* as a consequence of the manner in which *M* causes the having of *D*”. In my definition this condition does not appear because it is assumed that it is already a part of the conceptual background since the notion of functional dependence —in Jackson's sense or in a suitable modification of it— is essentially involved in the notion of qualia itself. Thus, we might say, it does not explicitly appear, but it *is there* nonetheless. The novelty comes in the second condition of my definition; thus I am essentially only adding a third condition to Jackson's definition (‘third’, because his second condition —or a suitable modification of it— is already implicit in my definition) which involves the operation of *binding*, which seems to me essential to account for the systematicity in the sort of achievement that being aware of a quale as belonging to an object is.

²² Since the properties are already “bound” or bundled up in the object, this improper binding should perhaps be regarded rather as a *recognition* of the properties as bundled up.

second thing *consists of* the first.

This is basically my proposal to account for the demonstrative character of perception, according to which experience plays this role: it delivers the elements — the *qualia*— of which the subject is aware *as selected and bound* (the awareness of an achievement). The object is present in the subject's awareness as a “binding” of selected *qualia* whose instantiation has been caused by it, which are “selected” in the sense that the subject is aware of them *as belonging to one and the same object*. This, we can say, is the mode of presentation of the object. And this is also what it means to say that the object “is presented to the subject” *as attended in the current act of attention*. ‘Attended to in the current act of attention’ and ‘present to the mind as a binding of selected qualia’ thus come to be two linguistic descriptions of the same individuating and cognitively accessible property of an object, the property that constitutes the condition for its mode of presentation.

I think that if we are prepared to accept something like the García-Carpintero's tentative proposal for the intentional content of a perceptual experience —cf. section 1 of this chapter— but agree that that sort of proposal does not in itself solve the problem of accounting for the demonstrative mode of presentation of objects in perception we should find the proposal just advanced quite adaptable.

Among the many aspects of this proposal which require discussion, one which is especially important in view of the prominent place it occupies in rival accounts is the issue of the role of spatial location in the mode of presentation. I will discuss this issue now because to do so may also contribute to clarifying or adding details to my proposal.

As we know it is widely accepted that location plays a major role in perceptual demonstration. Indeed, as we saw in section 2 of Chapter 4, there are views according to which locating the object egocentrically or at least the ability to do this is constitutive of perceptual demonstration. But we also saw that McDowell or Evans's arguments in favour of this view were not compelling. Furthermore, we saw reasons to doubt that location has such decisive role, although it does somehow seem important or special. According to my theory, what would the role of location be? To begin with, and most importantly, the notion of location is subordinated to that of attention from a theoretical viewpoint. This means that whatever role location is postulated to play here will come from the role it plays in perceptually attending to objects as this notion has been explained above. This can be explained as follows.

First we must recognize spatial qualia. From the general viewpoint about qualia adopted in the previous section which links them essentially to discrimination we must recognize at least three (kinds of) spatial qualia constitutive of location: (egocentric) “latitude” and “longitude”, and (egocentric) depth (cf. Clark, *Sensory Qualities*, § 5.4.1), varieties of which would be present in different sensory modalities (sight and hearing certainly, and probably also touch also). What happens—I think—in the case of visual attention and also touch is that the spatial qualia play a very special role in the binding of qualia that constitutes attention to an object: other qualia—such as the colour qualia—“cluster round” the location qualia.²³ This is undoubtedly a much more modest role for location that was envisaged by the “substantial”

²³ The impressions of shape one has of an object are regarded in some theories as a qualitative dimension on its own. Other theories, however, hold that they are patterns of simpler qualities (cf. Clark, *op. cit.* § 5.4.3).

doctrines of Evans and McDowell, but nevertheless it is still an important role. Furthermore, even if that “clustering round” the location qualia does not hold for the case of attending to an object by the sounds it gives off, I think that these differences about the role of location in different sensory modalities —like other aspects that belong to a *rough* characterization of its role— can be established without the need for empirical research.²⁴ In this sense there is some room in my view for *a priori* reflection on the role of location in perceptual attention, and subsequently in perceptual demonstration.

If we now, pul together all the threads obtained from Chapters 3 and 4 and from the foregoing, my proposal for the demonstrative mode of presentation has the following elements:

²⁴ Campbell expands on the different characteristic possessed by visual attention and attention in hearing and their respective roles on perceptual modes of presentation, in “Sense, Reference and Selective Attention”. I do not agree with the altogether empirical status he assigns to the differences between the two modalities; on the contrary, I believe that a good deal of what he says can be given an *a priori* foundation (see the section below). How much about the role of location can be at least *prima facie* established by conceptual considerations and what needs empirical investigation from the outset is, however, a real issue . For example, one might try to use the idea of *opening a file* to try to draw a more accurate profile of how attention works. Thus, one might say that attention to an object is achieved by opening a file for it and filling it with qualia for the object, location qualia to begin with in the case of sight. But I think that such attempts, unless they are empty speculations, are rather to be seen as theoretical proposals that belong fully in the province of empirical scientific psychology (see the reference to Kahneman & Treisman (1984) in § 3 of Chapter 5). Resorting to the notion of mental file has been not infrequent ever since Grice introduced the notion of *having a dossier for a description* in “Vacuous Names” (1969). Philosophers like Evans, Perry and García-Carpintero have made diverse uses of the notion of mental file, uses that, despite being different, are not unrelated to each other (and are also not unrelated to present concerns). To my mind, however, the legitimacy of appealing to such a notion in a philosophical, conceptual explanation could be a real issue, except when the use made of it does not go beyond the limits of a merely ancillary analogy.

(i) In perception objects are fundamentally *cognitively* accessible as *attended*, more precisely, as the objects of *current* attention.

(ii) This basic piece of knowledge that the subject has in this respect, is to be understood as implicitly knowing *of* the object that it is being attended to (rather than simply knowing that the object is being attended to).

(iii) This piece of knowledge is present as something that is *presupposed* or *taken for granted* in the act of attention, rather than something that is *acquired* in it.

(iv) Concurrent with the episode of attention to an object, is the subject's (tacit) awareness of this episode, and this awareness is also fundamentally the awareness of an achievement, even if an “easier” achievement than attention itself is.

(v) The cognitive attention to an object in perception consists of a sort of “selection” of the object from a perceptual background, which in turn is constituted by the *binding* of sensory qualities caused by the object of which the subject is also (tacitly) aware.

(vi) Because of the external significance of qualia, we can also talk —somewhat improperly— of the “objective side” of this binding as the binding of manifest properties in the object.

I do think that some intuitions support the different elements in my proposal, but of course, I am not suggesting that its case can be based on its intuitive strength. They need support from argumentative confrontation with other alternatives, without which it would be nothing more than a plausible story. In my view, this confrontation

will proceed essentially by *a priori* argumentation and also by appeal to *common sense* psychology, since what is at issue here is the common phenomenon we call *attending to an object*. My hope is that the use of the notions of *selection* (or *awareness of the qualia as belonging to an object*) and *binding* do not definitively put my proposal *ipso facto* outside the domain of personal-level psychology or not more than does the appeal to notions such as that of *being (cognitively) aware of a qualia* and the others we saw referring to subjects' *implicit* but *personal-level* capacities.

However, the proposal is not innocent of empirical implications, in a way that should be made clear. In this aspect, the proposal's close relationship to Anne Treisman's psychological theory of selective attention cannot have escaped notice. This is no coincidence, of course, since the proposal was inspired by Campbell's, which in turn seems partially inspired by Treisman's theory. If anything, my proposal is closer to Treisman's theory than Campbell's is, since, as I argued in Chapter 5, Treisman's *features* —the entities which are bound according to her theory— cannot be regarded as properties of objects, but as some sort of scientifically based “counterpart” of sensory qualities or qualia.

All this does not imply that my proposal stands or falls with the success or failure of Treisman's theory. The reason why it does not raises significant issues about the relation of a conceptual, *a priori* proposal like the one I am outlining and empirical theories of selective attention. This is the main issue dealt with in the two remaining sections of the dissertation.

7.4. The subpersonal and the tacit in attention and perceptual demonstrative modes of presentation

As we recalled in § 1 of Chapter 4 modes of presentation are classically conceived of as conditions on objects that are *individuating*, and whose satisfaction by objects is *cognitively accessible* to the subject. We found trouble in the *first* respect concerning a proposal I put together (somewhat artificially) from elements of views on perception belonging to Jackson, Searle and García-Carpintero in the first section of the present chapter. The difficulties with Campbell's proposal I am about to discuss in detail concern instead the *second* aspect of modes of presentation.

The problems in this latter respect in Campbell's approach (see section 3, Chapter 4) come from its empirical stance. It seems *prima facie* quite plain that if demonstrative modes of presentation look to the *subpersonal* processes postulated by empirical theories of perception and attention for their identities, it will be very hard to comply with the classical idea that they are "cognitively accessible" to the subject (that is, *qua* "man/woman in the street", not *qua* expert).

As I see it, Campbell has mainly developed his approach to demonstrative "senses" or modes of presentation in three largely complementary papers. In his intriguing "Is Sense Transparent?" he tried to provide a general rationale as much as a direct argument for moving to an empirical stance towards perceptual demonstrative modes of presentation. In Chapter 4, § 3 I tried to reconstruct the argument and submitted one of its premises to close scrutiny. Further, in his rather daring but to my mind interesting paper "Sense, Reference and Selective Attention", he developed the

approach by straightforwardly giving an empirical criterion for the identity of modes of presentation (the one quoted at the beginning of § 3, Chapter 4). And finally, in an even more recent paper, “Sense and Consciousness”, he tried to dispel or anticipate qualms about his empirical approach by trying to point to a “classical setting” for it, and also by providing brief rebuttals of the alternatives.²⁵

To a great extent I agree with his rebuttals. His main adversary is—he declares—the naturalists who do not find a place for sense or modes of presentation in his theory of perceptual consciousness since, for him, “what gives meaning to a system of representations is a pattern of causal correlations between use of the system and external phenomena”, and, as a consequence, “[t]he notion of a “truth-condition” comes into this account not as what causes and justifies the pattern of use, but as an artefact of the pattern of use” (“Sense and Consciousness”, p. 197). As is clear from the view developed here, I entirely agree with his opposition to this idea. At one point he characterizes these naturalists more specifically as theorists

who think that we do not, ordinarily, grasp any justification at all for the procedures we use in verifying or acting on the basis of demonstrative judgements.

(Op. cit. p. 206).

Again, I agree with opposing this position, but ironically enough his theory runs a serious risk on this score, as we will see.

²⁵ His talk at the IXth Annual Meeting of the Society for Philosophy and Psychology at Salzburg went in this same direction while introducing some new elements, but since it has not been published (to my knowledge), I will refrain from discussing these. They would not however alter the conclusions of the present discussion.

Campbell also rejects outright any sensation-based account, on the grounds that this would merely concentrate on the *effects* of perceptible objects, and hence it could presumably be made to count as a variant of the naturalist approach.²⁶ I fully agree with his classical Sellarsian worry here, but nevertheless I shall engage him in discussion at just this point, since it will clearly signal the place occupied by my position and why I believe it is free from the difficulties in his.

It is true that my proposal may be recognized as appealing to sensations, but firstly sensations come into it only indirectly because what constitute a basis for my theory are only the qualitative properties of sensations —sensory qualities or qualia— as the previous sections will have given an opportunity to appreciate, and secondly, these intervene at one remove, as it were, since I account for the demonstrative character of the relation to objects in perception first by appealing to attention. Moreover, this theoretical background parts company with the classical theories of both sensations and qualia, which see the latter as (fully) intrinsic properties of experience. On the contrary, I subscribe to a variant of qualia-based theories which emphasizes *both* the *external* significance of qualia —holding by their very nature— and their *cognitive* accessibility (thus being reason conferring). And it is only if qualia are conceived as (fully) intrinsic properties of experience —intrinsic regarding what is objective— that they necessarily lack *both* properties (cf. section 2). Even views of qualia like Ned Block’s that try to make their putative intrinsicness compatible with an *a posteriori* purely empirical basis for their external significance, fail —as I

²⁶ Because it shares the idea that “a representational system has meaning because of the existence of causal correlations between external phenomena and the use of the system” with a naturalistic view (“Sense and Consciousness”, p. 206).

believe is shown in García-Carpintero's argument mentioned in section 2, which develops Wittgenstein and Dennett's views. The upshot of all this is that my proposal's background does not regard sensations, or rather their qualities, as *merely the causal effects* of objects and their properties, which, in Campbell's words, “would not provide [one] with any grasp of what [those properties], or the objects, intrinsically are”, i. e. would contribute nothing to making “the nature of the thing transparent to us” (“Sense and Consciousness”, p. 208).

Campbell also mentions Locke as putting reflection on these matters on a path which led to another dead end: realizing that causal relations by themselves alone could not bring us any nearer to that “transparency”, he resorted to the notion of *resemblance*, postulating that sensory effects (or at least some of them) are intrinsically like their causes. But trying to do this as a sort of supplementary appendix to a thorough causal account of representation that is already quite complete by itself has, as Campbell says, “the problem ... that it makes no sense” (*loc. cit.* p. 106). However, *some* idea of resemblance begins to make sense, I believe, when put in a rather different intellectual setting. It is the idea sought after in formulations of “imagistic content” (cf. § 1 of Chapter 6) —itself somehow touched upon in passing by Campbell himself;²⁷ it is present in Jackson’s notion of “functional isomorphism” (§ 1 of the present chapter), or in the related notion of “second-order isomorphism”

²⁷ If I am not mistaken, Campbell uses the expression ‘imagistic content’ only *twice*, in the three papers mentioned above. One of its occurrences is in the title of the first numbered section of “Sense, Reference, and Selective Attention” (“Propositional vs. Imagistic Content”), and the other appears just in passing in the course of that same section, a text where Campbell moves —characteristically without giving any notice— from talking of propositional *content* to talking of the problem of confronting propositional *representations* with pictorial or imagistic *representations*.

(cf. § 2, Chapter 6) by Peacocke, and, in general, in the latter's attempts to capture non-conceptual "analogue contents". As it is present, I believe, in all attempts to articulate qualia by systematic descriptive strategies, from Nelson Goodman to the more recent techniques using multidimensional scaling (cf. Clark, *Sensory Qualities*, Chapter 4). One might understandably say that all these efforts have not yet crystallized into a well rounded philosophical theory of "resemblance" which is also satisfactorily integrated within some version of a causal-explanatory perspective, but it would hardly be plausible to say that all these attempts are not promising, not to speak of saying that they make no sense. All the work referred to has at the very least opened up Locke's dead end.

On the other hand, I think that there are motives for suspecting that Campbell's views do not succeed in escaping completely from a rejectable sort of naturalism, contrary of course to his intentions.

It is not difficult to relate Campbell's position to Quinean naturalism. According to Campbell's theory senses are determined —constituted— by "the principles that *the perceptual system* uses to select a collection of *imagistic information* as all relating to one object" ("Sense, Reference and Selective Attention", p. 60, my italics). Thus, what constitute senses —putting it vaguely— are certain "elements" used by "the perceptual system", that is the mechanisms of perception. And it is *scientific* psychology which studies such mechanisms, and also that determines what counts as "imagistic information". In short, senses are wholly abandoned to *science* for determination. They are fully within *its* province, as it were, so the notion of sense is in the end a scientific notion. In this respect is there any difference from the Quinean

version of a naturalized epistemology? Strictly speaking I think there is no such difference and that this is ultimately the reason why we should say that Campbell's theory of perceptual modes of presentation fails. And yet I also think that there is something very close to his theory in many respects that does not fall in the trap.

The point just made about the affinity of Campbell's view to Quinean holistic naturalism —be it rejectable or not— does not by itself establish Campbell's proximity to the naturalists' position on the specific issue of the use of a notion of sense that we normally grasp (see above). Indeed, there are some relevant details we should attend to before we can see where the inadequacy of Campbell's theory lies on this decisive issue more clearly. In this respect I think it is instructive to begin by comparing Campbell's theoretical stance with Tye's theory of pictorial (mental) representation. Indeed, the theories are partly related by their respective subject-matter because Campbell's theory can be fairly described as a theory of the role that *imagistic representations* play in the constitution of a key aspect —the demonstrative aspect— of perception, and Tye's theory as a theory of what is distinctive of imagistic representations in general.²⁸ Moreover, besides being related by their subject matter, they are also related by their very nature, to the extent that both declare that clarification of their respective subject matter should be sought in empirical scientific psychology, either by taking up contributions by others (Campbell), or by making one's own contribution to it (Tye). It might be thought that a critical stance on Campbell could simply refer to the criticism levelled at Tye's project (cf. § 1 of

²⁸ Campbell himself indirectly relates both projects by mentioning Kosslyn's attempts at clarifying the notion of pictorial or imagistic representation (cf. "Sense, Reference and Selective Attention, p. 56).

Chapter 6), but this would not be correct; Campbell's emphasis is on *information*, and this changes matters significantly. As we will see, this does not free Campbell's position from decisive criticism but makes it, in contrast to Tye's, somehow "recyclable".

Campbell's central notion of attention is, indeed, that of "selection of information [from the imagistic array] for further processing" ("Sense, Reference and Selective Attention", p. 57). With this Campbell is pointing to the information (of the relevant kind) that the perceptual (subpersonal) mechanisms use for "fixing on" an object, that is, to the information involved in the (information-processing) procedures used in what we can reasonably describe as the task of "isolating" an object from the perceptual background. But spelling out what information an internal mechanism uses to solve a cognitive task and why the mechanism uses that information, is to theorize at what David Marr (misleadingly) called the "level of computational theory", that is, what was later to be called Marr's level 1. In contrast, Tye's proposal belongs to the "level of representation and algorithm" as we saw in Chapter 5, section 2. Thus, Campbell's proposal about perceptual modes of presentation and Tye's proposal about pictorial representations, whatever other similarities they may have, differ completely about their explanatory levels as these are laid out in Marr's widely discussed —and, I think, widely accepted in its main outlines— methodological reflections on the scientific study of cognition.

This, I believe, has the immediate consequence that we cannot generalize without further ado our negative conclusion on the potential of Tye's proposal for clarifying the sense in which imagination is "picture-like" to Campbell's proposal for clarifying

the notion of perceptual modes of presentation and thus clarifying the relation between “imagistic content” to “propositional content” —another way in which Campbell himself sees his approach to sense (cf. “Sense, Reference and Selective Attention”, pp. 56-57).²⁹

So, where does the problem for Campbell’s approach lie? One could anticipate — as I did at the beginning of the section and again in a general way some paragraphs ago— that it stands out as soon as we consider in detail the classical requirement of senses to be “cognitively accessible” to subjects; that they must be something the subject can *grasp*, as we say when expressing the requirement in the terms that a long tradition of discussion on senses has put it (the terms we saw Campbell himself use in his specific objection to the naturalist position) How then can we say that subjects can grasp demonstrative modes of presentation when these are characterized in the terms of subpersonal mechanisms and procedures postulated by scientific psychology? Campbell has recently formulated just this problem for his proposal in the following way:

Of course, you might point out that some of the input and output procedures I am concerned with not only involve shifts between the conceptual and non-conceptual levels, but shifts between personal and sub-personal levels. And, you might ask, in what sense does the subject grasp the justification for sub-personal procedures of whose existence he may have no inkling?

(“Sense and Consciousness”, p. 203)

²⁹ I think that when Campbell associated sense with “the *principles* that the perceptual system uses to select a collection of imagistic information ...” (as quoted above), he is making a non-explicit suggestion about the explanatory level of his proposal by using just the word I have italicised.

This specific way of putting the problem arises from Campbell's explanation in the same paper of the (causal) role of perceptual attention to objects, and the (conceptual) relation that grasping perceptual demonstrative modes of presentation has to that role:

Which object you are consciously attending to is what causes you to use one information-processing procedure rather than another to verify the judgement. And it is the character of your conscious attention that causes you to use one information-processing procedure rather than another to find the implications of the judgement for action. Moreover, your conscious attention to the object does not merely cause your use of these information processing procedures. It is also *what justifies your use of these information-procedures*. It defines the point of these procedures, what the goal is of the computation. And *that is grasp of the sense of the demonstrative*. If you did not have consciousness of the object, you might run these information-processing procedures; but you would have no grasp of their point.

(“Sense and Consciousness”, pp. 202-203)

My main concern is with the two sentences I have italicized in this text. Let us ask: is *the subject justified* in using or at least entitled to use *the procedures at issue*? As we know, in Campbell's approach the procedures are defined entirely in subpersonal terms. The information they process is information transmitted through a channel where the occurrence of certain events at one end increases the probability of other events happening at the other end, where these events belong to groups characterized in subpersonal terms; hence, the information at issue is really information about which the subject “has no inkling”. How, indeed, can the subject be *justified* in using or *entitled* to the use of *such* procedures? This is Campbell's answer:

The answer is that what the subject grasps defines the point of these sub-personal procedures; they are not somehow carried out independently of the aims of the subject (...) the grasp a [person] has of the demonstrative he is using defines the point of the sub-personal procedures which underpin his use of the demonstrative, even though the speaker could not say what those sub-personal procedures are.

(Loc. cit.)

I think there is indeed a kind of justification involved here. But exactly what kind? What we should expect when talking of senses is that the justification involved is a *rational* justification. I think that Campbell should fully agree to this. Since he is rejecting a naturalist position, he should, I think, reject an account of the justification at stake that makes this exclusively a matter of the reliability of the processes involved. This, to my mind, is the decisive point, since I think that Campbell lacks what he needs, because of the scientific (“naturalistic”) way in which he characterizes the notions of attention and of the demonstrative mode of presentation. Campbell explains why there is justification (of the sort it takes, it is assumed) with the help of an analogy—a linguistic analogy, as a matter of fact (cf. *op. cit., ibid.*), and in a partially similar way I will try to sort out when we do not have and when we have not rational justification in the case at hand with the help of a different case. If I do not use Campbell’s own analogy to explain what I see as the fundamental difficulty that Campbell’s approach faces, it is not because I think that his analogy is somehow particularly well suited to his purposes, so that there would be some special difficulty in using it to criticise of his views. It so happens tha the case I will use for clarificatory purposes is simpler while also more directly related to our case than simply by analogy since it is the case that Campbell himself uses to explain in a

general way (that is, before he comes to discuss the special case of demonstratives) just what grasp of sense is.

The case at issue is that of the sense of a connective or, in other words, the mode of presentation of the semantic value of a connective, as this is given by the truth function shown in its truth table. After giving some examples of extensionally equivalent connectives that differ in their senses, and with the help of some examples showing how they also differ in the inferences that are justified with one or the other connective, Campbell says:

So the reason why we need the notion of a ‘mode of presentation’ of semantic value is to explain why it is correct to use particular set of procedures in verifying or drawing the implications of propositions. The subject who grasps a particular mode of presentation of semantic value thereby grasps the justification for using a particular set of procedures for verifying or finding the implications of propositions.

If this model is right, it suggests that we should think of grasp of sense (...) as what causes, and justifies, your use of a particular pattern of use of the term—a particular set of procedures for justifying and finding the implications of propositions involving the term.

(Loc. cit. p. 196)

Let me spell out the sense in which I find that these comments to be right with the help of a couple of (very simple) examples. If one is asked to verify the proposition ‘A or B’, when given as data the assumed facts that A is false and B true, one uses one's understanding—one's grasp of the sense— of the connective ‘or’ to *reflect* that it is enough that one of the two, A or B is true for ‘A or B’ to be true, and that this sufficient condition is satisfied in the case at hand, since B is assumed to be true, so

that the verification is thereby complete. Again, if one is asked whether ‘A or B’ is an implication of A, one can use the very same understanding of the connective to *reflect* that since it is enough that one of the two, A or B, is true for ‘A or B’ to be true and A may be assumed to be true in the case at hand, it is mandatory that ‘A or B’ is also true. These reflections could perfectly well be explicitly put in the form of the procedure: “to verify whether ‘A or B’ is true, verify whether one of the two, A or B, is true. First, find out whether A is true. If A is false or not known to be true, find out whether B is true ...”.

The procedures at stake in these cases are undoubtedly procedures “within reach” of the thinking person. And I think it is not very controversial—at least not in the present discussion context—to say that someone capable of using such procedures has *rational* justification for the conclusions he reaches when verifying or finding implications of propositions. Now, I do not think that *only* the person that is actually presently able to apply such procedures explicitly possesses rational justification for such conclusions. I think that the capacity the subject is exercising in the cases at stake is “the very same, understanding-based capacity he would be exercising in a real case in which he had the information that [say] A is true and is false and has to evaluate the alternation ‘A or B’” (Peacocke, “Implicit Conceptions, Understanding and Rationality”, p. 45). Only, of course, he would be exercising that capacity *implicitly* and show only *implicitly* his understanding of the sense of the disjunction. And I think that we should allow that a subject that exercises his capacities in this way is also *rationally* justified or entitled to the conclusions he reaches, since it is the very same “understanding-based” capacities which he is using that gave justification

in the explicit case (cf. Peacocke's "Implicit Conceptions, Understanding and Rationality", § 1).

In these cases of exercise of capacities —be it explicit or implicit— where it is legitimate to regard the subject as rationally justified or entitled, the procedures he uses are either procedures he can formulate and follow explicitly, or at least procedures he uses only implicitly but could be brought to recognize if certain cognitive "complements" were realized in the subject: he would need to make the procedures explicit to himself in the first place, and this seems to require certain habits of reflection —not to mention factors like time or willingness— and the possession of some conceptual resources (at least some conception of truth and false) to develop the potential behind his implicit possession of the notion of disjunction.

Bearing all this in mind, I think one should fully agree with Campbell's claims at the end of his text that I quoted, if the term 'procedures' is given a *personal* meaning, that is, when these procedures are regarded as procedures which are either explicitly or *implicitly* carried out —but in the latter case, only in the sense of 'implicit' that has been explained in connection with the examples above.³⁰ In contrast with this, I do

³⁰ That is, in the sense of 'unthematized' —not fully "brought to light" and attributable "at the personal level"— not in the very different sense usual in the cognitive sciences since its introduction by Chomsky in connection with knowledge of grammar of the mother tongue, which applies to subjects only in virtue of their having some subpersonal mechanisms. Cf. the comments above in section 2, n. 18. As can be seen, I am sticking to the terminology with 'tacit' and 'implicit'. On the one hand it seems like a good idea to use a new term (which, moreover, seems to have a certain philosophical "pedigree"), since the phenomena described are clearly different. On the other hand, one might think that the use of 'implicit' or 'tacit' is perfectly natural in connection with knowledge —procedures, awareness, etc.— that can be attributed to a person but which is not explicit knowledge of that person —procedures he uses explicitly, awareness he can immediately express or articulate,

not think we have any reason at all to talk of rational justification or entitlement of a subject if what we mean by ‘procedures’ are *subpersonal* procedures of one of our cognitive systems, the perceptual system, say. And it is obviously *this* sense of the word that is given to it in Campbell’s answer to the question put to him about the subject’s grasping of the justification for the subpersonal procedures. Hence, we should conclude that his answer to his own query cannot be right. If *rational* justification is what is at stake, the subject —simply *as a person*— cannot have justification for such supersonal procedures. And viceversa, if there is justification for them, this justification is only for some subpersonal procedures or algorithms relying on some (subpersonal) information to be activated, rather than others. That is, the sort of justification provided for reliable mechanisms and known only to experts knowledgeable about the workings of such mechanisms. Both kinds of justification may be perfectly in order; but they should be kept separate.

No difficulties of the kind that face Campbell’s theory face the approach to demonstrative modes of presentation I have expounded in the previous section, since “cognitive access” in this approach has been modulated to a *personal* key: *attention* —*selecting out*— is regarded as a personal —as opposed to subpersonal— process. Hence, things we can say which express intuitions are in principle in order. Things such as when we are perceiving an object we are —at least in central cases—

etc.— and that, moreover, it is the Chomskian use, applicable to subpersonal processes, which is unnatural, even if it is widespread. On this basis, one might try to “recover” what is perceived to be the “natural” use. I remain undecided about which is the wiser terminological decision, but in this dissertation I use ‘implicit’ (or ‘tacit’) in an *un-Chomskyan* way, using the expressions ‘psychological reality’ or ‘psychologically real’ when the Chomskyan notion is at issue (see below).

conscious of it *as attended to*, that is, according to my approach, *as “selected out”* by “*bundling up*” the properties of it of which one is conscious, or, subjectively speaking, by *binding* the qualia whose instantiation is caused by those properties — qualia of which we are also cognitively aware.

Furthermore, there is now nothing conceptually amiss in saying that the point of binding all those properties or qualities is to keep track of an object (where this expression is given much of its ordinary meaning) and to attribute to a person at least implicit knowledge of that “point”. Equally, there is nothing wrong with saying, in the more specific case of vision, that the point of linking all those properties or qualities to a location at a given moment may be to make that object which has those properties or corresponding to those qualities “stand out”, or that the point of linking all those properties or qualities to a succession of locations —in the case of vision of a moving object— is that of keeping track of the object thus associated with such properties or qualities.

Let me now, in the last section of this work, make some general remarks directed at making room for the kind of theoretical approach in which my proposal has found its setting.

7.5. The philosopher's mind: neither deep, nor shallow

In his commentary to Campbell's “Sense, Reference and Selective Attention”, Mike Martin criticizes Campbell's views as follows:

One might contrast Campbell's account with one on which one appeals to our knowledge of essential features of physical objects. For one might claim, a physical object is one which is distinguished from others by its spatio-temporal history—no two physical objects of the same kind can occupy the same place at the same time.... So, if one is knowingly to pick out a physical object, then one will be rational only if one takes it that a different object must be in mind where one picks out something at a discrete location, unless one has specific reason to think otherwise....

Here the explanation stays solely at the level of what is manifest to us about experience.

(“The Shallows of the Mind”, p. 90)

Martin is contrasting an account which, like Campbell's, appeals to scientific theories with one that appeals to our knowledge of what it is to be a physical object. There would be no point in appealing to science to establishing the point that our awareness of the fact that every object has a distinctive spatial location is involved in our “picking it out”, and so consequently objects are presented to us as essentially *located*. As is made explicit in the last two lines of the text quoted, the suggestion appears to be that a kind of explanation that remains at the level of “what is manifest” to us about experience *suffices* for establishing this point about location, and that an account based on empirical psychology—or any other science—would therefore be out of place. However, I suggest accepting either of these tenets would be wrong.

With regard to the first, it seems natural to hesitate in attributing to Martin what his words would naturally suggest, because it seems very dubious that the explanation that he gives about the role of location *stays solely* or *remains* at the level of “what is manifest to us about experience”. It is one thing to say that a claim of ours *is founded*

on what “is manifest” to us about experience, and quite another to claim that it is *exhausted* by what is thus manifest. And the first idea is, I think, much more plausible than the second.

In this way one is led to rise the question about the scope we should give to the word ‘manifest’ in such methodological or metaphilosophical reflections. In other words, what is the nature of the knowledge we should be appealing to here? One possibility—which I surmise is close to Martin’s thought— would run roughly as follows: we, as theorists, decide what the relevant traits we will use for giving explanations are on the basis of something like asking people (including ourselves) about their common sense thoughts and experiences, and abiding by their intuitions concerning them. A theorist will ground what is philosophically relevant about perceptual experiences in the case at issue *solely* on the basis of what affects our conscious experiences *in a manner that we can easily recover*, or what is *immediately* accessible to us through introspection. Only facts established *that way* would count for confirmation or otherwise of any contending proposals.

Now, as theorists interested in characterizing “senses” or demonstrative modes of presentation of objects in perception we could also be suspicious about conferring such relevance on what is *patently* accessible to everyone. Is it not possible that relevant aspects of the phenomena under study are not “manifest” in the sense of uncontroversially *immediately* accessible to subjects? Could it not be that, in what appears to be just thus and so on the basis of a more or less casual act of introspection there is actually ample room for discussion, for rational reconstruction, or in short for cases in which theory overrides intuitions? I think that some sound motivation for this

kind of position can be found in the preceding sections. As a general position it does not coincide with the “contrasting view” that Martin advances in his commentary on Campbell’s views on sense. In the new view, what we know in an “implicit” manner about what constitutes our experiences could only be made explicit through a process of *rational discussion of theorizations* .

As applied to our problem, it would seem that perceptual demonstrative modes of presentation should be regarded first as theoretical elements that we suggest and justify at an “intermediate” level of analysis (i.e. neither scientific, nor “manifest”). We are explicitly conscious of those modes of presentation, and of what they are, only through theoretically oriented analysis or reasoning. Nevertheless, they remain within the boundaries of what subjects of experience and action are able to recognize, if they are brought to recognize them in an adequate way, and because of this it is fair to say that modes of presentation are tacitly immediately accessible to subjects as “in use”, for “guiding” perceptions and actions. According to this position then, we have, on the one hand, an *explicit* theory of such modes of presentation and of the grasping of these which is *a priori* in character.

Indeed, there are several things that it is natural to hold that subjects know tacitly, or are tacitly entitled to assume *a priori*, according to such a view. Things such as: they are aware of objects in perception *as attended to*; or that the properties or qualities they appreciate as bundled up in an object when attending to it correspond precisely to the object attended; or that they are aware of qualia as belonging to objects, which involves being aware of qualia as bound. In saying that they tacitly know or are entitled tacitly to assume these things *a priori*, I mean in the first place

that knowledge of these things which is particular and not general —not the knowledge of a generalization, but knowledge referred to particular occasions— and which is *implicit* does not require relying on perception beyond what belongs to “enjoying” those experiences, something that I have suggested we should explain in terms of implicit cognitive awareness of qualia.³¹ Furthermore, in saying that such items are known implicitly *a priori*, I mean that *explicitly* making the corresponding claims —on top of “enjoying” the particular experiences— requires *only* the possession of the concepts involved, that is the concepts of attention, binding, and so on. In other words, we would be following in the footsteps of the postulation of diverse tacit capacities on which we reflected at the end of section 2, after discussing the particular case of the cognitive awareness of qualia. Unfortunately, however, here I cannot rely on a well articulated and widely supported theory of the *a priori*.

But, even if I cannot appeal to a well developed theory of a priori knowledge here (and even less to try to develop one myself) I suggest that there is nothing amiss in saying that the kind of *a priori* knowledge at issue —or rather, its *explicit* version—

³¹ I think the notion here is an extension of the notion of *relativized a priori* which Peacocke has recently introduced (cf. “Explaining the A Priori: The Programme of Moderate Rationalism” p. 267, and which applies to e. g. the judgement that *that* shade (perceptually given) is red and not green. The subject is entitled to a judgement such as this, says Peacocke, to the extent to which his judgement “does not rely on the content of her perceptual experiences, beyond that content needed for having the relevant concepts in the first place” (*loc. cit.*). And this is precisely what happens in a normal situation in which he makes that judgement. Since having the content corresponding to ‘*that* shade’ is possible only by perceiving the shade at issue, this perception is “not counted” —as it were— when we pronounce on about the (relative) a priori character of the judgement. In a similar way, I suggest, the awareness of qualia, and even of qualia as belonging to an object normally require perceptual episodes which should “not be counted” in deciding about the (relative) a priority of the claims in the text.

is compatible with the claim that such knowledge is *a posteriori* impugnable. And this, looked on in a positive, amounts to saying that such knowledge is also empirically *confirmable*. I think that the model here is provided by Chomskian theories of grammar. It seems to me that when generative linguists argue for and against theoretical proposals to account for grammatical phenomena on the basis of intuitions about language they eventually arrive at generalizations and other theoretical claims that they are entitled to hold, and which, if true would constitute knowledge. And I think we should agree that this kind of knowledge, reached in the way briefly described, is *a priori*. On the other hand, the generalizations and claims postulated aim to account for an underlying reality which psycholinguists and neurologists try to study by experimental methods. And such inquiries are centrally relevant for confirming or refuting whether such generalizations and claims have “psychological reality”.

Now, my suggestion is that what we need to apply such views to the case of our interest is a notion of a “psychologically real” perceptual demonstrative mode of presentation, much in the way in which I think *a priori* knowledge about grammar, reached by means of abductive reasoning *from* “what is manifest” to our grammatical intuitions, is empirically confirmable (or refutable) as soon as we have a general adequate notion of a “psychologically real” grammar. In the same way in which it is first possible to raise the claim that a grammar which has been articulated on the basis of fundamentally *a priori* reflections reflects really a mental-cognitive capacity with the help of this notion, the claim that a particular view of perceptual demonstrative modes of presentation, articulated on the basis of fundamentally *a priori* reflections

captures really a mental-cognitive ability, as soon as we had the explicit supplement of a notion of a “psychologically real” perceptual demonstrative mode of presentation.³²

Finally, I suggest that this way of looking at things can make sense of Campbell’s attempt to put the discussion of “senses” at the level of subpersonal processes and mechanisms. The thinking is that his contribution may be regarded as making suggestions for a “psychologically real” theory of perceptual demonstrative modes of presentation, in the same way in which we can make claims to the effect that a particular grammar has that property. In the same way that these claims require the notion of a “psychologically real” grammar, Campbell’s efforts would require the supplement of a parallel characterization of the notion of a “psychologically real” perceptual mode of presentation, which has not been given until now.

From this viewpoint, in recalling how Campbell’s concrete proposals on the “senses” of visual and auditive perceptual modes of perception in “Sense, Reference and Selective Attention” relied on an empirical theory which postulates *features*, we can realize that those proposals may be seen as claims that something like the modes of presentation arrived at by an *a priori* route in the theory I have been defending can be regarded as psychologically real. For, if the suggested way of looking at Campbell’s proposals is right —that is, if he can indeed be regarded as advancing

³² In “When Is a Grammar Psychologically Real”, Peacocke showed how it is possible in principle to capture the notion of a “psychologically real” grammar. The application of such a notion opens the way for an explanation of our knowledge of grammar at Marr’s three levels: the level of what information is handled, the algorithm level, and the level of neurophysiological realization. What I am suggesting for the case of perceptual demonstrative modes of presentation is a parallel of this

proposals for a “psychologically real” theory of perceptual “senses”— a sort of bridge is needed to reach those proposals. And it may be thought that my explanation of the elements on which attention works could provide an important part of this bridge, since (we can recall from Chapter 5) these seem to be fundamentally the same kinds of entities that an empirical theory could use, with the exception that they respond to different individuating needs. I believe it is when this bridge is in place that Campbell’s theory could first begin to be seen as the “counterpart” in cognitive science, *at Marr’s level 1*, of a philosophical hypothesis established by abductive procedures about our implicit knowledge and notions.³³

³³ The fact that Campbell’s proposal and mine depend on concrete psychological theories in a quite different way is a reflection of their differing status. While Campbell’s proposal in “Sense, Reference and Selective Attention” seems to depend on the truth of something very much like Treisman’s theory of selective attention, since that proposal appeals directly to it, my own proposal would only be *a posteriori* refuted by an empirically well supported theory of attention that is entirely without #features# and any notion of “binding” #features#. It does not stand or fall with Treisman’s particular model of how these elements work.

Now, I think these reflections and possibilities provide reasons for regarding what I described above as Martin's second tenet in "The Shallows of the Mind" as wrong, that is, the claim that there is no point in appealing to science for establishing claims such as the idea that our awareness of the fact that any object has a distinctive spatial location is involved in our "picking it out". Martin is indeed right when he claims that "we cannot simply read Campbell's account off from ... empirical hypothesis" (*op. cit.*, p. 91), and I have tried to argue in detail in favour of a claim like this. But, on the other hand, I believe science has a major role to play in the formulation and testing of *empirical theories of perceptual modes of presentation*. I hope then to have contributed to showing why in spite of being incorrect as a *philosophical* theory of such modes of presentation, even if preliminary and in need of essential supplementation, Campbell's work is a most valuable contribution to the development of an *empirical* theory of such modes of presentation after all. Fortunately, we are not "stuck here in the shallows of the mind" (*ibid.* p. 97).

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