

Vision-Based Demonstratives

Hemdat Lerman
Wolfson College, Oxford

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Abstract

How should we account for our ability to entertain simple, vision-based demonstrative thoughts about particular objects (that is, our ability to entertain thoughts about particular objects simply on the basis of seeing them)? In this thesis I propose an account of this ability that accords with the common-sense view that seeing an object puts one in a position to single it out by visually attending to it, and that this provides one with the ability to entertain demonstrative thoughts about it.

An account of this type requires that we account for what it is to see a particular object and to visually attend to it without appealing to *particular* demonstrative abilities. However, it has been argued that a notion of seeing an object, and similarly a notion of attending to an object, which is accounted for in this way is unsuitable for accounting for demonstrative abilities.

I argue that there is no real problem: what we need is a notion of experiential content which is concept-dependent only in a general manner. That is, the account of the relevant notion of experiential content requires appeal to the subject's conceptual abilities, but the account is not given in terms of specific conceptual abilities (especially, not specific demonstrative abilities). I then characterize a notion of attention to a seen object which can be accounted for without appeal to particular demonstrative abilities, and explain how attending to an object in the relevant sense provides the subject with the ability to think about the object demonstratively.

It is widely agreed that spatial location plays a central role in an account of demonstratives. I explain this role in terms of the role played by location in visual attention to the object and the subject's grasp of the fact that he attends to the object.

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Introduction

How should we account for our ability to entertain simple, vision-based demonstrative thoughts about particular objects (that is, our ability to entertain thoughts about particular objects simply on the basis of seeing them)? In this thesis I propose an account of this ability that accords with the common-sense view that seeing an object puts one in a position to single it out by visually attending to it, and that this provides one with the ability to entertain demonstrative thoughts about it. Specifically, I shall spell out what seeing an object and visually attending to it involves, in a way which will clarify how visually attending to a seen object provides the subject with the ability to think about the object demonstratively.

If we are to maintain the common-sense view, we should construe seeing a particular object and visually attending to it as explanatorily more basic than the demonstrative ability to which they give rise. However, it has been argued that if we explain seeing an object and attending to it without appeal to the relevant demonstrative ability, we shall not be able to account for how it is that these phenomena provide the subject with a demonstrative ability; specifically, we shall not be able to account for the fact that they provide the subject with knowledge of which object is in question. In Part I, I argue that the consideration that gives rise to this worry only requires that we acknowledge a *general* link between seeing and the subject's conceptual abilities; that there is no need to appeal to the *particular* demonstrative ability which the experience is supposed to explain. And I shall suggest a view of experiential content according to which such contents are concept-dependent only in this general sense. In Part II, I characterize a notion of visual attention which accounts for the subject's ability to entertain demonstrative thoughts about the object he is attending to, and which is explanatorily more basic than the ability accounted for.

In Part I, then, I argue for a view of experiential contents according to which such contents are concept-dependent only in a general sense, thus providing us with a notion of experiential content suitable for the account of demonstrative abilities. I should clarify that the starting point of the discussion is that, at a general level, our ability to experience things and our ability to think about them are mutually dependent. At this general level, it is also the case that the ability to experience particular objects and the *general* ability to entertain demonstrative thoughts (i.e., the ability to entertain demonstrative thoughts about *any* seen object) are interdependent. What is at issue is the relation between the *particular content* of a *particular* experience and the subject's conceptual abilities; I ask whether an account of the former requires appeal to the latter and if it does, whether we need to take into account only general relations between the experience and the subject's conceptual abilities, or whether an appeal to a specific conceptual ability (or a specific set of conceptual abilities) is what accounts for the particular content of the experience in question.

Part I consists of five chapters. In Chapter 1 I argue that one cannot account for a particular experiential content without some appeal to the subject's conceptual abilities. The following three chapters contribute to showing that an account of such content does not require appeal to the specific demonstrative ability to which the experience in question gives rise (where demonstrative abilities are the only plausible candidates for being the specific conceptual abilities which explain the content of particular experiences). The main opponents in these chapters are John McDowell and Bill Brewer who argue that if experience is to play a role in accounting for our conceptual abilities, then an experience must be viewed as a special type of attitude towards a proposition which, like other occurrent propositional attitudes, involves the

actualization of relevant conceptual abilities. Further, they suggest that the relevant conceptual abilities are demonstrative abilities.

In Chapter 3 I argue that McDowell and Brewer do not provide a conclusive argument for the claim that the content of an experience must involve the actualization of conceptual abilities. Chapters 2 and 4 show that we cannot, generally, construe experiential contents as involving the actualization of demonstrative abilities. First, in Chapter 2, I discuss the type of account of demonstrative abilities one is committed to if one is to construe the experience of a fine-grained property as a matter of the actualization of a predicate which the subject possesses in virtue of demonstrating the given instance of the property. I show that the actualization of such an ability must involve the subject's intentionally attending to the fine-grained property. Thus, one must either accept that experiential content cannot generally be construed as a matter of the actualization of demonstrative abilities, or opt for the unintuitive view that we experience only the fine-grained properties we are intentionally attending to. I then argue that the aspects of the experiential content which cannot be accounted for in terms of the actualization of demonstrative abilities are also not to be accounted for in terms of the relevant non-actualized abilities (i.e., the abilities which would have been actualized had the subject attended to the relevant environmental aspects).

In Chapter 4 I examine what may seem to be empirical support for holding that we do not experience unattended environmental aspects (i.e., aspects the subject does not intentionally attend to). Empirical data suggest that our intuitions regarding what we experience and the effect which our experience has on our activities are often mistaken. This may encourage one to opt for the unintuitive option that we experience only the fine-grained properties we are intentionally attending to, instead of accepting that there are aspects of our experience that cannot be accounted for in terms of the

actualization of demonstrative abilities. In response, I point out (i) that the data are consistent with the claim that we experience unattended aspects and that such experiences play a role in the account of the subject's activities, and (ii) that an interaction with the environment which does not involve experience of unattended aspects and its effect on the subject's reactions is significantly different from the way in which we, in fact, normally interact with our environment.

If the arguments presented in Chapters 1 to 4 are correct, then we have good reasons for accepting that states whose content is the result of the actualization of conceptual capacities are not the only states which involve the subject's grasp of normative relations between his state and other propositional attitudes of his; thus we have reasons for accepting that experiential states involve such a grasp, even though their content is to be explained in terms of the actualization of experiential capacities which are not a type of conceptual capacities. Chapter 5 includes a summary of the considerations leading to this view and some clarification as to how, on the given view, particular experiential contents are to be specified.

Given the view of experience suggested by the discussion in Part I, I turn in Part II to discuss how an experience of an object enables the subject to single out the object by attending to it. The challenge, again, is to characterize a notion of visual attention to an object which makes it suitable for explaining the subject's ability to entertain demonstrative thoughts about objects. Specifically, the subject's attending to an object in the relevant sense should be explanatorily more basic than the demonstrative ability it gives rise to and account for the subject's knowledge of which object he is thinking about when he entertains such thoughts on the basis of the relevant act of attention to the object.

The experience of objects as the particular objects they are is based on the organization of the information about objects' seen features *as information regarding*

the seen features of given objects. Conscious visual attention involves the subject's sensitivity to this organization. That the information is made available to the subject organized in this way is due to the ways the visual system binds together visual information. In chapter 6, I suggest that what provides the subject who is attending to an object with knowledge of which object he is attending to, and thus with the ability to think about the object demonstratively, is the combination of: (i) the fact that information from a given object is made available to the subject as information from one and the same object, and (ii) the subject's grasp of this relation between the object and the relevant information.

The view presented in Chapter 6 resembles, in various respects, John Campbell's account of demonstratives in *Reference and Consciousness*. However, Campbell does not seem to view as pressing the question which is the focus of Chapter 6 - that is, how conscious attention, construed as more primitive than the subject's ability to think about the object demonstratively, can be what provides the subject with knowledge of which object he is thinking about. At least one possible explanation for this is that on his view the characterization of the functional role of a demonstrative need not involve an appeal to the way in which, from the subject's point of view, the experience bears on how to evaluate demonstrative thoughts and which implications can be drawn from them. In Chapter 7 I argue that this view is unjustified.

It is widely agreed that spatial location plays a central role in an account of demonstrative thought, though views differ as to what this role is. In the last two chapters I discuss the views of Gareth Evans and John Campbell on this matter, and clarify what role is played by location on the account suggested in Chapter 6.

According to Evans the ability to locate the object is necessary for the subject to distinguish the object of his thought from any other object. In Chapter 8 I argue that

the only way in which this view can be made tenable already requires that the subject be able to distinguish the object, and thus that it cannot be that the ability to locate the object is what explains the ability to distinguish it. According to the view suggested in Chapter 6, what distinguishes the object for the subject is that he grasps the fact that he is attending to it. On this view, then, part of the explanation of why location is central is that the availability of information about the object's location is central to the subject's grasp of the fact that he is currently attending to the relevant object.

In Chapter 9 I turn to Campbell's view. On his view what matters to the subject's ability to think demonstratively about a seen object is its apparent location. When evaluating demonstrative thoughts and acting upon them the visual system selects the information relevant for the evaluation of the thought or for the guidance of the action on the basis of location, and Campbell holds that it is the fact that the subject identifies the object as the object at the apparent location which determines for the visual system which location is relevant to selecting information for the task in question. I point out a difficulty with this picture and suggest an alternative way in which the subject's consciously attending to an object can enable the visual system to select information from the correct location. An object's apparent location still plays a role, on this alternative picture, in enabling the subject to focus his attention on it. But this role is explained by appeal to facts about what, from the subject's point of view, makes an appearance an appearance as of a single object, distinct from others. I argue that this is the way to explain the role of apparent location even if the visual system selects information in the way Campbell suggests it does.

I should briefly note that the discussion in the thesis presupposes a realist view of the objects and properties we experience. However, the account I suggest, if accepted, supports such a view as it contributes to spelling out the idea that our ability

to think about mind-independent objects is explicable in terms of our primitive grasp of the actual relations which obtain between our experiences and the way things are in our environment.

I should also explain that I focus on vision in order to make the discussion manageable. Ignoring the other senses is justified by the fact that, in the case of sighted people, vision is the dominant sense. Furthermore, there seem to be clear cases in which visual-experience is the only experience relevant to the subject's ability to identify the object. (I am assuming that, as the discussion concerns the relation between the experience and the subject's thought, the contribution of non-visual information at the sub-personal-level need not be taken into account). Note however that the subjects under discussion are ordinary subjects with, at least, vision, hearing and touch, and that the subject's primitive conception of perception and objects, to which I often appeal in the thesis, concerns all three senses. Since I do not make any particular claims about the structure of this conception in general, the restriction to vision does not create a problem regarding the relation with the subject's general primitive conception.

A possible worry about the restriction to vision is whether it limits the implication of the following discussion to those particular cases in which the subject, when singling out an object, relies on vision alone. I am relying on a non-trivial assumption that the discussion is relevant to other cases as well; that is, that the account of the contribution of vision can be later developed into a more comprehensive picture which includes the contribution of other senses. In effect, it might be that without this assumption the discussion is irrelevant to the account of an ordinary subject's ability to think about particular objects, since it might be that, even when a subject relies on vision alone, his conception of the seen object depends on his

disposition to immediately take information which could be provided by other senses to be from the same object when the object is experienced the relevant way.

Some terminological notes:

Since the discussion is limited to visual experience I use 'experience' as meaning visual experience. Further, I use 'seeing' and 'experiencing' as interchangeable.

Seeing and experiencing are both taken to be conscious. When I wish to speak generally about gathering information from the environment by means of the senses - that is, when the result could, but need not, be a conscious state - I shall use 'perception' or 'vision'.

When I speak about the seen (experienced) object (or any other environmental aspect) I refer to the actual object in the environment.

'The way an object is experienced by (or presented to) the subject', and 'the way it appears to the subject' are all used interchangeably to refer to the aspect of the experience which explains variations in the information available to the subject from a particular environmental aspect.

Talk about appearance is understood disjunctively: it is either a case in which an environmental aspect is seen or a hallucination.

I use 'information' in a rather loose way, close to the everyday notion. Experience is said to provide the subject with information about the environment in virtue of its being the product of a mechanism which is a reliable source of knowledge. Understood in this way, information can be veridical or non-veridical. (When I wish to refer only to veridical information I shall say this explicitly). I shall also speak about the information encoded in sub-personal perceptual states. In this

case informational contents are ascribed in virtue of the representational role the state plays in processing information and controlling action and thought (at the sub-personal-level). It will be clear from the context whether I am discussing experiential information, information at the sub-personal-level or, generally, information which can be available both at the sub-personal-level and to the subject.

Following Evans (1982, pp.124-5) I shall say that information is from an object (or some other particular environmental aspect) when, if the mechanism which produces the relevant informational state is functioning properly, the content of the state is determined by the object's state.

By 'objects' I mean to refer, roughly, to space occupiers which we can experience and which are causally connected in the sense that each state of the object at a time is causally dependent on its earlier state and also in the sense that the possible causal interactions which each of the simultaneous parts of the object can undergo are constrained by the part's relation with the other parts of the object. I shall discuss clear cases such as trees, cats, tables, and ignore problematic cases.

As mentioned above, I shall characterize a specific notion of visual attention to an object which I take to play a central role in explaining demonstrative abilities. The relevant notion involves the subject's (intentional) selection of an object on the basis of his experience, where this, in turn, involves the selection of experiential information by the subject. There are several other senses in which the subject's interaction with the environment involves attention. I shall attempt to clarify the sense in which the expression is used whenever the use changes.

Part I: Is the content of experience concept dependent and if so in what way?

Introductory note

I mentioned in the introduction that I am taking for granted that, at a general level, our experiences depend on our conceptual abilities: generally, we cannot understand what it is for a subject to have an experience without appeal to his ability to think about the experienced environment. This still leaves open the question of whether an account of what it is for a particular experience to have the particular content it does (rather than others) requires appeal to the subject's conceptual abilities. In addition, there is room for asking whether what is required is merely that relevant connections between the experience and the subject's conceptual abilities should figure in the account (when this is the case I shall say that there is only a general dependence on the subject's conceptual abilities) or whether we can fully account for what is unique to the particular content in question in terms of a specific conceptual ability (or a specific set of conceptual abilities). In this Part I discuss these two questions. It will be argued that one cannot account for a particular content without appeal to the subject's conceptual abilities, but that the dependence is only general in the above sense.¹

The position I am arguing for occupies the middle ground between, on the one hand, Evans's view according to which no appeal to the subject's conceptual abilities is required when accounting for the content of a particular experience, and on the other hand, McDowell and Brewer's view according to which the content is to be (fully) accounted for in terms of specific demonstrative abilities (abilities to think

¹ Hereafter, when I speak about an account of a particular experiential content or simply the account of an experiential content I mean to refer to the account of what it is for a specific experience to have the particular content it does (rather than others).

demonstratively about each of the currently experienced aspects). I shall argue that both views are indefensible and clarify what the suggested middle position is.

When discussing different views as to whether or not experiential contents are concept dependent in both the general and particular senses mentioned above, I shall refer to views, such as Evans's, according to which there is not even a general dependence of the content on conceptual abilities as strong-non-conceptual views, and to views, such as McDowell and Brewer's, according to which there is a particular (and therefore also a general) dependence as strong-conceptual views. The middle position I am arguing for involves the rejection of the two strong views, and is thus weakly-conceptual and weakly-non-conceptual. I shall say that according to the first view experiential contents are strongly-non-conceptual, according to the second strongly-conceptual, and so on. Note that this is not meant as suggesting that there are different types of experiential content. Rather I am using these terms to refer to what is supposed to be the same type of content where the difference lies in the view held regarding how such content is to be construed.² I should mention that often, when a distinction between two types of concept-dependence is made, what I call a strong-conceptual view is regarded as the conceptual view, the opposing view is regarded as non-conceptual, and then a further distinction between two non-conceptual views is made.³ The difference is merely terminological. I prefer the above terminology because it indicates that the fact that an experiential content depends on the subject's conceptual abilities is not less important to our understanding of what having the

² This is not to deny the possibility that there are differences between the ways in which different aspects of experiential content should be accounted for. The claim is only that, to the extent that we are interested in the experience's making information available to a (concept-possessing) subject, the relation between the content and the subject's conceptual abilities is generally of the same type, thus in this respect there is uniformity. This is not a trivial claim and I am not suggesting that it can simply be taken for granted as a general assumption. However, the views I am arguing against are presented as uniform in this sense.

³ See for example Peacocke 1992 pp.90-92 and Bermudez 1995.

content involves than the fact that the account does not require appeal to particular conceptual abilities.

I should emphasize that I am characterizing the type of dependency which defines what makes a content conceptual or non-conceptual (and to what degree) in terms of what is required for an account of what it is for an experience to have the particular content it does. Many writers who intend to discuss whether particular contents depend on the subject's possessing particular conceptual abilities draw the distinction between conceptual and non-conceptual content in terms of whether or not the subject must possess the concepts required for understanding the specification of the content;⁴ similarly when the general dependence is discussed, the question of whether or not there is such dependency is normally presented as a question as to whether or not having an experience (with the relevant content) requires that the subject possess any conceptual abilities at all. Drawing the distinction in this way will not capture the distinction I am interested in. It seems clear that if accounting for having an experience with a specific content requires appeal to the subject's conceptual abilities, then one cannot have such an experience without possessing the relevant conceptual abilities; but, at least in the case of the dependence of the particular content on particular conceptual abilities, the converse implication need not hold. For example, one might maintain that a subject cannot have a particular experience with a particular content without possessing certain demonstrative abilities (abilities to think demonstratively about the currently experienced environmental aspects) simply because, given that the subject possesses certain general abilities, experiencing an environmental aspect is sufficient for providing him with the ability

⁴ A few examples are Bermudez (1995), Crane (1992 pp.142-3) and Brewer (1999 p.149, though Brewer adds another clause to his definition). Such a definition is also implicit in what Evans says on p.159 (1982). The above formulation is meant only as a general indication of the type of characterization in question. Different writers use different formulations which may differ, sometimes quite significantly, from the above formulation.

to think about it demonstratively (as would be the case if experiencing the aspect and possessing the relevant general abilities is what constitutes having the particular demonstrative ability in question). Now, the fact that X is sufficient for Y does not entail that Y must play a role in the account of X, and if it is not required for the account, then there is an important sense in which X is independent of Y even though we cannot have X without Y. It is exactly this sense of independence which is relevant in the context of this discussion, as the motivation for discussing the relation between experiential contents and the subject's conceptual abilities is the need for a notion of experiential content which is prior in the order of explanation to the conceptual abilities the relevant experience is supposed to explain.

Some writers characterize what they mean by conceptual content by saying that it is of the kind that can be the content of judgements and beliefs.⁵ Not all views I regard as strongly-conceptual are conceptual on this definition. It might be held that a particular content is wholly accounted for in terms of particular conceptual abilities, though the content itself is not a matter of the actualization of these abilities. Categorizing views of these two types together is convenient in this context, since I wish to rule out any view according to which experiential contents are explained in terms of demonstrative abilities.⁶

To recap, I regard as conceptual any view according to which some appeal to the subject's conceptual abilities is required in order to account for what it is for a particular experience to have the particular content it does. Such a view is strongly-conceptual if it is suggested that what is unique to the content (in contrast to other

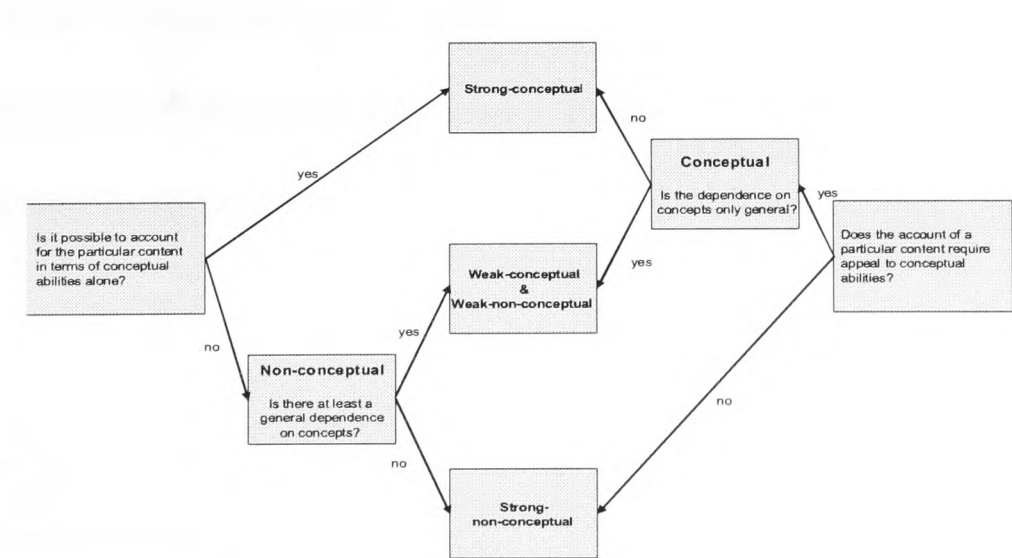
⁵ See for example Peacocke (2001 p.243), McDowell and Brewer.

⁶ In principle, there might also be room for a view according to which the content is not wholly explained in terms of specific demonstrative abilities but certain *specific* demonstrative abilities should figure in the account. As far as I can see the arguments against the strong-conceptual views are sufficient for ruling out views of this type. This comment makes clear that my aim here is merely to present convenient tags for the following discussion.

experiential contents) is to be explained by appeal to specific conceptual abilities, and otherwise - that is, if only a general dependence on the subject's conceptual abilities is suggested - it is weakly-conceptual. A view which is not strongly-conceptual - that is, a view which does not suggest that one can account for what is unique to the content in terms of the subject's conceptual abilities alone - is regarded as non-conceptual. Such a view would be strongly-non-conceptual if it is suggested that no appeal to concepts is required (thus, if it is not conceptual), and weakly-non-conceptual otherwise. (These distinctions are also summarized in the diagram below).

Part I is structured as follows. In Chapter 1 I argue that we should reject the strong-non-conceptual view. In Chapters 2 and 4 I argue that the strong-conceptual view cannot be maintained and in Chapter 3 I reject the argument by which strong-conceptualists attempt to show that their view is incumbent on us. Chapter 5 summarizes the arguments and develops further some issues regarding the suggested middle position.

I should emphasize that I do not intend to develop and defend a detailed account of all aspects of experiential content. The aim is only to outline a general picture which will serve as a basis for the discussion in Chapter 6 of how experience enables demonstrative thoughts about particular objects.



1 Reasons for rejecting the strong-non-conceptual view

I

In this chapter I shall argue that one cannot account for what it is for a particular experience (i.e. a particular conscious perceptual state) of a (concept-possessing) subject to have the particular content it does without appealing to the subject's conceptual abilities. I shall discuss Evans's view since he agrees that the experiences of concept-possessors are essentially linked with their conceptual abilities and yet suggests that the particular content of a particular experience could be accounted for independently of this link.⁷ My claim will be that this essential link between experiences and the subject's conceptual abilities must also be apparent in any consideration regarding particular experiential contents. I shall consider two possible readings of how Evans suggests to account for the content of a particular experience, and argue that neither of them provides an acceptable strong-non-conceptual view. The discussion of the problems encountered by the two readings will clarify why, generally, strong-non-conceptual views are unfeasible.

I should emphasize that what is at issue is not the interpretation of Evans, but rather the possibility of a strong-non-conceptual view. Apart from a few occasional comments I shall not discuss the faithfulness of any of the readings to the text.⁸ I should also explain that when discussing Evans's view I normally use his terminology. When it is unclear how exactly he construes certain terms (e.g., 'internal states of the organism', 'perceptual input', etc.), I shall use them loosely and tighten up the use if a need to do so arises.

⁷ Some of the writers who explicitly maintain that experiential contents can be strongly-non-conceptual do not mean the claim to apply to the experience of concept-possessors (for example, this seems to be the position of Bermudez, Hurley and Peacocke (in his 2001)).

⁸ In fact, there is room for reading Evans as suggesting a weak-non-conceptual view of experiential contents (i.e., of the content of conscious perceptual states *of concept-possessors*).

II

Evans claims that for an internal state of a subject to be regarded as having a certain content - that is, as being a state in which the world is represented a certain way - 'it must have appropriate connections with behaviour - it must have a certain motive force upon the actions of the subject'.⁹ He goes on to say that perceptual informational states - that is, states produced in a subject by a perceptual mechanism in response to sensory input¹⁰ - 'have a content by virtue of their phylogenetically more ancient [than their connections with the concept-exercising and reasoning system] connections with the motor system...'.¹¹ What distinguishes cases in which the subject's perceptual informational states involve conscious experience from those in which they do not is that in the former 'the internal states which have a content by virtue of their phylogenetically more ancient connections with the motor system also serve as input to the concept-exercising and reasoning system. Judgements are then *based upon* (reliably caused by) these internal states';¹² or as Evans puts it on p.158 'we arrive at conscious perceptual experience when sensory input is not only connected to behavioural dispositions... but also serves as input to a *thinking, concept-applying, and reasoning system*; so that the subject's thoughts, plans, and deliberations are also systematically dependent on the informational properties of the input'.¹³

One might read Evans as suggesting here what I shall label 'a two-stage account of experience'. First, we identify a state which has a certain content in virtue of its connections with the subject's behavioural dispositions, where the connections in question are independent of any link with his concept-applying system (I shall

⁹ p.226. All references to Evans are to his 1982.

¹⁰ See p.124.

¹¹ pp.226-7.

¹² p.227.

¹³ For brevity's sake I shall often refer to the relevant system as the concept-applying system, or generally speak about the subject's conceptual abilities.

refer to such connections as ‘primitive connections’); and then, if this state is also linked with the subject’s concept-applying system, the content which the state has in virtue of the primitive connections with his behavioural dispositions is also the content of an experience (i.e., of a conscious perceptual state). Thus, on this picture, one has to appeal to the subject’s conceptual abilities only in order to explain what makes *a given content* - which has already been accounted for at the first stage, independently of whether the relevant state is also linked with the concept-applying system - the content of an experience (rather than merely a content of an unconscious perceptual informational state).¹⁴

Alternatively, Evans may be read as suggesting a milder strong-non-conceptual view which I shall label ‘a background-presupposing account’. On this view, when accounting for the particular content of a particular experience, one must presuppose, as a general background assumption, that the state whose content we are accounting for is linked with the subject’s concept-applying system. But given this assumption, specifying the relevant primitive connections between perceptual input and behavioural dispositions (without any further appeal to the subject’s conceptual abilities) will suffice for explaining what it is for the content to be the particular content it is rather than others. Thus, according to the background-presupposing account, specifying the primitive connections will not account for something which is a *potential* content of a conscious state if the link with the concept-applying system is not presupposed, while according to the two-stage account what is accounted for at the first stage is a content which *can be* the content of a conscious state independently of the assumption that a further link with concepts obtains. Correspondingly, on the

¹⁴ For such a reading of Evans see McDowell 1996 pp.49&51. McDowell’s formulation suggests that the contentful state accounted for in the first stage, if linked with the concept-applying system, *is* also an experiential state. The following objection applies to the two-stage view regardless of whether one accepts this or has a different view of the relation between the initial state and the experiential state.

two-stage account, the content accounted for at the first stage might equally be the content of a non-conscious state, while on the background-presupposing account the account applies exclusively to experiential contents. (It may seem that strictly speaking the background-presupposing account should be regarded as weakly-non-conceptual; for, ultimately, the link with the subject's conceptual abilities is part of the account. The strong-non-conceptual element here is the suggestion that there can be a specific part of the account that *explains* what it is for a particular content to be the content it is in terms which do not presuppose the subject's conceptual abilities. Note also that the view is consistent with allowing that the specification of exactly the same type of primitive connections, with a different background assumption, can account for other contentful states (specifically, states of non-concept-possessors). This is why such a reading can still accord with what seems to be Evans's motivation for a strong-non-conceptual view; namely, the thought that all perceptual contents, whether or not the perceiver is a concept-possessor, are explained in the same way).¹⁵

At least as far as concept-possessors are concerned, I accept Evans's view that only perceptual states which are linked with the concept-applying system are conscious. For I take it that saying that a perceptual state is conscious amounts to saying that the perceiver's state is such that, *from his point of view*, environmental aspects are presented as being a certain way; and that in the case of concept-possessors this means that the perceiver is in a position to take the content into consideration when evaluating thoughts, reasoning and planning without a need for any kind of further mediating step. (As for non-concept-possessors, I stay neutral about whether they can have conscious states). However, in contrast to Evans, I shall argue that it is impossible to account for a content which is linked with concepts in

¹⁵ I do not remember reading a text in which this second version is explicitly ascribed to Evans, though various people agree in discussion that this seems a plausible reading of him.

this way (that is, to account for what makes it the particular content it is) without presupposing the link. This claim, if correct, shows that a two-stage account is unfeasible regardless of how one proposes to account for the content at the first stage. I shall then clarify that the background-presupposing account is unworkable as well.

III

I start, then, with the two-stage account ascribed to Evans. How should we construe, on this reading, the claim that the content of primitive perceptual states is due to their primitive connections with the subject's behavioural dispositions? Evans's discussion of such states¹⁶ suggests that he is thinking about the states of primitive mechanisms (i.e., mechanisms that operate independently of links with the concept-applying system) which process perceptual information, making it available for the control and guidance of behaviour; where the states in question play a specific representational role in the processing of the information or directly in the control and guidance of motor processes.¹⁷ To say that a state of a certain mechanism has such a representational role is to say, roughly, that its occurrence affects the organism's reactions to the environment in a way which is an appropriate way to react (given the organism's current needs and goals) when the situation in the environment is of a certain type. Or more accurately, the state is said to be of a type which has a certain systematic effect on states of perceptual- and motor-mechanisms: an effect which, if the relevant mechanisms are functioning properly, makes the ensuing behaviour appropriate to a situation in which the conditions in the environment are of a certain type (given the organism's current needs and goals).

¹⁶ pp.154-8.

¹⁷ I shall assume that perceptual informational states are partly individuated by the type of perceptual input which normally causes them and partly by certain information-processing operations. Thus the subject's being endowed with certain input may count as such a state.

Such states have only brute causal effects (by which I mean effects that do not depend on awareness of the implications which the veridicality of the states' content may have for the appropriateness of the effect). Thus, it seems unquestionable that the place such a state occupies in the network of connections between input, output and other states of this type exhausts the idea that the state has a particular content; it thus also seems that the state's place in such a network of connections fully accounts for its having the particular content it does.¹⁸ Roughly, such a state will be said to have a certain content *X* if the effect it has in standard conditions is such that its contribution to shaping the organism's behaviour results in an adjustment of the behaviour to the situation in which *X* is the case.¹⁹ Of course, there are properties of the state which enable it to have this role: normally a state will not play such a role if it is not - to some sufficient extent - correlated with the aspect of the environment which it represents, or was so correlated when the connections with the efferent systems were determined. But such a correlation, by itself, does not make it the case that the state has a representational role. Furthermore, it does not determine which representational role the state has when it has one. (When the ascription of content to a state is construed in the above way, I shall refer to the state as a primitive state and use 'primitive content' to refer to its content).

Now, the suggestion is that when a primitive state of this type is linked with the concept-applying system, the subject has an experience whose content is constituted by the same primitive connections which constitute the content of the primitive state. But how could this be? The content of an experience is what is presented *to the subject* in his experience, while the idea that primitive connections between

¹⁸ Note that this does not commit one to a strong holistic view on which any change in the network entails a change in the content of each of the states. In fact, what I am thinking of here is types of places in a network which are characterized by the types of effects the state may have, given relevant general types of needs, goals, capacities and other representational states currently occurring.

¹⁹ I leave open the question of how the content of such states is to be specified.

perceptual input and behavioural dispositions constitute the content of a perceptual state has its place only in the context of the theoretician's description of the relevant information-processing and behaviour-producing systems.²⁰ However, the objection requires some spelling out. The proponent of the two-stage account fully agrees that the mere fact that visual input is connected with the subject's behavioural dispositions does not make it the case that things are presented to the subject a certain way. His claim is that it is only when the relevant primitive state is also linked with the concept-applying system that the primitive connections constitute the content of an experience. Thus we have to clarify that the fact that a primitive state is linked with the concept-applying system cannot make it the case that what constitutes the content of the primitive state also constitutes the content of the experience. I shall do this by considering the following questions.

In cases like blindsight, there is a link between primitive perceptual states and the concept-applying system without a corresponding experience.²¹ The fact that such cases are possible will suffice for showing the incorrectness of the two-stage account, unless its proponent formulates his view in a way which makes clear that when describing the second stage he is referring to a narrower type of link with the concept-applying system - a link which does not obtain when there is no corresponding experience. We may then ask whether it is possible to provide a characterization of the required link which holds only in cases in which a (concept-possessing) subject has a relevant experience. If it is possible, we should go on to ask whether the link in question can be of use to a proponent of the two-stage account.

²⁰ See, for example, McDowell 1996 pp.51-55, and also his 1994.

²¹ By saying that a certain experience corresponds to a certain primitive state I mean that the relevant experience makes available to the subject the same (or closely related) information which the primitive state can be said to make available at the level of operation of perceptual- and motor-mechanisms.

By criticising possible attempts to argue that the link that obtains in blindsight is generally of the same type as the link which obtains when there is a corresponding experience, I shall reach a characterization of the link between primitive states and the subject's concept-involving activities which obtains in all and only in cases in which there is a corresponding experience. (As far as I can see, attempts to argue that the link is of the same type would be based on claiming that there is no essential functional difference between the cases. Thus the characterization offered in response will be a functional characterization). We shall see that the suggested characterization presupposes that the subject is in a conscious perceptual state; thus it will be of no use to the proponent of the two-stage account. Furthermore, we shall see that aspects of such a link which are not part of what we presuppose when presupposing that the subject has a certain conscious experience (as opposed to merely a primitive perceptual state) - particularly, the facts regarding the primitive state and what constitutes its primitive content - cannot play a role in an account of the content of the experience.

The following discussion does not involve particular assumptions as to the way one should account for the content of primitive perceptual states (it may be accounted for in terms of the primitive links as suggested above, but one might as well suggest an alternative account), thus the conclusion will not be restricted to any specific version of the two-stage account. That is, we will be able to conclude that any account of content which is not exclusively an account of the content of a conscious state (of a concept-possessor) cannot be turned into an account of such content simply by adding that the state in question is linked with the concept-applying system.²²

²² Since we are allowing for any proposed account (independent of links with the concept-applying system) of the content of subject's perceptual non-conscious states, 'primitive states' refers now to any such state (even if one suggested that the account should not be given in terms of the state's place in a network of relevant connections as suggested above). I should clarify that I do not think that there are plausible alternatives (I have mentioned above why it seems to be the only plausible type of account).

IV

Blindsight patients are able to choose, in a frequency of above chance, the correct statements as to how things are in their blind field (out of a restricted number of options), when required to do so, while they insist that they have no experience in their blind field.²³ Assuming (i) that what we mean by ‘experience’ implies that unawareness that one is having an experience, when specifically occupied with whether one has a relevant experience, is sufficient for concluding that one does not have an experience, and (ii) that the subjects’ reports are sincere, this seems to be a case in which the processing of visual input has an effect on the activation of the relevant concepts without a corresponding experience. A natural reaction here is to point out that the link with concepts which obtains when the information is available to the subject in experience is of a different type. First, when the information is available to a subject in experience it affects the way the subject *evaluates thoughts, reasons, makes plans*, etc., while the effect on the subject’s use of concepts which is observed in blindsight does not amount to any of these: the statements made by the blindsighted subject are regarded by him as mere guesses, something that does not normally play a role in evaluating thoughts, reasoning and planning. Secondly, in the blindsight case the primitive state is not *immediately* linked with the activities it may affect (such as making statements); rather if the state is to have an effect on, say, which statements the subject makes, the subject has to be asked to choose between certain statements at a certain time. (These seem the important functional differences. For the sake of the argument I ignore other differences such as the fact that blindsighted patients are limited in the range of properties they can identify or that

But the following discussion enables showing the generality of the claim without going into a detailed discussion of issues concerning the account of perceptual non-conscious states.

²³ For a description of blindsight see Weiskrantz 1990. I focus on blindsight for convenience’s sake; there are other cases in which processing of perceptual information affects the subject’s use of concepts in the absence of a corresponding experience (and some of these cases might be more suitable for the current discussion, specifically those which concern normal subjects).

they are unable to compare objects which are simultaneously present in their blind field).

It might seem that these differences are inessential. For it seems that, at least in principle, a subject in a condition similar to that of a blindsight patient could learn to prompt himself to make statements about how things are in his blind field, and, in virtue of past success, he may be willing to accept the statements he is inclined to make as true, or ascribe a certain likelihood to their being true (unless he suspects that the conditions are non-standard).²⁴ But even in this case there is still an important difference between blindsighted and normal subjects. It seems wrong to describe the situation of a blindsighted subject as one in which any bit of processed visual information can, *generally, directly* affect the way he evaluates thoughts, reasons and plans. For a certain bit of information to be poised for a general effect on the way the blindsighted subject performs such activities he has to prompt himself regarding the relevant aspect and to register which statement he is inclined to make (thus registering the information at the conceptual-level²⁵). In contrast, the information available in experience can generally affect such activities without the mediation of further registration. For example, consider a case in which the processing of light from an object results in the activation of the concept of red. Suppose however, that

²⁴ Compare this to Block's super-blindsight: a person for whom visual input from the blind field can affect action and thought whenever he prompts himself without any experience being involved (Block 1997 pp.385-6). Block uses this imaginary case to argue that the characterization of the link between input and thought is not sufficient for guaranteeing what he calls phenomenal consciousness - that is, roughly, the state's having some particular feel for the subject. I should emphasize that the issue here is not phenomenal consciousness as opposed to mere availability (or accessibility) of information to the subject, but rather the availability of the information *in experience* as opposed to other ways in which it may be made available.

²⁵ The considerations are presented from the point of view of one who does not take the strong-conceptual view to be a viable option. A strong-conceptualist who takes experiential contents to be a matter of the actualization of conceptual abilities cannot take the fact that the information is registered at the conceptual-level to be a distinguishing characteristic of the blindsight case. He may instead point out that in the blindsight case the information has to be registered by exercising conceptual abilities possessed by the subject independently of facts regarding the specific visual information (from the blind field) currently processed by his visual-system. In any case, the emphasis is *not* on the type of registration in question, but rather on the fact that there is a need for some further registration. In what follows I shall refer to the additional step required in blindsight as conceptual registration simply because this is a convenient way to clarify that this is a further step.

the redness of the object is due to a red beam of light being directed towards the object. A normal subject also immediately sees, say, that a certain area surrounding the object appears red; thus he would normally refrain from judging that the object is red, as it would seem to him that the red colour is due to a beam of red light directed at that area.²⁶ In contrast, if the blindsighted prompts himself regarding the colour of the relevant object, the information from the object's surroundings would affect his judgement about the object's colour only if it as well is registered at the conceptual-level; thus, only if he also prompts himself regarding the colour of various things or areas in the general direction of the object.²⁷ It is in this sense that the primitive perceptual states of the (imaginary) blindseer might embody the same information as is available to a normal subject in experience without this information directly bearing on the way he evaluates thoughts, reasons and makes plans.²⁸

The opponent may suggest that we consider a blindseer for whom it is the case that whenever he prompts himself, the process leading to the result makes it possible for any currently processed visual information to have a direct effect on the result. Thus in the above situation we can assume that, when prompting himself regarding the object's colour, such a subject just finds himself with an inclination to say that the object is not red (or make some other relevant statement). If this was the general case, then there would have been a sense in which the relevant bits of information were,

²⁶ The point I wish to illustrate is independent of whether the situation should be described as one in which the subject simply sees that red light is projected to that area or as one in which he has to make an inference from the red appearance of the relevant area. In both cases the information can affect the subject's reasoning independently of what he judges on the basis of the information. Even if an inference is not required, the fact that the situation appears to be non-standard can cause the subject to reflect upon it, and it may happen that, once his attention is drawn to the question of the source of the light, he will judge (in this example, mistakenly) that the seen object is in fact red.

²⁷ It is not clear which observations, among those possible for the blindsighted, may lead him to suspect that the object is not red (and why). For the sake of the argument I ignore this difficulty.

²⁸ One might argue that while it seems correct that a normal subject need not register the information at the conceptual level in order for it to affect the way he evaluates thoughts, the effect on reasoning and planning requires a prior experience-based judgement. For present purposes it is sufficient that the information can have a direct effect on the question of which lines of reasoning and planning the subject takes on.

generally, directly linked with the subject's thinking: for any relevant act of thought evaluation which the subject in fact performs, that act may be affected by the information. But this falls short of the kind of general link between the information and the subject's thinking which obtains when the information is available to the subject in experience. In the blindsight case, mechanisms whose operation is not directly accessible to the subject are what determine which information will affect the reaction to a given prompt and in what way. In contrast, the information available to the subject in experience affects his activities due to the implication which the subject takes the information to have. Thus, *he* determines which bits of information affect his activities, and has a grasp of why he takes each of the selected bits to be relevant to the activity (which allows him to reflect on the appropriateness of the activity given the information he selected). In addition, any available bit of information can direct the subject to initiate certain activities and can direct him in deciding on the order in which he performs them; where the blindsighted is dependent on the occurrence of a prompt. This kind of general effect on the subject's thinking can take place in the blindseer only when the information is registered at the conceptual-level. I shall use 'subject-level effects' to refer to effects of this type, which, presently are to be contrasted with what I called brute effects.²⁹

Thus, for example, suppose that after prompting himself about, say, the shape of a certain object and guessing that it is round, the object moves and the input from it is sufficient for a normal subject to see that, actually, the object is elliptical. Seeing this, the subject, unless he is completely occupied with something else or loses

²⁹ People often use 'rational effect' to refer to such effects (in later chapters I shall sometimes do so as well). Using 'subject-level' clarifies that no evaluation of the resulting activity is implied, and that what is in question is only those cases in which the effect is due to what the subject takes to be appropriate in the relevant circumstances. I use 'subject-level' rather than 'personal-level' in order to emphasize that what distinguishes the relevant effects is the fact that they depend on the subject's grasp. (Also talk about personal-level effects might be construed as relating, say, to effects which are due to mechanisms one can ascribe only to the person as a whole, without a requirement that the relevant effects be due to what the subject takes to be appropriate in the relevant circumstances).

interest in the shape of the object, would normally immediately change his view about the object's shape. The blindseer, in contrast, will have a reason to change his view only if he prompts himself again regarding the shape of the object, and the mere fact that the relevant information has been processed will not cause a (automatic or intentional) prompt of this type to occur.³⁰

Note that it would not matter if the prompting becomes an automatic routine. The point is *not* that the prompting adds an aspect which, phenomenologically, seems to be absent when normal subjects experience things. Rather what I have been appealing to is the fact that the need for a prompt (whether or not the subject initiates it or is at all aware of its occurrence) and for the following registration at the conceptual-level has the consequence that, at any given time, the blindseer can take into account in his concept-involving activities only information which is, by then, registered at the conceptual-level. Consequently, the information which can have a subject-level effect on his activities is restricted to information which is registered serially according to an order that is not guided by the information from the environment which has not yet been registered. (It is true that aspects of the scene sometimes automatically attract the visual system and we may assume that such occurrences would enable the blindseer to register information without self-prompting. But apart from the fact that this allows only a limited set of unregistered input to affect the order in which the information is registered, it will not be a case in which the information *guides* the subject in *his* determination of the order; it only has a brute effect on the order³¹).

³⁰ One might suggest adding to the story that the processing of information regarding a change normally induces relevant prompting, and consequently will get registered. But if this was the case, it would be impossible for the blindseer to register information even in moderately dynamic situations, and would also make it impossible for him to focus on gathering specific information he is interested in while staying relatively sensitive to changes which may take place in his blind field.

³¹ Allowing that information can be registered in this way as well requires a refinement of the last sentence in the previous paragraph.

This last point - that the information which can have a direct subject-level effect on the way the blindseer performs concept-involving activities is processed serially in an order which is not guided by unregistered information - may seem to be significant only due to empirical facts regarding the limitations of our capacities. For we may imagine a blindseer with mechanisms which would enable him to (serially) prompt himself and register information very rapidly, and which would have the power to continuously register and update the amount and the variety of information normally available to a subject in experience. It may seem, then, that the effect of the information embodied by the blindseer's primitive states on his concept-involving activities does not differ from the effect of the information available to a normal subject in experience.

Suppose for the moment that the effect is in fact similar. The comparison between perceivers with limited capacities is still useful to our attempt to characterize what distinguishes the effect of experiential content on the subject's activities from the effect of the content of a primitive state. It manifests the difference made, in our case, by the lack of the possibility of direct, general, subject-level effects on the subject's concept-involving activities. Furthermore, it is clear that the possibility of describing a blindseer who appears to be functionally the same as normal subjects depends on the possibility of describing a blindseer for whom the information registered at the conceptual-level at any particular period of time (long enough to be relevant to his considerations as to what to do and how things are) is virtually the same as the information a normal subject is provided with in experience. Thus, in effect, we are still assuming that, in the blindsight case, visual information can have a direct (here in the sense that it does not require further registration, see footnote 25), general, subject-level effect on the subject's activities only in virtue of its being registered at the conceptual-level. In other words, we agree that only contents of

conscious states can have this type of effect on the subject's activities, and attempt to make sure that for each relevant primitive state there will be a corresponding conscious state with a corresponding content (the state he is in due to the registration of the information). It is clear, then, that we are regarding the link between the primitive state and the subject's concept-involving activities as composed of the link between the primitive state and the registration of the information and a link between such a registration and the subject's activities; there is no change in status of the contents of the primitive states (as the contents of such states); that is, they are not, any more than before, the contents of conscious states.

Note, however, that the blindseer imagined here is not functionally the same as normal subjects. His ability to register information from things in his blind field depends on and is restricted by a given repertoire of concepts (that determines which statements he can be prompted to make and which information would consequently be registered), where the relevant concepts are such that their contents are fixed independently of which information (from the blind field) is processed by the visual-system at the time.³² This reminds us that an important aspect of the link between experiential content and our conceptual abilities is that experience enables demonstrative thoughts and is thus generally basic to our ability to think about a mind-independent world.

The suggestion, then, is that the information available in experience, in contrast to information which is processed but not available in experience, can, *generally*, have a *direct* (that is, not mediated by conceptual registration), *subject-level* effect on the way the subject evaluates thoughts, reasons and plans. (Where such an effect is not restricted by the range of conceptual abilities the subject can apply independently

³² Note that not all concepts in the relevant repertoire have to be expressible in words, and it might be possible for the blindseer to apply quite fine-grained concepts (perhaps with the aid of mental images).

of the currently processed information. For the moment I am leaving this point aside). How does this show the unfeasibility of a two-stage account? The above characterization is simply a result of spelling out the effect which a content of a conscious perceptual state can have on the subject's concept-involving activities in virtue of its being a conscious state. Trivially, a perceptual state which is not linked with concepts in this way is not a conscious state. Given a state of the latter type, adding that it is linked with concepts in the above way is just to say that this state is somehow related to a conscious perceptual state (probably being part of the processing underlying the relevant experience). Regardless of what we have to say about this relation, it is clear that the content of the experience cannot be constituted by whatever it is that constitutes the content of the non-conscious state. For whatever constitutes the content of the non-conscious state does not, by itself, put *the subject* in a position to take into account, in his concept-involving activities, the information that state might be said to embody.

We can look at it this way. Generally an account of the content of a state of the subject should account for the state's potential to play the representational role it does. Thus when we account for the fact that a perceptual state makes specific visual information available *to the subject*, so that he is in a position to take the relevant information into account in his considerations as to how things are and what to do, we have to make sure that the state is of a type which can make information available to *the subject*. But this is just to say that we have to presuppose that the state is a conscious state (and thus linked with concepts in the relevant way). In contrast, an account of the content of a state which plays (or can play) some other representational role would relate to aspects of the systems in relation to which it can play the relevant type of role. It is, then, the difference between the latter systems and the system that constitutes a subject's ability to think about the world - a system which essentially

involves links between the subject's experiential and conceptual abilities - which makes accounts of contentful states which are not conscious states of a concept-possessor unsuitable to be an account of a content of an experience.

Note that if creatures without concepts could be ascribed experiential contents, this would apply to such contents as well. For the account of such contents would be an account of what it is for a non-concept-possessor to experience things as being a certain way; and this would require appeal to the capacities of such a creature in virtue of which it can be said to have a point of view in relation to which its perceptual states can be ascribed the relevant representational role. Even if a concept-possessor possessed the same set of capacities, a primitive link between visual input and these capacities would not amount to an account of a content of a conscious state of *his*, for these capacities do not constitute a concept-possessor's point of view as to how things are in his environment.

The opponent may complain that I have ignored the possibility that the link I have described in terms of subject-level effects on the subject's activities is also describable in terms which do not presuppose the notion of a conscious state. For if this is possible, the alternative description does not immediately entail that the content must be the content of conscious state. But this misses the point made above. Suppose there is such a description. It has been made clear that the obtaining of such a link (regardless of how it is described) does not affect the fact that the type of representational role played by a primitive state cannot by itself explain the fact that things are presented a certain way to the subject. The opponent might then suggest that we consider the role the state can be said to play in virtue of both the primitive connections and the further links with the conceptual system (described in the alternative way). But, without explicitly appealing to the possibility of subject-level effects of the information on the subject's activities, we will not capture the

representational role the experience plays in virtue of its content in the subject's considerations.

V

I have argued that one cannot account for the particular content of a particular experience without presupposing that it is the content of a conscious state, and thus presupposing that the relevant content is a content of a state which is linked with the concept-applying system in the way described above. This may seem to leave room for what I have called a background-presupposing account: an account of the content of a particular experience without a specific appeal to the subject's conceptual abilities, which is made possible in virtue of a general background assumption that the state in question is linked with such abilities in the relevant way. A closer consideration, however, will show that there is no room for such an account.

The problem is that we must be able to account for the significance which the content of the experience has *for the subject*. For example, we need to clarify how it is that, from the subject's point of view, an object is presented to him as, say, being on his left rather than his right, and also, more generally, how it is that the state in question is such that the object is presented as having a certain location in a 3D space rather than a 2D one, or rather than the experience having no spatial significance for the subject at all. Now, the specification of certain primitive connections between the current visual input and the subject's behavioural dispositions would not account for such facts if we merely assume in addition that the state in question is a conscious state (and thus linked with the concept-applying system in the relevant way). As cases like blindsight make clear, the primitive connections can obtain without having any effect on what the subject is aware of; thus they cannot have a direct bearing on what the subject takes to be the significance of his current experience. Further, it is

doubtful whether the *current* primitive connections bear on the significance the experience has for the subject in some indirect way; and even if they did, it is rather implausible that they should fully explain the aspect which distinguishes, from the subject's point of view, the given experience from other experiences. It is, of course, reasonable to assume that primitive connections between visual input and behavioural dispositions play a role in the development of the subject's experiential and conceptual capacities. But we are not asking how it came about that certain visual input can give rise to a certain type of experience rather than other; the question is what it is about the subject's current state in the current situation that makes it a case of his experiencing things as being one way rather than others.³³ The only other alternative I can think of is that the primitive connections might be part of what constitutes abilities which are, in turn, part of what constitutes the subject's grasp of the relations between the current experience and other experiences and actions. But even without going into detail, it seems clear that the specific primitive connections would not suffice for explaining what makes it the case that the subject grasps the particular experience as having the place it does in the network of subject-level connections.

It does not seem that other suggestions as to which concept-independent factors may account for particular contents could fare better. In general, since the relevant factors are supposed to be independent of the subject's conceptual abilities, the mere fact that they obtain does not explain the fact that things are experienced by the subject one way rather than another. Presupposing that we are considering a

³³ To remove doubts as to whether the effect on the development may somehow imply that the current primitive connections have some such effect, it is helpful to remember the following facts. The effect of the primitive connections on the development is due to their actual manifestations in the subject's interaction with his environment. However, the primitive connections between visual input and manifestable behavioural disposition may change without an immediate change in the way things are experienced by the subject. (Paralysis is one type of example; behavioural adaptation to distorting prisms, in contrast to perceptual adaptation, is another).

conscious state is thus unhelpful unless what is presupposed includes specific details as to how these factors affect the content of the experience. But filling in the details as to how they affect the content would be helpful only if we explicitly relate the relevant factor with specific aspects of experiential contents, thus taking for granted what we are supposed to explain.

VI

I have argued that both types of strong-non-conceptual accounts (the two-stage and the background-presupposing accounts) are unfeasible. Now, since we must presuppose that the content is the content of a conscious state, and since the account must make clear in virtue of what the content is grasped by the subject as having a specific significance (thus clarifying what makes it the case that the subject takes it to be linked with other conscious states of his in a certain way rather than others), it may seem that we should take the content to be of the same type as the contents of judgements (contents which are a result of the activation of relevant conceptual abilities). In the next chapter I shall argue that this suggestion is unfeasible as well.

2 Reasons for rejecting the strong-conceptual view

I

At first glance a strong-conceptual view - according to which it is possible to account for a particular experiential content in terms of the subject's conceptual abilities alone - may seem implausible. For, as Evans points out,³⁴ the content of an experience is more fine-grained than the concepts the subject possesses; thus the fact that an experience has a particular content (rather than others) cannot be explained in terms of such concepts alone. McDowell and Brewer respond that one who argues this way is ignoring the fact that for any aspect of the environment which one can distinguish in experience, one has the ability to think about that aspect demonstratively. They suggest that, though the content of a subject's experience is not determined by the concepts he possesses independently of his having the relevant experience, it is determined by demonstrative abilities which he possesses at that time.³⁵ Furthermore, McDowell and Brewer not only claim that the content of an experience is determined by the relevant demonstrative abilities, but also that an experience involves the actualization of these abilities: experiences, they claim, have the type of content which can be the content of a judgement, content which is a result of the actualization of two demonstrative abilities - the ability to think about a particular object demonstratively and the ability to predicate a particular property (identified demonstratively) on objects.³⁶

It seems clear, then, that the question of whether a strong-conceptual view can be maintained is the question of whether an account of the particular content of a particular experience can be given in terms of the specific demonstrative abilities

³⁴ p.229.

³⁵ McDowell 1996 pp.56-8 and 1998; Brewer 1999 pp.170-4.

³⁶ See, for example, McDowell 1996 pp.26&46-7, Brewer 1999 p.149. (Brewer takes the above claim to hold only for the experience of aspects which the subject is currently attending to; I discuss this qualification later).

which the subject has at the time of the particular experience in question.³⁷ The following discussion will be focused on rejecting the stronger suggestion (that the actualization of such abilities is what constitutes the content of the experience), since this is the view which is in fact advocated by strong-conceptualists. However, when the argument against the stronger suggestion leaves room for a weaker version, I shall give reasons for rejecting the latter as well.

As mentioned in the introduction, a general problem with appealing to a particular demonstrative ability (the particular ability to think about a specific environmental aspect which the subject has when experiencing this aspect) in the account of a particular experience is that it is in virtue of his experience of an object or property that a subject can single out the relevant object or property and entertain demonstrative thoughts about them.³⁸ But one leaves no room for experience to play this explanatory role if one construes, as McDowell and Brewer do, experiencing a particular environmental aspect as a matter of the actualization of the relevant demonstrative ability,³⁹ or, generally, if one holds a view which implies that accounting for the subject's experiencing a particular environmental aspect requires appealing to his possession of the particular ability to think about it demonstratively.⁴⁰ Given the intuitive force of the thought that experience plays such a role in the

³⁷ Further, more important, reasons why demonstrative concepts are the only relevant candidates are related to the particularity of experiential contents and to wider considerations as to how to account for the content of our non-demonstrative empirical concepts.

³⁸ Since McDowell and Brewer hold that the experience of a property is explained in terms of a predicative element, it is inaccurate to say that the relevant ability is the ability to refer to the property or entertain thoughts *about* it. When the discussion is focused on the predicative element, I try to avoid such formulations, but when speaking about demonstrative abilities in general, I use the inaccurate formulation for simplicity's sake.

³⁹ As mentioned in footnote 36, Brewer holds that the actualization of a demonstrative ability is involved only when the subject attends to the experienced aspect. However, what enables singling out the experienced aspect is the subject's attention to it, thus this formulation of the objection applies only to the parts of the content which, on Brewer's view, involve the actualization of demonstrative abilities.

⁴⁰ For this type of claim see Campbell 2002 pp.97&121-4 and Eilan 2001. Peacocke presents a different version of the objection, focusing on the role played by the *way* in which an object or property are experienced in the individuation of demonstrative abilities (see, for example, 1992 pp.84-5 and 2001 pp.246-50).

explanation of demonstrative abilities, it seems that as long as the strong-conceptualist does not provide an argument for his view, we should, generally, prefer views which are not strongly-conceptual to those which are. In Chapter 3 I shall argue that McDowell and Brewer do not provide a conclusive argument for their view, and consequently we have at least a *prima facie* reason to reject it. In this chapter I shall discuss a different objection to the view.

The claim in this chapter will be that the strong-conceptual view is not generally correct; that at least some aspects of our experience cannot be accounted for in terms of the demonstrative abilities they give rise to. According to McDowell and Brewer, experiencing, say, a round object as such involves the actualization of a demonstrative referring to the object and a demonstrative predicative element which we may express by 'x is thus'. I shall focus on what they take to be the predicative elements of the content; the elements involved in the experience of properties of objects (where properties are to be understood as including the relations in which the object stands to other things). I shall suggest a reconstruction of Brewer's account of the predicative element which I take to be most favourable to the strong-conceptualist. On the resulting view (as Brewer himself admits) an experience of a given property involves the actualization of a demonstrative ability only when the subject is attending to that property. I shall then argue that the strong-conceptualist cannot maintain the generality of his view by claiming that the experience of a property which is not currently attended to must be explained in terms of the specific (non-actualized) demonstrative ability. First, however, I shall briefly explain my reasons for rejecting McDowell's construal of the predicative element of the content.

II

On McDowell's view, given a certain instance of a certain property (say, a certain shape or a certain shade of colour), for something to be thus (in relation to the particular instance) is for it to be, in standard conditions, indiscriminable in the relevant respect (i.e. in shape, shade, etc.) from the instance in question. The ability to think about something as thus (in relation to the given instance) is, then, partly constituted by the subject's capacity to recognize instances which are thus; a capacity which he has in virtue of his present (or past) experience of the specific instance.⁴¹ This means that on McDowell's view we can have such abilities only when the experience of the property instance is veridical; for if the experience is non-veridical, the subject will not have the required recognitional capacity (that is, it will, then, not be the case that, generally, what he takes to be instances of the same property will be so). (Note that McDowell must require a capacity to recognize instances which are, in fact, the same as the given instance in the relevant respect, rather than simply a capacity to recognize appearances as the same. If the latter rather than the former was required, then suggesting that our experience involves the actualization of the resulting demonstrative abilities would amount to suggesting that experience provides us with the effect of an encounter with the property, not with the property itself). Consequently, McDowell should either deny that there is an element of the content of the experience which corresponds to an illusory experience of a certain property, or hold that there is such an element but that it differs in type from elements of the content which correspond to a veridical experience of a property (presumably it would

⁴¹ See 1996 pp.170-2. Three comments: (a) In his 1996, McDowell uses expressions such as 'this shade' to speak about the abilities in question; in his 1998 he acknowledges that he should have used expressions of the form 'φ-ed thus' instead. (b) The reference to standard condition is my addition; as far as I understand, McDowell takes this for granted. (c) I use 'is thus' rather than 'is φ-ed thus' since it makes it clearer that the relevant conceptual ability is not analyzable as two separable conceptual abilities (an ability to single out a relevant dimension and an ability to single out a currently instantiated property, of any dimension). (I assume that this is McDowell's view).

be an element which could be explained without reference to the actual experienced property, that is, the actual property of the experienced instance). As I shall explain later, I take this to be implausible. (Note that the claim concerns only illusions, not hallucinations; that is, it concerns cases in which there is a perceptual link between the subject and a certain instance of a property but at least some of the experiential information he has from it is misleading).

Another difficulty with the above view is that since perceptual indiscriminability is non-transitive, all the instances which are said to be thus (in relation to a given sample) do not share the same shade (or shape, etc.) property.⁴² What they have in common is only that they are indiscriminable in shade (shape, etc.), in standard conditions, from the given sample. But, then, if the ability to think about a thing as thus is an ability to predicate a property which is essentially defined in terms of discriminability from a particular sample, it is unclear how the claim that abilities of this type are actualized in our experience can contribute to explaining how experience makes the way things are in a mind-independent world immediately available to the subject.

Finally, McDowell requires that the recognitional capacity the subject has in virtue of her encounter with a certain instance of a property should be one which 'can in principle persist beyond the duration of the experience itself' (1996 p.57). However, it simply seems a fact about our ability to make discriminations in experience and our ability to recognize seen properties as the same as previously seen properties that the

⁴² McDowell simply stipulates that being thus (in relation to a given sample) is what it is to share a shade (1996 p.171). Such use is remote from what we normally mean by a shade property (and even more clearly in the case of shape, orientation, etc.). In what follows I shall take two things to share a fine-grained property iff anything which is indiscriminable from one of them, in relevant conditions, is indiscriminable from the other in the same conditions and vice versa. However, when saying here that they do not share a shade property I am willing to count as shade properties any property the individuation of which is not *essentially* tied to one particular token sample.

former is much finer than the latter.⁴³ McDowell claims that if we allow that the recognitional capacity be restricted to the time of the encounter, then we will not be able to ascribe to the subject a grasp of the distinction between, say, something's being shaped thus and its appearing to the subject that something is shaped thus. But, as far as objects other than the one serving as the sample are concerned, it seems that subjects do grasp the difference; for they grasp the possibility that something which is discriminable from the sample in standard conditions appears indiscriminable from it in non-standard conditions. Thus the problem, it seems, is not that the type of ability expressed by 'x is thus' on this account cannot be regarded as a genuine conceptual ability but rather that we cannot take judgements of the form 'this is thus', where 'this' refers to the object which serves as the sample, to involve a genuine predication. The discussion of Brewer's suggestion will clarify that the problem can be dealt with without appealing to recognitional capacities which we do not seem to have.⁴⁴

III

I turn, then, to Brewer's view. There are some aspects of the view which I am not clear about. What follows is a reconstruction which seems to me faithful to Brewer's general line of thought, and which answers difficulties regarding the account of illusions and the possibility of demonstrative predication of fine-grained properties. The discussion of the reconstructed account will clarify the dependence of the relevant demonstrative abilities on the subject's attention to the predicated property, thus making a strong-conceptual account of the experience of unattended aspects

⁴³ Peacocke (2001 p.251) and Kelly (2001) express a similar complaint.

⁴⁴ I should mention that on p.175, prior to the detailed presentation of his account of demonstrative abilities, Brewer explicitly endorses McDowell's characterization of the ability to think about an object as being thus as well as the requirement that it be possible for the relevant recognitional capacity to endure in the absence of the sample. However, in the account he offers in the following chapter the sample seems to play a different role than in McDowell's account and there is no obvious need for a recognitional capacity which endures in the absence of the sample. Furthermore, in response to Kelly's objection (manuscript), Brewer clarifies that he does not think that such a capacity is necessary.

impossible. For the sake of the argument, I shall assume that there is no difficulty with holding that the experience of attended aspects involves the actualization of demonstrative abilities. I shall later reject this assumption.

Brewer explains what he takes to be the predicative aspect of the content of experience as requiring two interdependent abilities: (i) the ability, given a certain experience of a property, to think about things as having the property which is the ground of the current appearance (the appearance of the experienced object having a certain fine-grained property), (ii) the ability to think about things as appearing the way the relevant property currently appears (the way it appears from his current perspective and in the current circumstances).⁴⁵ (i) is the ability we are in fact interested in - the ability whose actualization is part of what constitutes the content of the experience - but we cannot consider it independently of (ii). Its dependence on (ii) is due to the fact that it requires the subject's grasp of his experience as an experience of the property which is the ground of the appearance, and such a grasp involves his grasp of the dependence of the current appearance on, on the one hand, the actual property to which he is currently attending, and on the other hand, his position in relation to it and further relevant circumstances.

It is crucial to the view that, in addition, (ii) depends on (i). The ability to think about an appearance is described by Brewer as involving the subject's bracketing from his grasp of his experience as an experience of the actual property thoughts about how his position in relation to the experienced instance and further relevant circumstances contribute to his experience, where the prior grasp of the experience as an experience of a certain property from a certain perspective and in certain circumstances is what makes it the case that the subject grasps the current appearance as an appearance of a mind-independent object and property. Furthermore, the appearance is not conceived

⁴⁵ This is how I construe the description in 1999 pp.198-200.

as something independent of the currently experienced object and property - something which can be common to hallucinations and experiences, or to experiences of different particular things. The picture, as I understand it, is that by attending to the actual instance of the property, the subject singles it out, and his grasp of the relation between the appearance and its ground is (from his point of view) a grasp of the relation between the property which he is singling out and *its* appearing the way it does (where the fact that it is this particular instance which is experienced is part of what individuates the appearance as grasped by the subject).⁴⁶

Now, the subject's grasp of the joint dependence of an appearance on the actual attended instance of a property and further conditions must be such that the subject has the ability to keep track of the property while its appearance may change (due to changes of perspective and further circumstances), grasping it as one and the same property whose appearance is changing. This ability to keep track of the attended instance of the property (together with the subject's grasp of the possibility of experiencing the same property again) is essential to the subject's ability to single out a mind-independent property which he grasps as such.⁴⁷ Consequently, this ability is essential to the subject's knowledge of what it is for any object (including the object whose current instantiation of the property serves as the relevant sample) to have the attended mind-independent property. For this reason one's view as to what exactly constitutes this ability to keep track of the property bears on how one individuates the ability to predicate the property which the subject can be said to have, and which is supposed to be actualized, when he experiences the property. I shall thus spend some

⁴⁶ This is how I interpret Brewer's emphasis that the subject's relation to the experienced aspect is an attentional relation (see for example 1999 p.202 and manuscript).

⁴⁷ See pp.210-13. Brewer's interest there is to clarify that what the subject singles out is a mind-independent property rather than only a subjective appearance. But, as he clarifies later (manuscript), the ability to keep track of the particular instance is what makes it the case that the subject takes *the particular instantiated property* to be the particular mind-independent property in question.

time criticising what might appear to be Brewer's view on this matter and suggest an alternative.

IV

When Brewer discusses the ability to keep track of the instance of the property, he emphasizes the subject's immediate expectations as to how the appearance should change with changes of perspective and circumstances - that is, the expectation the subject has, when taking the experience at face value, as to how the experience will change if he moves in certain ways, if the lighting conditions change in certain ways, etc. (immediate expectations are to be contrasted with expectations the subject might have when he has doubts regarding the veridicality of the experience and with expectations which are at least partly based on further, non-experiential, relevant information). This may suggest that, on Brewer's view, the ability to keep track of the specific property is constituted by such immediate expectations. In the next few paragraphs I shall point out that such a view imposes on the strong-conceptualist an unappealing construal of illusions, and argue that there is an alternative construal of the ability which is generally better motivated and which allows the strong-conceptualist a more plausible view of illusions.

Suppose that, in the lack of depth cues, a motionless subject sees an elliptical object, facing him, as a slanted round disc (that is, the elliptical object appears to him to be a slanted round disc). Assuming that he takes the experience at face value, his expectations, in this situation, as to how the appearance will change once he moves differ from the immediate expectations he would have had, had the object appeared to him to be an ellipse facing him. If one holds that such expectations are what constitute the subject's ability to keep track of the relevant property (while taking the latter to be part of what accounts for his grasp of which property is in question), then one cannot

ascribe to the subject, in the situation described above, a grasp of what it is for things to be thus (referring to the actual shape of the object). For, once the conditions change in a relevant way (e.g. the subject moves, the light becomes dimmer), his expectations will be violated; since these expectations determine what he will or will not take to be the same shape, he does not have the *ability* to keep track of the object's current shape through changes.

To take this route amounts to saying that when the subject's experience is not veridical it does not provide him with a grasp of which property he is experiencing, and thus that no information (or misinformation) about the property is immediately available to him in experience *as such*. But this seems wrong; various illusions are simply cases of the appearance differing from the way things are due to the subject's current perspective and the specific circumstances.⁴⁸ Thus, just like the veridical case, we have an instance of a property which is experienced by the subject a certain way, a way which systematically depends on the property and relevant conditions.

Furthermore, subjects do (and arguably have to) take into account the possibility that the current appearance is a misleading appearance of an instance of a relevant type of property (or that it is not specific enough for determining what the subject can, in fact, expect) (where this should not be taken to imply more than that they are willing to accept, in some cases, that a certain appearance might be, is, was or might have been misleading due to certain conditions - something that should be manifested in how they take certain information to indicate the possibility or the actual occurrence of a mistake, how they behave when a mistaken reaction can be crucial, etc.). It is,

⁴⁸ I shall interpret the relevant circumstances rather widely; include things like the current interests of the subject, current memories that might influence the experience, the focus of his attention, etc. When interpreted this way, I cannot currently think of an illusion which is not such a case. However the point made in the text does not require that the claim have no exceptions.

therefore, unjustified to assume that the subject's immediate expectations exhaust what he takes to be the possible changes in appearance when the conditions change.

Now, simply taking such possibilities into account does not yet guarantee that a subject has the ability to keep track, through changes, of a property which currently appears in a misleading way. But it seems that normally changes in appearance which result from gathering more accurate information differ in their appearance from changes in appearance which result from changes of the property. For example, in the above case, when the subject starts moving towards the object while continuing to attend to its shape (other things being equal), it will not appear to him that a sudden change in orientation and shape of a slanted round object is taking place, but rather the change in appearance will be of a type which occurs when the subject suddenly sees, due to change in his position in relation to the object, that what has been mistakenly experienced as a round disc is an ellipse facing him. Whenever this is normally the case, the subject - who takes into account the possibility that certain appearances may be misleading - has a (fallible) ability to keep track of the currently experienced property (that is, the actual property which is the ground of the appearance) as such.⁴⁹ It is in virtue of this ability that the subject can grasp which property is experienced even if the experience is currently not veridical.

There are further considerations which support the construal of illusory experience as providing the subject with a grasp of which property is experienced and as doing so in the same way a veridical experience does. It is exactly by keeping track of the instance of the property that the subject can gather more information about it,

⁴⁹ The changes in the subject's perspective and circumstances which are relevant here are of the types which normally occur in a natural environment; thus the fact that one can, for example, create illusions of change in shape, size, orientation, etc., by a sudden elimination or insertion of aspects which affect the appearance should not be regarded as a problem. Of course even in natural conditions the appearance may be misleading as to which change takes place, the important point is that often it is not. (Note also that the main point is that the change will not appear as a change of the property. In some cases the fact that one is gathering information which corrects previous mistakes might not be noticed).

including information which enables him to correct previous mistakes. And it is in virtue of the current appearance of the property (whether veridical or not) that he has information as to whether further information is more accurate information from the same property, or whether the property has changed. The importance of this can be overlooked; it may seem that the subject's keeping track of the relevant *object* - something he can do independently of whether the relevant property of the object is continuously seen⁵⁰ - suffices for explaining the way he gathers experiential information and uses it. But this is incorrect. If a subject has experiential information about, say, the object's shape at a time t_0 and he keeps track of the object, but not of its shape, between t_0 and a later time t_1 , then gathering information about its shape at t_1 , can only yield *direct* information about the shape it has at t_1 . In contrast, if the subject has been continuously attending to the shape since t_0 , the further information at t_1 is also immediately related to the information gathered at t_0 : he is thus provided with experiential information as to whether or not the shape has changed, and if it did, also as to how it changed. (The immediacy here should be contrasted with cases in which reasoning or reliance on general assumptions regarding the relevant object, property and the circumstances are required for the subject to evaluate whether or not the object has changed its shape since t_0 and if so in what way, or rather how likely it is that it has changed in this or that way).

Note also that often the current non-veridical information can guide the subject's attempts to gather more information about the property on which the current appearance depends: it can suggest which specific movements may be more helpful in exploring the property, to which aspects to attend, what kind of background information may be relevant, etc. It seems that subjects are able, in such cases, to

⁵⁰ Remember that an object can be seen while some of its properties are not; e.g., the light might be too dim for seeing colour, or significant parts of the boundaries of a seen object may be occluded.

intentionally conduct their attempt to gather more information about the property according to the relevant aspects of the experience. But how could one agree to this while denying that an illusory experience can provide the subject with a grasp of which property (in the environment) is experienced? It may seem that the subject's intention can be construed as involving thought about the experienced property as 'the shape (or colour, etc.) of this object', where this is understood as a mode of thought that is independent of whether the subject is attending to the property and of whether he actually has information about it, that is, a mode of thought that is partly descriptive. But to say that a subject is thinking about a shape in this way - rather than thinking about it in a way which essentially involves his visually attending to the object's shape - is to say that it is not the case that he is specifically selecting shape information from the object and immediately (that is without some additional inference) taking this information to be from the property he is thinking about. This simply seems to be the negation of the characterization of the way we actually think about the property in such cases.

The suggestion, then, is that the current appearance of a property and the immediate expectations it gives rise to do not play a role in the individuation of the predicative demonstrative element which, according to the strong-conceptualist, is actualized when we experience an object as having the relevant property. For the factors relevant to the individuation of the ability are the attended instance of the property and aspects of the subject's state which are essential for his having the ability to keep track of the instance of the property as such. And it is suggested that this ability to keep track of the instance is not simply constituted by what the subject immediately expects due to how the property currently appears to him, but rather by a more general conception of what is involved in keeping track of one and the same property of the relevant type: a conception which presupposes the subject's (fallible)

ability to visually distinguish between cases in which the actual property changes and those in which the appearance changes due to more accurate information.⁵¹ On this picture, changes in appearance, even if they have an immediate effect on the subject's current view regarding the character of the attended property, need not affect the identity of the demonstrative ability which is actualized in the experience. This is not to say that changes in appearance do not entail some change in the relevant demonstrative ability, only that the change need not be one of identity. The current appearances are part of what presently forms the ability, and thus we might say that changes in appearance are changes in the character of the ability. (Note that presenting things this way does not require viewing appearances as more basic than demonstrative abilities. As mentioned above, the strong-conceptualist may claim that what is in question are genuine appearances - rather than, say, mere sub-personal information-processing or mere sensations - only in the context of the actualization of demonstrative abilities).

V

Whether or not this is Brewer's view, I see no obvious reason for him to reject it. It might seem that if we treat illusory cases exactly as we treat the cases in which the experience is veridical, we will not be able to say, as Brewer wishes to say, that simply experiencing an object provides the subject with a reason to judge that things are the way they are experienced. But, first, as long as the subject attends to a particular object

⁵¹ What about cases in which the appearance changes from being veridical to non-veridical in a misleading way? It seems that, in non-artificial conditions, ordinary subjects hardly encounter cases in which, while continuously attending to the property, such changes appear as changes of the property. First, the fact that the property has been seen and attended to for a while from different perspectives or in different circumstances means that the conditions are different from those obtaining when the subject views the property from a perspective and in circumstances which are exactly as the current ones except that the property had just become visible or that the subject has only presently shifted his attention to it. Since information is present in dynamic patterns of light, it is possible that only in the latter conditions the appearance would be misleading. Furthermore, when there is a change which results in a non-veridical appearance, the change might be experienced as such due to the subject's experiencing the change in the conditions which is responsible for the change in appearance.

and to a specific property of it, his judging that this is thus is bound to be true, for the property he is predicating is the actual property of the demonstrated object. (The ways in which things can go wrong are (i) the subject fails to realize that what he takes to be an unchanging property is in fact changing, (ii) he fails to realize that he is hallucinating. In both cases there will be no corresponding demonstrative element in the content of the experience).⁵² Since the subject's grasp of the relation between appearances and the experienced property is such that he takes into account the possibility of inaccurate information, and when the information is inaccurate he still has the ability to keep track of the property and gather more accurate information about it, there is a clear sense in which he knows which property is in question even when he is mistaken about its character: he knows that it is the property he is actually attending to and that even if his current applications of the predicate to other objects are mistaken, he is normally able to correct them by performing relevant exploratory actions while continuing to attend to the property. This also means that, as Brewer suggests, the mere fact that the subject grasps that this [a seen object *a*] is thus [a particular seen property of *a*] can provide *the subject* with a reason to judge that this is thus (even when he suspects that the appearance might be misleading or believes that it is).

The misleading appearance may, of course, give rise to mistakes when the subject applies the concept *x is thus* to other objects, makes judgements about the relations between being thus and being thus* (where the latter relates to a different instance of a property in the same dimension), or attempts to evaluate thoughts involving more general concepts (for example, in the discussed case, judging that the object is round rather than elliptical). But - given the ability to correct such mistakes

⁵² There is, in fact, a third possibility. An apparent property of an object might be due to information from a different object. It seems that there is no one clear answer as to what we should say in cases of this type.

by performing various exploratory actions (such as moving towards the instance of the property while continuing to attend to it) and the fact that the subject takes into account the possibility of such mistakes and the ways in which he may be able to correct them - holding that the appearances which explain these mistakes are currently part of what forms the subject's demonstrative ability but not part of what individuates it seems more reasonable than saying that there is no aspect of the content which corresponds to the non-veridical experience or that the relevant aspect of the content is of a different type (that is, different from the type found when the experience is veridical).

VI

There is a further question the strong-conceptualist has to answer. The property predicated by the subject is supposed to be the property he attends to and is able to keep track of despite changing appearances; but we have not yet clarified in virtue of what a subject can be said to attend to a specific fine-grained property, rather than to any other property of the same dimension which is sliced more finely or more coarsely. Suppose that we have a situation in which it seems correct to say that the subject is selecting shape information (as opposed to information about colour, texture, etc.) from a seen object; for example, a situation in which he is comparing, on the basis of his visual experience, the shape of the object with the shape of some other object. This description of the situation is not sufficient for saying that the subject is attending to a particular fine-grained shape, rather than to one which is sliced more coarsely, more finely, or even that he is, generally, attending to the object's shape whichever shape it is and whichever way it changes. If there are no current changes in the object's shape, all these candidates are a source of the information he is currently selecting. Thus we need to say something about what would make it the case that the

subject is attending to one particular shape sliced a certain way; that is, we should explain what would make it the case that, when certain changes of the object's shape take place, the subject cannot be regarded as continuing to attend to the same fine-grained shape while other changes will not have this effect.

Since we are considering the fine-grained properties which experience makes available to the subject, it is clear that in some way or another we should appeal to the subject's (visual) discriminatory abilities.⁵³ We cannot appeal merely to facts regarding what would appear to the subject as an actual change of the property rather than changes in the appearance which are due to change in conditions or an appearance of lack of change. For a change of the object's shape which appears as such in certain conditions may not appear so in others. Rather it seems that we should appeal to the subject's (fallible) ability to discriminate properties in certain favourable conditions. However, we are constrained by the need to make sure that we can account for the subject's knowledge of which mind-independent, fine-grained property is in question. This requires that there be a sense in which the subject grasps which conditions are the ones in which he should be able to distinguish the property from any other seen property, a grasp he may have regardless of whether these conditions actually obtain (and, at least according to the view under discussion, the relevant grasp should be associated with the subject's grasp of the joint dependence of his experience on the actual property and relevant conditions, allowing him to grasp that he is experiencing the same property while the appearance changes).

⁵³ It should be emphasized that an appeal to the subject discriminatory abilities in order to determine the fine-grainedness of the property does *not* make the property mind-dependent. Any way of slicing properties that reflects certain differences in the causal effects which objects might have, has an objective basis. The fact that we appeal to differences in causal effects on the subject's visual system does not make the difference mind-dependent. Objects would have had the same causal power whether or not there were minds to be affected by them. It is true that what I appeal to is partly determined by limitations of the visual system (and it is possible that these are simply due to physiological limitations), but the important point is that there actually are objective differences in causal power to be detected. What the limitations of the visual system add is that they determine, among the different objective ways in which the relevant dimension can be sliced, which way of slicing is the one that distinguishes properties the subject can visually keep track of.

Before going on to discuss what seems to be the line one should take here, I should clarify that there is no room for suggesting that the current appearance and the immediate expectations as to how the appearance may change with change in the conditions somehow determine the relevant property, and therefore suggesting that the current appearance is essential to the individuation of the ability to think about things as thus. The ability to discriminate the property given its current appearance cannot be that according to which the property is sliced, for we are assuming that the subject can continue to attend to the property while the appearance changes. But it might seem that the strong-conceptualist could appeal to the subject's immediate expectations regarding the appearance of the property in optimal conditions (or something of this sort) and say that the fineness of the attended property is determined by what the subject expects to be indiscriminable in those conditions. However, the suggestion is implausible. First, it is implausible to suggest that at any given time we can pick out certain expectations as those which relate to conditions we would regard as standard, and even less plausible to suggest that we can do so consistently in various current conditions. But even if this difficulty is ignored, it is clearly not the case that the expectations we have, given the current appearance, as to how things would appear in certain conditions (different from the current ones) have a form which could enable us to determine, at present, what we would regard in those conditions as the same or different *fine-grained* property. Specifically, they do not normally consist in a current ability to imagine the *exact* appearance in the relevant conditions, and even when they do, it seems that the images are never specific enough for basing on them judgements about the indiscriminability of fine-grained properties.

What, then, could determine the fineness of the predicated property? First, note that the relevant candidates (i.e., the properties the subject can attend to) are those fine-grained properties which vision enables the subject to discriminate *as distinct*

properties. That is, it is not sufficient that in specific given conditions the appearance of an instance of the property is discriminable from the appearance of instances of any other relevant property seen in the same conditions. Furthermore, it is not sufficient that for any other relevant property there could be some conditions (which are in the range of standard vision-enabling conditions) in which an instance of that property is discriminable from the instance in question. The latter condition is necessary, but it is required, in addition, that there be a sense in which, whatever the current conditions are, the subject has some grasp of the type of conditions in which he could discriminate the property, and that this be a grasp that could guide him in attempting to discriminate the property and evaluate the possibility of such discriminations in the current conditions. (For, otherwise, the subject cannot be ascribed a grasp of the possibility of his experiencing the same property in varying conditions; a grasp which can in fact be maintained in varying conditions).

It seems that at least properties which are sliced according to the threshold of the subject's current visual discriminatory abilities satisfy these conditions. For not only is it the case that for any property differing from such a property there are conditions (in the range of standard vision-enabling conditions) in which the subject can discriminate it from the property in question, but also subjects have some grasp of the kind of changes in conditions which may enable them to discriminate different fine-grained properties if they are indiscriminable in the current conditions. Suppose then, that we agree that subjects are able to discriminate, as distinct properties, instances of fine-grained properties which are individuated as follows. Two instances *a* and *b* have the same fine-grained property iff any instance *x* that is indiscriminable from *a* (in the relevant respect) is indiscriminable from *b* and vice versa. Where *x* is indiscriminable from *y* (in the relevant respect) iff there are no conditions in the range of the standard vision-enabling conditions in which the subject can discriminate *x* from *y*. (Remember

that what is in question is not an ability to *decide* for any two instances whether they are instances of the same property but rather to grasp what it is for two instances to be of the same property).⁵⁴

The mere fact that certain properties are discriminable by the subject as distinct properties does not solve the initial problem which was what would distinguish, for example, a case in which the subject attends to the fine-grained shape of a given object, sliced according to the subject's discriminatory threshold, from a case in which he attends to the object's shape whichever particular shape it is.⁵⁵ What we need in addition is that the subject's interests be such that *he* restricts his attention to the relevant fine-grained property; that is, although he might not be able to tell whether he is successful, his intention should be to select information relating to the relevant dimension only as long as no change in this dimension which he could discriminate in the relevant favourable conditions occurs. Without such an intention, all we can appeal to is the subject's brute dispositions to react in certain ways when a change in shape is detected. However, since we are assuming that the conditions may be such that the shape may change while it appears to the subject that there is no change, this will not suffice for making it the case that the subject attends to the actual fine-grained shape. And if it is proposed that the relevant dispositions are the dispositions to react in the relevant favourable conditions, it is unclear what relation there is between these brute

⁵⁴ I should mention that I have been speaking about *x is thus* as predicating a mind-independent property following Brewer's explicit stress on this in chapter 6. However on p.175, when Brewer discusses the conceptualist's response to the difficulty raised by the non-transitivity of perceptual indiscriminability, he suggests that *x is thus* should be true of any object which is indiscriminable in the relevant respect from the demonstrated instance. Unless Brewer wishes to adopt a non-standard view, allowing that the objects on which a certain property can be truly predicated need not have this property, this should be taken to be a slip. For surely Brewer would not say that the properties which are presented to subjects in experience as the properties of seen objects are of the form '*x is indiscriminable in, say, shape from this [referring to a sample]*', and as mentioned in the discussion of McDowell's view, this does not seem to provide us with an account of what makes mind-independent properties available to the subject in experience.

⁵⁵ Or further possible shapes, sliced more coarsely, and similarly from his attending to a certain pattern of change of shape. It seems that there can be more than one possible property the subject may attend to, but I shall ignore these possibilities and focus on the question presented in the text.

dispositions and the subject's knowledge of which property he is currently attending to. Specifically, such dispositions can have no bearing on what he grasps to be a case in which he is keeping track of the same property while the appearance may change.

To see that there are circumstances in which we may ascribe to an ordinary subject the intention to restrict his attention to a fine-grained property sliced according to his discriminatory threshold, consider a subject who is selecting shape information from a given object with the purpose of determining exactly which fine-grained shape the object has. Such a task, it seems, is understood by an ordinary subject as involving both the recognition of general features of the shape (e.g., which category of shape it resembles if at all, whether it is angular, symmetric, complex, and so on) and a question regarding the extent to which it visibly resembles or differs from other shapes with the same general features. The subject will thus be disposed to evaluate the visible resemblance and difference between the currently seen shape and other shapes (which might include the shape of the given object at a later time), while taking into account the possibility of mistakes and how it is affected by changes in conditions (where he has at least some general grasp of which changes can affect his ability to discriminate fine-grained shapes, and is able to recognize changes in conditions which improve or detract from this ability; however, he need not know exactly to what extent the current conditions are close to optimal and similarly need not be able to foresee *exactly* which changes will affect the ability in which way). Due to his interest in the fine-grained shape, the subject will be attentive to any small change in the apparent shape, and *any* such change which he takes to be an actual change of the object's actual shape will be viewed by him as a change in which property he is attending to (as opposed to, for example, a case in which a subject is selecting shape information from a triangle with the purpose of only making a general categorical shape judgement; if the triangle is seen to undergo a change in the width of two of its angles

this would not be regarded by the subject as a change in which particular shape he is attending to). Furthermore, the subject will regard in a similar manner cases of change in the object's shape which he does not notice but which he could have noticed if the conditions were different (but still in the range of standard vision-enabling conditions). Thus, in this type of case, as long as the subject, in fact, continues to select information from the same fine-grained shape (sliced according to his discriminatory threshold) with the relevant purpose, he should be regarded as attending to this fine-grained shape. Attending to the shape together with his ability to keep track of it (which is a matter of his having these discriminatory abilities as well as a conception of their dependence on various conditions) makes it the case that he knows which fine-grained shape he is attending to and thus has a grasp of what it is for an arbitrary object to have this shape. This is so even though he is never in a position to determine with certainty that another instance of a shape is of exactly the same fine-grained shape as the attended one (since he will always allow for the possibility that there are other conditions in which he can discriminate the shapes of the two instances), and though he is always fallible as to whether or not he is actually continuously attending to one and the same fine-grained shape.⁵⁶

One may complain that normally people do not have such interests: most often we are interested in more general categories of seen things, or in local comparisons between, say, the shapes of two specific seen objects, where normally this does not involve worrying about the exact slicing of properties. Brewer concedes that we experience properties which we are not attending to and claims that in these cases the account of the content only requires appeal to demonstrative abilities which are not currently actualized. I shall shortly argue that this aspect of the view is problematic,

⁵⁶ The subject's certainty about the latter question depends on the extent to which he takes it to be likely that the attended property and object are such that the fine-grained property is likely to undergo slight changes without a visible external cause.

but at present it is sufficient to note that Brewer does not suggest that, for each currently experienced aspect, the experience must currently involve the actualization of a relevant specific demonstrative ability; he only requires that it be possible for such an ability to be actualized.

A further problem is whether we can assume that the sense in which an ordinary subject regards certain conditions as standard vision-enabling conditions is such that he has a grasp of a coherent set of conditions which are specific enough for it to be the case that discriminability in these conditions would suffice for individuating a certain fine-grained property. I leave this question open. If the points made above are correct, then the strong-conceptualist must provide some account along the suggested lines, and if there is no such plausible account this should be seen as a further reason to conclude that one cannot construe the experience of fine-grained properties as a matter of the actualization of demonstrative abilities.

Suppose, however, that an account of this type is possible. One point to note is that an account of what determines how fine-grained the attended property is does not seem to support the view that the current appearance plays a role in the individuation of the relevant demonstrative abilities. Thus, given the considerations presented in section IV for holding that the current appearance of the property being the appearance of this or that specific fine-grained property does not play a role in the individuation of the ability, I shall assume that the above construal is the best construal of the strong-conceptual suggestion, and in the following discussion ascribe it to the strong-conceptualist.

Secondly, and more importantly, the discussion makes clear that, for a particular demonstrative ability predicating a fine-grained mind-independent property (expressed by ' x is thus') to be actualized, the subject must attend to a particular instance of a property in a rather demanding sense. It is not sufficient that information from the

relevant instance is currently among the information selected by him as relevant to a certain task (specifically, for the control of his thoughts and actions) or even that as a matter of fact only information from the aspect is selected. The subject must *view* only information from the particular instance of the specific property as relevant to a certain task, where saying that he views the information this way is saying that he will attempt to select information, and to evaluate his selection, according to what he takes to be information from the instance and what he takes to be considerations relevant to the evaluation of whether it actually is from the same instance of the property. This is necessary for the subject to grasp which property is predicated, and thus, necessary for him to grasp what it is for an object (any object) to be thus (to have the given property).

The point is not restricted only to fine-grained properties. The same difficulty arises regarding all cases in which the subject is supposed to attend to a specific property (as opposed to generally attending to the relevant dimension), and as far as I can see the constraints on what is required if the subject is to attend to the property in a way which provides him with knowledge of which property is in question is, again, that he attends with the intention to restrict the selection of information to information from the relevant property alone. Furthermore, it seems that the point can be generalized to all environmental aspects, though for present purposes we can focus on properties (however, for convenience's sake I shall often speak about environmental aspects in general rather than specifically about properties of objects).

This creates a serious problem for the strong-conceptualist. For, clearly subjects do not attend, in this demanding sense, to all the aspects of the environment which they are experiencing. It was just mentioned that subjects do not normally attend in this sense to fine-grained properties (sliced according to the subject's discriminatory threshold). And normally there are various other seen aspects which are not attended

to in this sense; for example, a subject who attends to a seen table and to its colour would normally experience several other properties of the table (e.g. its location, shape, orientation) regardless of whether or not he is currently attending to any of them. Furthermore, while attending to the table, he may experience several unattended things surrounding it (e.g. the wall behind it, the objects on it, etc.), thus experiencing at least some properties of these objects (e.g., the fact that the wall is *behind* the table, its colour, or at least the fact that its colour is lighter than the table's, etc.). In the remaining part of this chapter I shall argue that the strong-conceptualist must either give up the generality of his view or hold the unintuitive view that we do not experience properties which we are not attending to in the demanding sense. (Hereafter I shall use 'attention to x ', where x is a certain environmental aspect, to refer to attention to the aspect in the demanding sense. When a subject is not attending to a certain aspect in this demanding sense, I shall refer to it as an 'unattended aspect').

VII

Brewer mentions the difficulty regarding unattended aspects, and remarks, in response, that he agrees that there are parts of the content of our conscious experience which are not conceptualized, but that nevertheless 'the central notion in understanding perceptual experience is... the attentional selection of information which is thereby conceptualized in perceptual demonstrative content'.⁵⁷ The claim is presented as following from his description of the non-conceptualized aspects as information which is available to the subject (rather than only to sub-personal systems) 'in the sense that it is a *possible* focus for his selective attention, without further ado, either actively directed in the service of some ongoing project, or passively drawn by

⁵⁷ p. 240.

acquiring some other kind of salience'.⁵⁸ If this response is meant as a defence of the generality of the strong-conceptual view, then it seems that it should be read as follows. Though the relevant aspects of the experiential content do not involve *the actualization* of demonstrative abilities, what makes it the case that they are aspects of the content of the experience is the fact that the subject can select them for the control of his thoughts and actions (where, according to Brewer, such selection just is the actualization of a demonstrative ability).

But what can be the basis for such a claim? At least at first glance it seems to be based on the thought that it is only when the relevant information is selected by the subject (and a demonstrative ability is actualized), that the information in question can have a subject-level effect on his thoughts and actions; where it is only when the information can have such an effect, that we can speak about it as available to the subject in the sense which allows us to view it as part of the content of the experience. If so, the status of the relevant parts of the experiential content as content for the subject is derived from their potential for affecting his thoughts and actions once they are conceptualized.

However, this line of reasoning is problematic. First, it seems that the experience of unattended aspects can have a direct subject-level effect on the subject's thoughts and actions (where by saying that the effect is direct I mean that it can take place without the conceptualization of the information). More important, it is difficult to see how one can deny that information from unattended aspects can have such an effect without also denying that such aspects are experienced by the subject (prior to a shift in attention). For, in general, if perceptual information from a certain aspect can have

⁵⁸ p.240. Brewer's summary of this point (p.241) suggests that by 'further ado' he means further uptake of information. If I understand correctly, the idea is that the information is available to the subject in such a way that simply by selecting it for deliberation and control of action the subject's attention is shifted to the object and property the information is from: no further gathering of information or further information-processing is required for the shift to take place (though the shift in attention will probably result in further information-processing and thus further information will be available to the subject).

no present direct rational effect on the subject's activities, it is not clear how the information which can be, but is not yet, selected by him could be regarded as part of what he is currently aware of; thus it is not clear how it could be regarded as experiential information. If the subject cannot be immediately aware of implications of the information to his activities, it is not clear in what sense he is currently aware of the information. But if he can be aware of the relevance of the information to his activities, then - assuming that, generally, he has the ability to adjust his activities intentionally in relevant ways - it should be possible for him to adjust them according to what he takes to be relevant implication of the information.

In other words, it seems that the claim I ascribed to the strong-conceptualist - namely, that certain information can be said to be presented to the subject in experience only if it can have a subject-level effect on her activities - should be understood as requiring the possibility of a direct subject-level effect rather than only the potential for affecting the activities (a potential which could be actualized only when the subject attends to the relevant environmental aspect). Or, at least, this should be the case if the motivation for this claim is (as I take it to be) that to say that the information is presented *to the subject* in experience just is to say that it is integrated into her current view of how things are, and thus, like any other aspect of her view, is immediately grasped by her as having various possible implication for her thoughts and actions.⁵⁹

This should also clarify that there is no room for objecting to the above consideration by suggesting that attention to the aspect is required for the subject to realize that the information, which she is already aware of, has implications for her activities. The connection between the subject's awareness of the information and the possibility of its direct subject-level effect on her activities is a result of the fact that

⁵⁹ Which is the point emphasized in Chapter 1.

for a certain piece of information to be part of her view of how things are just is for it to immediately be grasped by her as having various connections with other actual and possible states of affairs, and thus as having a normative bearing on her thoughts and actions. That is, the awareness of possible implication is not an additional step which might or might not take place after the subject becomes aware of the information. I do not mean to claim that the subject cannot be more or less sensitive to information she is aware of, and that it cannot happen that in certain conditions she fails to act on it. The claim is that we cannot generally deny the *possibility* of her acting on it directly (where, of course, there are further conditions which enable her reaction; but such conditions are not specific to the experience of unattended aspects), where it is this possibility that the strong-conceptualist cannot accept.

We can direct the complaint specifically against Brewer's explanation of the sense in which he takes information from unattended aspects to be available to the subject. The suggestion was that it can be said to be available to the subject in the sense that it is a possible focus of the subject's attention '...either actively directed in the service of some ongoing project, or passively drawn by acquiring some other kind of salience' (p.240). Now suppose that Brewer denies that the content of the experience of the unattended aspect can have a direct subject-level effect on the way the subject directs his attention (thus holding that the way subjects actively direct their attention can be affected only by things like expectation based on memory, general knowledge and the information from the attended aspects, instructions, a general plan for a systematic search of the visual field, etc.). According to the above consideration, it is, then, unclear why the fact that information from the aspect is a possible focus of a subject's attention is regarded as relevant to explaining the sense in which he can be said to (consciously) experience the unattended aspects; for on such a view, the question of whether he is aware of the information has no bearing on the way he

directs or could direct his attention. It might be pointed out that Brewer also says that the shift in attention does not require any further uptake of information. But it seems that this addition is, at best, simply a statement that the relevant information is already available to the subject. If so, we have no explanation of the sense in which the information is said to be available to him, and in addition there is a need to explain why this information cannot have any direct rational effect on the subject's activities.

VIII

Intuitively it is implausible to deny that we experience unattended properties (where what is in question is any property from which the subject is not intentionally selecting information he takes to be from the property). Furthermore, holding that experiencing a specific property requires attending to *it* seems to lead to absurdity. A subject may attend to the relevant general property; that is, he may intentionally select, say, shape information from the given object, regardless of whether the shape is changing and in what way. If the subject does not restrict his attention to a specific current shape (that is, a shaped sliced in some specific way), he is not attending to it in the sense required for knowing what it is for an object to have it. If we take this to entail that the subject is not experiencing the object's fine-grained shape, then we will have to accept, for example, that it is possible for the subject to experience the shape changing without experiencing the shapes which it has in any relevant stage.⁶⁰ Despite all this, a strong-conceptualist might be encouraged to accept that we do not experience unattended aspects by various empirical data showing the unreliability of our intuitions as to what we are in fact experiencing and the actual effect the

⁶⁰ It would not help to argue that strictly speaking it is not specific shapes which are experienced, but rather only the change (or some similar claim); for the strong-conceptualist will have to explain what an experience of the particular changes involves and will then encounter the same difficulties. Similarly, cases in which the subject attends to an object without attending to its properties will be claimed to involve experiencing the object without experiencing its properties.

experience has on our thoughts and action. I shall consider this possibility in Chapter 4 and argue that the relevant data do not support a complete denial of these intuitive claims. At present, we should go on to consider which further options are open to strong-conceptualists who do not wish to deny that we can experience unattended aspects.

The above considerations, if correct, show that a strong-conceptualist who does not deny that we experience unattended aspects cannot deny that such experiences could have some subject-level effect on the subject's activities. In principle there is room for holding that the content of an experience has to involve the actualization of demonstrative abilities only when it provides reasons for outright empirical judgements, and that only the experience of attended aspects provides such reasons. However, at least McDowell and Brewer's argument for maintaining that only conceptual content can provide the subject with reasons (which will be discussed in Chapter 3) seems to rule out any view according to which a subject could be said to take a non-conceptualized element of the content to have a normative bearing on his activities. (Note also, that, even if it is agreed that non-conceptualized elements of the experience do not provide reasons for outright empirical judgements, it seems impossible to deny that they play a role in the account of demonstrative abilities. For example, a subject can attend to a seen object and entertain demonstrative thoughts about it without attending to any *specific* property of it; in fact, normally he cannot attend to all of its visible properties at once. But the object's appearance, which consists of the appearance of its properties, is what guides the subject's attention to it and plays a central role in the subject's ability to keep track of it; thus the appearance of these unattended properties can be indispensable to the subject's ability to think demonstratively about it. Thus the strong-conceptualist should also give up the claim that an experiential content can play a role in explaining our conceptual abilities only

if it involves the actualization of a conceptual ability (though so far it has not been shown that he cannot maintain that the content of the experience of an attended aspect is both necessary for such an account and involves the actualization of a demonstrative ability)).

Even if we conclude here that McDowell and Brewer would not attempt to defend a view which allows for a subject-level effect of non-conceptualized elements of experiential content, we should still ask whether one who accepts that there are non-conceptualized elements of the content and that they could have some subject-level effects, can provide a different motivation for claiming that the non-conceptual elements of the content are explanatorily dependent on specific, currently non-actualized, demonstrative abilities. Since we agreed that we cannot construe the content of an experience of an unattended aspect as merely a potential for the exercise of a certain demonstrative ability, it is difficult to see how such a view could be defended. In fact, it seems that strictly speaking the subject does not have the particular demonstrative ability when not attending to the property. For his attention to the property is required for him to know which property is in question, and such knowledge is required not only for the actualization of a particular conceptual ability, but also for possessing it. But it should be clear that the strong-conceptualist cannot even suggest that the account of the specific experience of a specific unattended aspect requires appeal to the *specific* potential for thinking demonstratively about the experienced unattended aspect in question; i.e., that it requires appeal to the fact that, due to his experiencing the relevant aspect, he has information from it which enables him to shift his attention towards it if he wishes to do so, and thus has the ability to apply, to this particular aspect, his general ability to think demonstratively about experienced aspects of the relevant type and the general ability to attend to such aspects, and generally knows that he can do so.

One might try to suggest that there is such an explanatory dependence by pointing out that an experience of a particular aspect depends on the subject's ability to apply his general grasp of perception to the particular case in question, and it is central to this that the subject can have the specific demonstrative ability in question. But it is clear that this relation between the current experience of the unattended aspect and the potential to think demonstratively about the aspect is such that what is relevant to explaining the current experience are general abilities: the subject's general ability to attend to various aspects of the environment and his general ability to reason in certain ways about the relation between the way things appear and the way they actually are. The fact that, in addition to the general abilities, the subject currently has this particular potential rather than others is simply a consequence of the fact that he is currently experiencing the relevant aspect.

IX

The claim, then, is that one cannot hold that all aspects of the experience are either conceptualized or accountable in terms of the specific demonstrative ability which would have been actualized had the subject attended to the relevant experienced environmental aspect. Furthermore, it was claimed that if the strong-conceptualist wishes to maintain that we consciously experience unattended aspects, then he must admit that the non-conceptualized parts of the content can have a direct rational effect on the subject's activity, that is, an effect which is not mediated by a conceptualization of the information. However, conceding this possibility seems incompatible with the motivation for holding that only the conceptualized parts of the content can provide the subject with reasons for an outright acceptance of empirical propositions. I have mentioned the possibility that the strong-conceptualist would deny that we experience unattended aspects. If the reasoning in this chapter is correct, then this is the position

one is forced to adopt if there is a conclusive argument showing that only conceptual contents can have a rational effect on the subject's activities. In the next chapter I shall argue that the argument McDowell and Brewer provide is not conclusive. One might, however, find the unintuitive (and arguably absurd) position of denying that we experience unattended aspects appealing for other reasons. I shall discuss this possibility in Chapter 4 and clarify why I think it should be rejected. This almost completes the claim that the strong-conceptual view is both unmotivated and unworkable. However, the claim in the next chapter is only that the strong-conceptualists do not provide a *general* argument which shows that it is impossible for non-conceptualized aspects of the content to provide the subject with reasons for belief. It might still be possible to argue for the need of a strong-conceptual view by pointing out that no suitable alternative has been provided so far. It is thus time to clarify what the suggested alternative is.

I fully agree with the strong-conceptualist that for a subject to have a certain experience - for it to be the case that things are experientially presented to the subject as being a certain way - the experience must be integrated into the way in which the subject reasons about how he is related to his environment, and specifically this should yield a grasp of his experience as jointly dependent on how things actually are and on various relevant conditions (these are the results of the considerations presented in Chapter 1 and considerations as to what a subject's grasp of his interaction with a mind-independent world involves). Furthermore, I agree that the content of a particular experience is determined by the actual experienced environmental aspects and the relevant conditions, where this is possible in virtue of the way in which these factors are integrated into the subject's primitive conception of perception and objects. The dispute is about whether such a view entails that the experience of attended aspects is a matter of an actualization of demonstrative abilities and whether the experience of

unattended aspects should be explained in terms of the demonstrative abilities which would have been actualized had the subject attended to the experienced aspect. The strong-conceptualist thinks that it does since he holds that conceptual abilities are the only abilities which are such that their actualization immediately entails the grasp of normative relations between states in which they are actualized and other contentful mental states. My response is simply to deny this, claiming that we should accept that experiential content involves the actualization of capacities whose actualization immediately entails the same type of grasp, but which differ from conceptual abilities in important respects (and thus should not be regarded as conceptual abilities).

The thought behind this response is that mental abilities, and the states one is said to be in when they are actualized, are individuated according to the function they have in the subject's mental life. Thus if the abilities actualized when the subject has a particular experience with a particular content can be shown to differ in function in a significant way from conceptual abilities (specifically, demonstrative ones), then this would justify holding that there are states which are similar to conceptual states in that being in them suffices for the subject to grasp the normative bearing which they have on his thinking, while their having the content they do is not due to the actualization of relevant conceptual abilities. So far we have seen that if we experience specific properties when they are unattended, then the relevant part of the experience (that which is due to the fact that the subject is experiencing the relevant unattended property) does not involve the actualization of a demonstrative ability - where two essential characteristics of such abilities are that they are actualized only together with other relevant conceptual abilities, yielding a state with a propositional content, and that their actualization is not restricted to a specific context (by which I mean a specific type of a propositional attitude). Since saying that the relevant aspects are experienced entails that they are directly grasped by the subject as having certain

implications to his activities, the experience of unattended aspects must be viewed as involving the actualization of capacities which are similar to conceptual abilities in this respect, but differ from them at least in the other two respects mentioned in the previous sentence.

3 Experience and reasons for beliefs

I

I have been arguing that the strong-conceptual view is unfeasible, at least as long as it is meant to be a general view relating to all aspects of our experience. However, strong-conceptualists like McDowell and Brewer do more than just suggest their versions of a strong-conceptual view: they argue that experiential content *must* be construed in the suggested way if we are to have the ability, which we take ourselves to have, to think about the way things are in our environment. In this chapter I shall argue that the argument they provide is inconclusive.

Both McDowell and Brewer argue that (i) if our empirical beliefs are to have the content we take them to have, experience must provide a subject with reasons for (at least) some of his empirical beliefs;⁶¹ (ii) states with content which is not of the type that can be the content of a judgement cannot provide such reasons; therefore (assuming that we have the empirical beliefs we take ourselves to have) (iii) the content of experience (or rather the parts of the content which provides such reasons) must be of a type which could be the content of a judgement (where such a content - a proposition - is a content which a state has in virtue of the actualization of two or more relevant conceptual abilities). It is the argument for the second premise which I find inconclusive. McDowell and Brewer defend this premise by emphasizing that what is in question is *the subject's reasons* - that is, the reasons which the subject recognizes as reasons for endorsing relevant contents (or performing relevant actions) and which consequently motivate his doing so - and claiming that only the relevant conceptual contents (propositions) could be recognized by the subject as having such normative

⁶¹ McDowell speaks about the experience being the subject's reason, while Brewer normally says that experience provides the subject with a reason. My interpretation is that Brewer agrees that when the subject takes the experience at face value and forms relevant beliefs the experience can be said to be his reason for forming these beliefs, but that he is careful to leave room for cases in which a subject mistakenly assumes that his experience is not veridical or that there are reasons to doubt its veridicality.

bearing on what he believes and does. I shall argue that they do not provide a general argument for accepting this last claim. Since Brewer presents a more detailed version of the argument, I focus on his version.

II

Brewer begins by arguing that giving reasons involves identifying certain propositions as the premises and conclusion of a relevant argument. Since I object to Brewer's reliance on this claim at the next stage, I shall quote the argument in full.

To give a reason [for making a particular judgement, holding a certain belief or performing a certain action at a given time] is to identify some feature of the subject's situation which makes the relevant judgement or belief (or perhaps action) appropriate or intelligible, from the point of view of rationality. It is... to mention considerations which reveal the judgement or belief (or action) as at least approximating to what rationally ought to happen in those circumstances. Now, making something intelligible from the point of view of rationality in this way necessarily involves identifying a valid deductive argument, or an inference of some other kind, which articulates the source of the rational obligation (or permission) in question. For *rational* intelligibility, or appropriateness of the kind revealed by giving reasons, just is the mode of approbation which is made explicit by the reconstruction of *valid reasoning*⁶² of some such kind to a conclusion that is suitably related to the judgement or belief (or action) for which the reasons are being given. Hence, in making essential reference to the relevant valid inference, giving a reason involves making essential reference to its premises and conclusion, and so trivially to the kinds of things which can serve as the premises and conclusion of some kind of inference [namely, propositions].⁶³

If 'giving a reason' is understood as the meta-activity of articulating in speech or thought what makes it appropriate to accept a certain proposition as true,⁶⁴ then one cannot but agree that such activity will involve forming an argument which is taken to be correct.⁶⁵ One might also be willing to accept that the claim applies to cases in which

⁶² Brewer comments in a footnote that 'validity' is to be understood here in a wide sense, including the correctness of inductive and abductive arguments.

⁶³ pp.150-1.

⁶⁴ In order to simplify the discussion I shall ignore the case of action (in effect, Brewer does so as well: he does not consider any aspect which relates to practical, rather than mental, actions alone). Also, for convenience's sake I shall sometimes mention only one of the possibilities (judging or forming a belief) or speak in general about taking or holding a certain content to be true.

⁶⁵ I shall use 'correct' as the general term (i.e., applying to any type of argument) for the property in virtue of which accepting the premises justifies accepting the conclusion, since 'valid' seems to be linked too closely with deductive arguments.

a subject reveals a reason for a belief in conversation without actually articulating it; for example, doing this by pointing at a certain location and saying ‘just look at that’. For it might be argued that if the speaker is to be regarded as really giving a reason and if the hearer is to understand the speaker, they both have to articulate the premises of the relevant argument in thought. However, agreeing on these two points is not sufficient for justifying Brewer’s application of this consideration at the second stage of his argument, where the question is what is required for a subject to grasp a reason for making a judgement as his own reason. At best, one can argue that this involves an implicit identification of such an argument.⁶⁶ I shall expand on this claim after presenting the second stage.

At the second stage Brewer argues that when what is in question is the subject’s reason - i.e., that which, *from the subject’s point of view*, makes a certain judgement rationally appropriate and therefore motivates her to make this judgement - then, having the reason consists in the subject’s being in a mental state the content of which is a proposition that the subject takes to be a premise in an argument that, in her view, justifies making the relevant judgement. (Thus, it is a mental state with a propositional content).

It is first argued that

... the subject’s having such a reason consists in his being in some mental state or other, although this may well be essentially factive. For any actually motivating reason *for the subject* must at the very least register at the personal level in this way.⁶⁷

The second sentence may seem to support only the claim that the subject’s having a reason must involve his having an appropriate mental state (allowing that environmental conditions, which are not themselves constituents of the state, may be

⁶⁶ Why should this case differ from the case in which a speaker conveys a reason without spelling it out? The thought is that some explicit articulation is required for the speaker to grasp the usefulness of his means of communication and for the hearer to grasp what the speaker is doing. However, rejecting this (and holding that the situation which involves communication does not require an explicit articulation of the relevant argument) is consistent with the view I wish to defend.

⁶⁷ pp.151-2.

regarded as further constituents of the subject's reason). For it may seem that the argument is simply that if the reason is to be causally relevant (*as a reason*) to the fact that the subject makes the relevant judgement, then he must recognize its status as a reason, and this, of course, implies having an appropriate mental state.⁶⁸ However, what justifies the stronger claim (that the subject's having the relevant reason *consists in* his being in the relevant mental state) is the thought that any environmental condition which is not in some way part of what constitutes the content of the relevant mental state cannot affect the subject's activity (in this case mental activity) in the right way; that is, its causal effect, if it has one, cannot be part of an effect which is due to what the subject recognizes as justifying his activity. Thus it is not part of *the subject's* reason. This seems to me perfectly acceptable.

The final step is to argue that the premise proposition which, according to the previous consideration, one must refer to when giving a reason

... must actually *be* the content of [the subject's] mental state in a sense that requires that he has all of its constituent concepts. Otherwise, even though being in some such state may make it advisable, relative to a certain end or need, for the subject to make the judgement, or hold the belief... in question, it cannot constitute *his own* reason for doing so. (p.152)

The argument seems to be that if a subject is to have a reason for judging that *p* which *he recognizes as such*, then according to the consideration of the first stage he must grasp a certain argument whose conclusion is *p* and which articulates what makes it correct, from his point of view, to judge that *p* in the given situation. Thus, his having the reason must involve a grasp of the premise(s) of the argument (which is(are), by definition, a proposition(s)), and it is precisely the grasp of the premise(s) as the premise(s) of a correct argument that has the type of motivating force which the subject's having a reason is supposed to have. Note that since the subject's grasp of the premise(s) as the premise(s) of a correct argument is supposed to have this motivating

⁶⁸ On p.155 Brewer's spells out the consideration in this way.

force, the mental state in question is understood to be an occurrent state which involves the actual entertainment of the premise(s).

As mentioned above, I see no obvious reading of the consideration presented at the first stage which immediately implies that the subject's *recognition* of an experience as providing him with a reason requires that he actually entertain the premises of an argument which articulates the normative relation between the experience and judging that *p*. At best, if it is agreed that such normative relations must be articulable, there is a sense in which when a subject recognizes a reason as such he implicitly refers to a relevant argument. But in order to claim that the subject has to actually entertain the propositions the argument consists of, one has to show that a subject cannot be said to recognize the normative bearing of the experience on his judgement if he does not articulate this normative relation in thought. Before pressing this point further we should examine Brewer's positive suggestion as to how the subject recognizes the reasons provided to her by her experience. I shall do so by discussing his response to a certain line of objection to his suggestion.

III

Brewer takes the relevant argument - the one which the subject is supposed to grasp in order to recognize that a given experience provides her with a reason for making a certain judgement - to be the argument consisting of (i) the proposition which is the content of the relevant experience as a premise and (ii) the content of the relevant judgement as its conclusion. An opponent may suggest instead that the relevant argument should be one in which the premise is a proposition of the form 'it appears to me that this is thus'.⁶⁹ This alternative, the opponent claims, makes room for the

⁶⁹ Note that despite the fact that the embedded content involves demonstratives it is not impossible to read the formulation disjunctively. For we need to assume that there is some story to tell about some kind of quasi-demonstrative abilities which the subject exercises when he does not believe that he is experiencing

possibility that the conceptual abilities involved in thinking that this is thus are involved only in the subject's grasp of the premise proposition and not in her actually having the experience. Furthermore, at first glance the alternative seems more appropriate than Brewer's suggestion, since taking a certain argument to be correct is not, by itself, a reason for accepting its conclusion as true. One must also accept the premise(s) as true. But having an experience with a particular content is not yet to accept its content as true.⁷⁰ In contrast, there seem to be no situations in which a subject, while her experience presents her with things as being a certain way, does not accept that things appear to her this way (construed disjunctively).^{71,72}

Brewer's reply to the latter difficulty is that demonstrative propositions of the form 'this is thus' are such that, whenever the object referred to demonstratively and the property predicated are determined by the subject's attention to an object and to a certain property of it,⁷³ the subject cannot entertain the content without taking himself to be justified to hold that this is thus is true. This is so due to the background conception involved in the subject's grasp of what it is for 'this is thus' to be true (that is, his grasp of the dependence of his experience on how things are and on various relevant conditions), and to the fact that he is aware of relevant aspects of his current relation with the environment, especially, the fact that he is attending to the relevant object and

an actual object and property - abilities which do not involve the subject's current commitment to there being a particular object and property which he is actually attending to.

⁷⁰ Heck (2000 p.507) presents this as a reason for preferring the alternative. The above difficulty with Brewer's suggestion is also mentioned by Martin in his 2001.

⁷¹ Heck (2000, 512ff.) and Peacocke (2001 pp.255-9) both appeal to such an alternative in order to show that requiring that the normative relation be articulable is consistent with holding that experience has a non-conceptual content. (Both are responding to McDowell who claims that the subject's recognition of a reason as such requires articulability, rather than actual articulation, of the relation).

⁷² I do not deny that a subject might doubt that what seems to be the way things appeared to him in experience was actually a visual appearance (rather than, say, imagination or an interpretation of the visual appearance). It seems, however, impossible for a subject to entertain such doubts about a particular *current* appearance which he takes to be the *current* (visual) appearance.

⁷³ See Martin 2001 and Brewer's reply (2001) for the need for this condition. In effect, the above condition is not strong enough, for there are cases in which different parts of the same object are visible to the subject but do not appear to be parts of the same object. However, the exact details are not important at present and in what follows I shall either omit the condition altogether, or just mention generally the need for relevant conditions to obtain.

property.⁷⁴ Thus even though experience only involves entertaining the content (not yet endorsing it), the mere fact that it is entertained suffices for displaying to the subject his right to endorse it. If I understand correctly, Brewer regards the subject's rational move from grasping the proposition to endorsing it as embodying a grasp of a correct argument from the proposition to itself.

In addition, Brewer argues that the opponent's suggestion (namely, that the premise should be the content of a belief about the experience rather than the content of the experience) does not exempt us from the need to take the content of the experience to be a proposition.⁷⁵ Take for example the following version of the opponent's suggestion. A subject who has a certain experience endorses the proposition 'it appears to me that p '. Due to his general grasp of the relation between his experiences and the way things are, he knows that when the conditions are standard such an appearance is a result of its being the case that p . So if he does not doubt that the conditions are standard, he takes it to be correct to judge that p . The opponent thus accepts that the subject's actual recognition that he has a reason to judge that p requires him to be in a conceptual mental state with the content 'it appears to me that p ', which is a state which requires him to possess the concepts which are the components of ' p '. But he claims that the actualization of these concepts is not required for having the relevant experience.

The question, however, is what basis the subject has for his belief that things appear to him to be p (rather than q , for any $q \neq p$). Now, it seems plausible that the way subjects form such beliefs should involve something along the line of Evans's suggestion on this issue; that is, it should involve the subject's finding out how things

⁷⁴ I use the square quotation marks to signify a proposition.

⁷⁵ Brewer outlines this objection as a reply to Peacocke and Heck (manuscript). The relevant considerations are spelled out in ch.4 of his 1999. I take the argument presented below to be a reconstruction of one of Brewer's main considerations.

appear to him by finding out what he is inclined to judge (about the way things are) in virtue of his sensitivity to the current experience alone.⁷⁶ But if this is part of how the subject forms the belief, then there is a problem as to how the experience and the relevant inclination are related. If one construes the inclination as *the subject's* reaction to the experience's *making it rational* to judge that *p* from his point of view, then we are presupposing what we are attempting to explain (i.e. that, from the subject's point of view, a particular experience has a certain normative bearing on which thoughts he should accept as true). But if, on the other hand, the inclination is not due to any rational effect of the content of the experience, then, it is difficult to see how one can hold that the alleged content of the experience is a content for the subject (that is, that from his point of view, things are presented as being a certain way). Or to put the problem differently, if the inclination is not due to such rational effect, there is no immediate reason, from the subject's point of view, for taking his judgement about the way things appear to him in experience to have a normative bearing on what he believes about the world; for the mere fact that things appear to him a certain way is not taken by him to have such a bearing on these beliefs. An attempt to appeal here to assumptions or knowledge the subject has about the relation between the appearance and the way things are - assumptions or knowledge which are not operative when he merely has the experience - will be futile since such assumptions could not be taken by the subject to be justified without appeal to experience.

⁷⁶ See Evans pp.227-8. In general, it seems that one who denies the relevance of these inclinations to the way we form beliefs about how things appear to us must be thinking that such beliefs are somehow based on the quality which the experience has for the subject. But this immediately leads to insurmountable problems as to how the subject could view beliefs about the appearance as justifying judgements about the way things are in the world. I should mention that Heck explicitly adopts Evans's suggestion. Peacocke (2001 p.258) offers a more elaborate view which involves special demonstrative concepts that allow thoughts about the fine-grained ways in which things appear. Such concepts are available only when things are experienced in the relevant way and, if I understand Peacocke's allusion to his notion of conceptual redeployment correctly, the normative bearing which the subject takes the experience to have when he is not reflecting on it plays a central role in what constitutes the subject's grasp of the relevant demonstrative. Thus at least in this respect it depends on the subject's inclinations to make (demonstrative) judgements about the world on the basis of his experience.

The opponent may respond that he does not hold that the subject actually has to form the argument in order to recognize that her experience provides her with a reason to make the relevant judgement. He only agrees that the subject has to have the *ability* to articulate the normative relation in thought (thus, the *ability* to form the relevant argument); for he agrees that if the subject is to have a genuine grasp of a normative relation, she should be able to reflect on what she takes to be her reason and to grasp the possibility that she was wrong in taking it to justify the judgement (where, at least for the sake of the argument, he accepts that this reflective ability involves the ability to articulate the normative relation between the experience and the content of the judgement).⁷⁷ Since the opponent holds that the subject's recognition of the normative relation depends only on her ability to reflect on the relation and re-evaluate it and not on its actualization, it is unproblematic that the beliefs about the experience, which the subject has to be able to form when reflecting on the relation, presuppose her recognition of the normative relation between the experience and the relevant empirical judgement. What is relevant to the subject's determining the embedded content of the self-ascription is the *prima facie* normative bearing which she takes the experience to have on her thought evaluation. And the fact that the experience has such a *prima facie* normative bearing is independent of her actually forming the relevant argument.

This brings us back to whether Brewer has an argument for the view that, generally, recognizing a reason as such must involve forming a relevant argument; that is, whether it must involve an actual articulation of the relevant normative relation in thought. Brewer seems to regard the consideration of the first stage as providing such an argument; thus he seems to regard it not merely as a claim about what the articulation of

⁷⁷ McDowell emphasizes that a genuine grasp of the normative bearing of experience on judgements requires an *ability* to articulate a relevant argument (for example, 1996 p.52); Heck and Peacocke are reacting to this claim.

a normative relation involves, but rather as a claim as to what is required for something to be displayed as a reason, including the case in which what is in question is the subject's recognition of his own reasons as such. I have claimed that there is no obvious reason why one should accept this: that the only obvious essential relation between reason-giving and arguments is the trivial claim that forming an argument which is supposed to be correct is simply the way of articulating this relation in speech and thought. What is more, it is rather natural to view the subject's recognition of the normative bearing of what he experiences on his thought evaluation as a counterexample to the claim that a subject's recognition of the normative bearing of the content of a mental state of his on his thought evaluation must involve actual articulation of this normative relation in thought.

Now, if the normative relation between the experience and the relevant judgement was one which was entirely due to structural relations between the content of the experience and the judgement, then this might have been a basis for arguing that the subject cannot recognize the relation without entertaining the premise proposition. For it might be possible to argue that there are no normative structural relations between a proposition and a non-propositional content.⁷⁸ At some points Brewer seems to ascribe a special significance to the fact that the relevant argument is one which is correct (and actually valid) in virtue of the structural relation between the premise and the conclusion; i.e., that it is an argument of the form ' p ; therefore p '. But it is clear that it is not the formal relation between the premise and the conclusion that articulates the relevant normative relation. As mentioned above, Brewer's picture of how the subject grasps the normative relation between the experience and the judgement deviates from the standard way in which a grasp of an argument articulates, for the subject, the right she has for making a certain judgement. What matters on his picture is not the fact that

⁷⁸ I am not claiming that this is the case. I am unclear about what an opposing view might be.

'*p*; therefore *p*' is a valid form of argument, but rather the fact that merely grasping the content 'this is thus' (in the relevant conditions) involves grasping that, in fact, this is thus. Clearly, this does not hold for all *p*. (And it is clear that Brewer is not suggesting that the subject first endorses the premise as true in virtue of grasping its content and then relies on the validity of arguments of the form '*p*; therefore *p*' to conclude that she is justified to judge that this is thus). Furthermore, given what the grasp of the concepts *this* and *is thus* involves, there seem to be transformations from one proposition, say, 'this belongs to John', to another, say, 'there is something in my visual field now', which can be justified in the same way and are not instances of a formally correct argument.⁷⁹ (I should emphasize that the main point here does not depend on this last claim. The point is simply that the justificatory work, in Brewer's account, is done by the fact that we are dealing with a content which is endorsed merely on the basis of grasping it and not by the fact that arguments of the form '*p*; therefore *p*' are valid).

Does Brewer have any other general reason for holding that whatever constitutes a reason for accepting a certain proposition (or for any other attitude towards it) must involve entertaining a proposition the grasp of which involves grasp of an inferential link between the two propositions (either a link which is due to formal relations between the propositions or one which is due to relations between the particular concepts from which the 'premise proposition' is composed)? In other words, the question is whether Brewer has a general argument showing that there is no way in which being in one mental state puts the subject in a position to recognize its implication for how he should evaluate his thoughts other than the state's involving grasp of a proposition which he recognizes as having relevant implications. Now, the discussion on pp.166-8 is

⁷⁹ Note that in this example each of the propositions is such that merely grasping it does not give the subject a reason to endorse it. Thus, one cannot suggest that there is an implicit additional inference from the premise to itself, or that actually the right to endorse the conclusion is due to the subject's grasp of *its* content. It also seems wrong to suggest that entertaining the thought 'this belongs to John' already requires the subject to entertain the proposition 'this is in my visual field now' which he then endorses and infers from it the existential proposition.

presented as addressing this question, but in this discussion Brewer simply assumes that in the case of states with non-propositional content

... mere possession of the mental state involved in having such a “reason” [in our case, the experience] is explicitly insufficient for the subject’s understanding of the proposition whose association with this state grounds its putative status as his reason for doing what he does. Hence any account of his essential recognition of his reason as such which attempts to exploit the connection between understanding and knowledge of what follows from what along the lines suggested above [i.e. the knowledge of what a proposition entails which one has simply in virtue of understanding the proposition] is inapplicable. (pp.167-8)

I am not sure how to construe the assumption that there is a proposition whose association with the subject’s non-propositional mental state grounds its putative status as his reason for doing what he does. However, if the thought is that recognizing a reason as such must involve forming a relevant argument and therefore the subject must relate the non-propositional mental state with a premise proposition if he is to recognize it (the mental state) as his reason, then Brewer is simply presupposing here the claim for which we are seeking an argument. Alternatively, if this is merely an expression of the thought that the *ability* to articulate the a relevant argument whose premise is related to the non-propositional state is necessary for the subject’s recognition of this state as providing him with a reason, then it was already argued that such a dependence is consistent with the subject’s recognizing that he is provided with the relevant reason despite the state’s content not being propositional. In this case, then, one does not have to appeal to the connection between understanding a proposition and knowledge of what it entails; for one assumes that the relevant non-propositional state is such that merely being in it provides the subject with a grasp of its normative bearing on his thoughts. Thus, once again, Brewer is simply assuming, rather than arguing, that:

... although conceptual contents are essentially grasped by their subject in precisely the way which has evident relevance for their inferential powers which are in turn crucial to sustain their status as reasons, *non-conceptual contents are not*. ... to categorize a state as non-conceptual just is to deny that it is given to the subject in such a way as to provide for the possibility of [the recognition of reasons as reasons] directly.⁸⁰

⁸⁰ p.168, my italics.

IV

The suggestion that experiential contents are only weakly-conceptual is a suggestion that simply having a certain experience puts the subject in a state in which he grasps the implications which the state has for his activities; specifically, for thought evaluation, reasoning and planning. That is, he is presented with the world being a certain way and, due to his primitive conception of the relation between his experiences and the way things are, grasps that unless he has reasons for relevant doubts as to whether the conditions are standard, things are likely to be as they are presented (where it should be remembered that this conception is part of what is involved in his ability to experience things; it is not some addition to his experiences which he may or may not develop on the basis of them). If the claims made so far are correct, then Brewer has not shown that this type of suggestion is unacceptable.

Is there some other basis for objecting to this weakly-conceptual suggestion? The suggested view includes the assumption that the content is available to the subject in the sense that he immediately grasps it as having a normative bearing on his mental and practical activities. As mentioned at the end of Chapter 2, the justification for assuming that contents that do not consist of a complex actualization of conceptual abilities can be of this nature is that we have to view experiential contents in this way in order to have an accurate and illuminating description of subjects' mental lives. Thus if one is to question this suggestion (while accepting the general framework of thinking about mental capacities), one should attempt to reject the arguments intended to show the need to distinguish experiential capacities from conceptual ones.

So far I have suggested that the experience of aspects the subject is not currently attending to (in the demanding sense) cannot involve the operation of a the relevant demonstrative ability since without actually attending to the aspect the subject cannot be ascribed knowledge of which particular aspect is in question. One may respond to this

in one of the following ways. Reject the requirement that an actualization of a conceptual ability involves the subject's knowledge of which aspect is in question; argue that the sense in which the subject is required to know which object is in question is weaker than I have assumed; or deny that we actually experience unattended aspects. The first two responses amount to construing talk about concepts in a different manner. Whether there are advantages to a relevant alternative construal, and whether there is room for arguing that it should be preferred to the construal I have been presupposing, is beyond the scope of the current discussion. Note, however, that the strong-conceptualists - McDowell and Brewer - would not choose any of these routes. I have mentioned the implausibility and even the absurdity of the third objection, but shall reconsider it in the next chapter.

The claim that the experience of unattended aspects is to be explained in terms of experiential capacities which are distinct from conceptual abilities also bear on our account of the experience of attended aspects. It seems that the experiential capacities involved in the latter case are just the same as those involved in the former.⁸¹ The difference lies merely in the amount of visual input processed and the amount of processing, due to the way the subject directs his attention. (There is, of course, a further question of whether the subject's intentionally attending to an environmental aspect can be distinguished from the actualization of a demonstrative ability, but this does not bear on the question of which capacities are involved in making it the case that the aspect is experienced the way it is). A clear manifestation of this is the fact mentioned earlier that one may, for example, attend to an object without attending to any particular property of it, while an object being experienced a certain way consists of the experience of its properties (being organized in a certain way). In addition, the discussion in Chapter 6 will help clarifying that we cannot account for the generality of

⁸¹ In Chapter 5 I shall mention a possible objection to this point and explain why it should not worry us.

a specific demonstrative ability if we identify the act of attending to the object (whatever our view about the capacities in virtue of which the subject experiences the object is) with the actualization of the demonstrative ability in question. (This is, in effect, a way of spelling out the fact that the experience plays a role in explaining the relevant demonstrative ability).

There are further differences between experiences and relevant attitudes to propositions which might not, on their own, justify the distinction under discussion, but the fact that they exist supports it. One such difference - related to the restriction of the actualization of experiential capacities to one specific context (that of experience) - is the fact that experiential contents as opposed to conceptual ones are not themselves directly affected by other mental states (that is, not affected in virtue of the content of those states). In addition, demonstrative abilities are the only conceptual abilities which might have enabled accounting for things like the continuous nature of experiential content, the special way in which such content can be unspecific and its particularity. (I shall say more about these features in Chapter 5).

V

I have argued that Brewer did not show that the content of the experience must be a proposition. It might, however, seem that Brewer and McDowell's line of argument supports a weaker strong-conceptual claim: namely, that though the content of an experience is not a matter of the actualization of demonstrative abilities, the relevant demonstrative abilities - those which the experience gives rise to - must be appealed to in the account of the experiential contents in question. Such a claim may seem a consequent of accepting that the subject's recognition of the normative relation between the experience and the relevant judgement requires that he be able to reflect on the relation and thus that he be able to entertain thoughts with an embedded conceptual

content that captures the content of the experience (or relevant aspects of it). However, such a claim is simply a more specific version of the claim considered at the end of Chapter 2 (namely, that particular experiences depend on the particular potential to think demonstratively about the experienced aspect, since the experience presupposes the subject's ability to apply his general grasp of perception in the particular case in question). Thus here as well the response is that the ability to reflect on the normative relation, even though it involves an ability to entertain demonstrative thoughts about the relevant aspects, is accountable in terms of the subject's general abilities to think demonstratively about aspects he encounters. It would also help here to remember that thinking about the ability to reflect on the relation as involving an articulation of an argument (whose premise is a belief about the experience) and an evaluation of its correctness is somewhat misleading. In effect, reflecting on the normative relation involves applying any of the variety of ways in which one reasons about one's current interaction with one's environment, and it is not always the case that the content of the particular experience in question figures in this reasoning (furthermore, if the reflection takes place a few seconds after the aspect disappeared from view it cannot figure in the subject's reasoning).

4 Subject-level effects without conceptualization

I

In Chapter 2 I argued that the elements of experiential content which are due to the subject's experience of a specific property he is not attending to (i.e., a property from which he is not selecting information with the intention to restrict the selection to this specific property alone) cannot be explained in terms of the demonstrative ability this experience may give rise to. It was mentioned that the strong-conceptualist may respond by denying that we experience unattended properties (or, assuming that the claim applies to any unattended environmental aspect, generally denying that we experience unattended environmental aspects). Intuitively, such a denial is implausible. Not only do we take ourselves to experience aspects which are not attended to in the demanding sense, but also we take the experience of such aspects to play a role in the way we interact with our environment. First, it seems undeniable that experiences of unattended aspects have a subject-level effect on the way we direct our attention. For example, it seems undeniable that a subject glancing at a group of people in front of him without attending to any one of them in particular, and similarly not to any of their specific features, is in a position to form an intention to attend to the person on the left and act accordingly *because* he experiences, say, the person as being woman-like and all the rest as man-like. Further, it generally seems that we direct various aspects of our actions according to the way things appear even when it is implausible to suggest that we attend to all the relevant aspects. For example, it seems that normally a subject who is walking towards a seen target will direct his action according to the target's seen direction, though subjects do not normally attend to the specific direction (or to a specific pattern of change of direction) in such situations. It also seems that the experience of unattended aspects can have a subject-level effect on the way we evaluate thoughts. Thus in the first

example, it seems that, prior to his shift of attention, the subject takes it to be likely that there is a woman there (referring to a rough egocentric location), quite likely that there is only one woman in the seen group, etc.

However, empirical data suggest that our intuitions as to what we experience as well as to the effect of the experience on our reactions to the environment are quite misguided. This might encourage a strong-conceptualist to accept the unintuitive view that we do not experience unattended aspects. In fact, such data may encourage one to hold that only propositional content can figure in a subject-level explanation, independently of a wish to establish that the content of experience must be conceptual.⁸² Furthermore, one should note that the strong-conceptualist may favour such a view even if he agrees that there is no general conclusive argument for the view that only conceptualized contents may have subject-level effects, for he may prefer it to the alternative - namely, allowing that propositional contents are not the only contents which a subject can grasp as having a normative bearing on his activities - for the sake of parsimony (or for some other reason I have been missing).

In response I shall suggest: (i) that the relevant empirical data are consistent with holding that we experience unattended aspects and that such experiences have a subject-level effect on our activities, and (ii) that an interaction with the environment, where only experiences of aspects which are attended to in the demanding sense have a subject-level effect on the subject's activities would be very different from the way in which normal subjects, in fact, interact with the environment. I shall first briefly present the line of thought in virtue of which the relevant data may seem to support

⁸² Campbell's view in his 2002 may be an example. On Campbell's view the actualization of the relevant demonstrative abilities is not part of what constitutes the content of the experience; rather the experience contributes to the subject-level effect by providing the subject with knowledge of which thing is experienced and thus with the ability to entertain demonstrative thoughts about it. Whether or not Campbell would say that experience does not have any direct subject-level effects is not clear. I shall say more about this in Chapter 7.

the view that the experience of unattended aspects has no subject-level effect on subjects' visually-guided spatial actions. (I focus on visually-guided action, since in this case the relevant line of thought is clearest and seems most persuasive). I shall then, without denying any of the hypotheses suggested by the relevant data, provide an example of a case in which I argue that experiences of unattended aspects do have such an effect. The example will demonstrate, in general, the type of role the experience of unattended aspects can play; where it is undeniable that we often do, in our interaction with the environment, rely on such experiences in the suggested way.

One may wonder why I do not discuss directly the question of whether the data which show that we experience less than we take ourselves to can support the view that we do not experience unattended aspects. There are a number of reasons for this. The current data are not sufficient for providing a general picture of the relation between what we take to be our current experience and the current visual information which is in fact available to us. Furthermore, as far as I know, at present, psychologists do not distinguish attention in the demanding sense from various weaker senses in which a seen aspect may be attended to, and they would not take the data to suggest a picture on which we experience only aspects which are attended in the demanding sense. Thus an attempt to present a line of thought which the strong-conceptualist may follow will require a detailed discussion of various highly speculative (and complex) possibilities. (In Chapter 5 I shall mention one suggestion as to why and how it might be generally the case that what we take to be the experience of unattended aspects is not genuine experience, and shall clarify what is wrong with this suggestion). In addition, by directly showing that our experience of unattended aspects plays a role in explaining the way we in fact interact with our environment, we have further direct support for the need to allow for non-conceptualized contents to have such effects. This would help quieting those who

have doubts regarding the way I have argued for the relation between a subject's experiencing things a certain way and the possibility of the experience's having a subject-level effect on his activities.

II

Intuitively, then, it seems that when we do things like reaching out with our hand to pick up a seen object our action is guided by our experience: by the apparent direction, distance, shape and orientation of the object, by whether or not we see that the route is clear, and so on. However, empirical evidence suggests that some of the visual information which guides and controls action is processed separately from the visual information available to the subject in experience. Thus, for example, when a visual form agnosia patient, who cannot see in which way a slot in front of her is oriented, is asked to insert her hand into the slot, she does this exactly like normal subjects: she orients her hand correctly right from the start of her reaching movement. Or in the case of normal subjects, it has been shown that certain visual illusions do not affect the way a subject acts; for example, subjects who are asked to pick up discs which are similar in size but appear different or appear similar in size while they are different, scale their grip aperture during the reaching movement according to the actual size of the disc rather than the apparent size.⁸³

This is not sufficient for suggesting that there are no aspects of visually-guided actions which depend on the way things are experienced. For the discrepancies between information for experience and information for action of the type mentioned above are limited to particular types of connections between vision and action; for

⁸³ Milner and Goodale 1995. I am simplifying here. There are minor differences in the size of the grip aperture which may be interpreted as an influence of the illusion. There are, however, alternative explanations (see Haffenden and Goodale 2000), and, in any case, for present purposes it is sufficient that there is a systematic tendency of the grip aperture's size to correspond with the disc's actual size.

example, they occur only in particular types of actions such as simple cases of reaching out with one's hand and grasping simple-shaped objects,⁸⁴ and only when the delay between seeing the target and initiating the action is shorter than two seconds.⁸⁵

However, the lack of discrepancies does not yet mean that the effect of the relevant information on object-directed actions depends on the information being available to the subject in experience. It may simply be a result of the contingent fact that the information which is used for the sub-personal control and guidance of the relevant aspects of action is processed by the same mechanisms which determine how things are experientially presented to the subject; so that, *in principle*, it could have happened that something has gone wrong and the information, though processed, has not been made available to the subject in experience, without this having an effect on how the subject performs (or is disposed to perform) the relevant visually-guided actions. In fact, it seems quite plausible that this is often the way things are. There is evidence showing that subjects respond to relevant changes in the environment by adjusting their behaviour much quicker than they report awareness of the change,⁸⁶ and that generally information is available for affecting processes at the sub-personal-

⁸⁴ Examples of more complex types of visually-guided action which require information processed by the ventral stream are cases in which the action is partly shaped by the subject's taking the object to have relatively sophisticated affordances, such as the affordances certain tools have for us (e.g., Carey et al. 1996). Another type of example is a case in which the subject is required to orient her hand in relation to a T-shape target, a target more complex than a simple slot (see Milner and Goodale 1995 pp.138-9). Milner and Goodale (pp.139-40) also mention that information processed by the ventral stream is also needed when actions are guided by cues which require organization according to certain gestalt organization principles (similarity and good continuity).

⁸⁵ See, for example, Rossetti 1998 pp.527-9,541-7, and Milner and Goodale 1995 pp.136-7.

⁸⁶ See Jeannerod 1997 pp.84-6. It may be objected that the experiments reported by Jeannerod concern cases in which the information guiding the action is assumed to be processed in the dorsal stream, and thus do not support the claim in the text. However, Jeannerod stresses that the two visual streams affect action directly (1997 pp.66-7), and mentions the general consideration I mention in the next sentence in the text in a discussion of reactions to categorized information (Gallagher and Jeannerod 2002). Also, there does not seem to be a significant difference in our ability to adjust our actions between reaching out towards a simple shape and reaching out towards a T-shape, or between picking up a knife and picking up a simple straight stick (where, as mentioned in footnote 84, the second in each pair is a case in which information processed in the ventral stream is involved in guiding the action); of course, it is an empirical question whether there is a relevant difference.

level prior to the subject's awareness.⁸⁷ If, generally, the direct control of action is quicker than control mediated by the subject's awareness of the information, then it is reasonable to assume that, in the various cases in which actions require a rapid update of information, visual information is available for the control of the action independently of its availability to the subject in experience.

In fact, it is tempting to go a step further and assume that, since the relevant sub-personal processing of the information as well as the sub-personal processing underlying the reaction must be present anyway, a direct effect of the information is normally possible. It is then tempting to think that the explanation of the fact that actions of the subject are controlled by visual information is wholly sub-personal, unless it is clear that his view as to what is appropriate to do, given the way things are presented to him in experience, is part of what explains certain changes in his course of action, or part of what explains the fact that he does not change his course of action. Given this view, a strong-conceptualist may go on to argue that all cases in which the experience of unattended aspects seems to play a role in explaining the subject's action are illusory: the effect of the information is, in fact, wholly sub-personal.

Note that a similar suggestion can be made in relation to mental activities such as the evaluation of a thought. There seems to be evidence that sub-personal structures which underlie the subject's conceptual capacities can be activated by visual information in the absence of a corresponding experience. Such effects, it may seem, are what is manifested when blindsight patients manage to make accurate guesses in a frequency of above chance, or in the effects of masked visual cues on normal subjects' performance in tasks like word recognition and word completion where the

⁸⁷ See, for example, Libet 1993.

cues are related to the words by meaning (rather than shape or other physical properties of the relevant words). It is reasonable that such effects take place regularly (whether or not the relevant information is available to the subject in experiences), and thus the strong-conceptualist may suggest that such effects are responsible for the effects of visual information on the subject's mental activity when the experienced aspect is not attended to. Of course, much more has to be said in order to defend the plausibility of the suggestion in this case; this brief comment is only meant to clarify that a strong-conceptualist can at least attempt to use the same strategy in all types of cases in which it seems that the experience of unattended aspects has a rational effect on the subject's practical and mental activity.

III

The step I have mentioned in the penultimate paragraph - concluding that, apart from cases in which the subject's view as to what is appropriate to do (practically or mentally), given the way things are presented to him in experience, is causally relevant to the way he acts, effects of visual information on the subject's course of action are direct (i.e., independent of whether the information is available to the subject in experience) - seems to me reasonable and, at least for the sake of the argument, I shall accept it. The question, then, is whether a strong-conceptualist can argue that all cases in which the experience of unattended aspects seems to play a role in explaining the subject's action are illusory (that is, that the effect of the information is wholly sub-personal).

In order to make clear that the empirical data do not force us to accept that such cases are illusory, I shall describe (in a somewhat rough manner) an example of a case in which the subject's action are directly guided by relevant visual information *and in addition* the subject's view as to the appropriateness of the relevant aspects of the

action, due to his experience of certain unattended aspects, is causally relevant to the fact that he acts as he does. Furthermore, I shall argue that it is implausible to suggest that the alleged causal relevance of the experience (due to its effect on the subject's view) must be illusory, and similarly implausible to suggest that in the discussed case the subject is actually attending to a relevant environmental aspect. As the example seems to represent an important aspect of the way in which we in fact interact with our environment, I shall take this to show the implausibility of suggesting that as a matter of fact only aspects which are attended to in the demanding sense have a subject-level effect on our actions.

Consider the following example. Suppose a subject S sees a certain person X walking away from him, and while attending (in the demanding sense) to X but not to any other aspect of the environment he thinks 'I shall catch this person' and acts accordingly. His seeing X bears on his action in virtue of the fact that he attends to X and this enables him to think demonstratively about the object he intends to catch. Now, suppose that the effect the information regarding X's (changing) direction and distance has at the sub-personal-level could suffice for guiding the direction and speed of his movements, in a way which would enable him to catch X in a certain range of circumstances. Furthermore, suppose that S's current movement is such that had he seen X but lacked the relevant experiential information regarding the direction and distance of X, then, at least in principle, he could have moved as he is actually moving during an attempt to catch X. It may seem that once we add this last supposition we should admit that the direction and distance of S's movement are explained by the operation of the relevant sub-personal visuomotor mechanisms alone: the fact that in addition information about these aspects is available to S in experience has no role to play in the explanation. I wish to argue, in contrast, that one can accept that the operation of the sub-personal mechanisms could have (in

principle) sufficed for explaining the actual course of S's action and still hold that S's experience of X's direction and distance is causally relevant to the fact that, in the particular situation in question, S directs his action in this particular way. (I should emphasize that my descriptions of the aspects which are relevant to guiding the action and of the way they affect it are only meant as rough pointers which must be refined and perhaps replaced).

The suggestion is that S's visual experience of the relevant aspects (i.e., X's changing location relative to himself and the speed at which the distance between them changes) could be causally relevant to the fact that S follows the course of action he does (i.e., that he moves through the particular path he does in the particular (changing) speed he does) in virtue of its playing a role in S's monitoring and controlling the way he acts. S can see whether or not he is moving in a direction which will enable him to catch X, whether or not he is moving closer to X, etc. If he sees that he is moving in the wrong direction, or not getting any closer to X, he will be made aware of the fact that his action is not performed in the appropriate way (given his intention). If there are no (external or internal) barriers, *he* will simply change his course of action: change direction, speed up or give up his attempt. If so, then it is also the case that, when S is monitoring his action, seeing that he is moving in the right direction and getting closer to X, is causally relevant to his continuing to act the way he does. For he will continue acting in this way, other things being equal, only as long as he takes his movement to be in a direction appropriate for catching X and only as long as the seen distance between X and himself seems to him to decrease or to be such that he can make it decrease.

So, in general, the suggestion is that the experience of an unattended aspect can play a role in a subject-level explanation of the way in which the action is performed, in virtue of its revealing to the subject whether his action is performed in a manner

which is appropriate for carrying out his intention. Since the subject's continuing to act the way he does or changing his course of action is then dependent on the way things are experienced by him, that things are experienced in the way which, from his point of view, makes the action appropriate is causally relevant to his acting in this way (even if in principle he could have, in the particular case in question, followed exactly the same course of action without the subject-level monitoring of the action).

Of course, this can apply only to actions which the subject is able to control during their performance. The first condition is that it should be a non-ballistic action. Secondly, since there is also sub-personal monitoring and control of visually-guided actions, it should be *possible* for the subject-level monitoring and control to make some difference to the action. I shall take it for granted that this is the case for any non-ballistic action, since it is always possible that the adjustment required according to current visual information in order to continue carrying out the relevant action does not accord with some more general intention of the subject.

In addition, we should remember that often actions which the subject could control are performed without his monitoring. A subject who reaches out towards the glass in front of him in order to pick it up might just reach out without continuing to look in its direction after the initiation of the reaching movement. And even if he continues to look in the direction of the glass, and his reaching movement is in fact guided by visual information from the glass, this can take place without *the subject's* paying any further attention (in a broad sense) to the glass or to the movement of his hand. However, there seem to be circumstances in which subjects do monitor their actions, and are constantly ready to change their course of action if their experience makes them aware of a need to do so. This seems to be the case, for example, when a subject takes himself to be unskilled in performing the task, takes it that the object is changing or likely to change location in unforeseeable ways, takes the task to be

dangerous, and so on. More generally, it seems that subjects can and do monitor their visually-guided actions when their grasp of the situation and of their own abilities is such that we can say (assuming that part of our grasp of our own capacities involves indirect reference to relevant sub-personal mechanisms⁸⁸) that they take it that the sub-personal mechanisms might not suffice for controlling the action, or when the control at the sub-personal-level might not yield the most efficient or safest way of acting.⁸⁹

Suppose, then, that S has such an attitude towards his following X (suppose that he has to weave his way through a crowd of active children; thus he is in a situation in which it is not difficult for him to visually keep track of X, and the only problem is to keep moving in an appropriate direction and speed), and that consequently he is in fact continuously monitoring the relevant aspects of his action, ready to change his course of action if he sees that he is moving in a direction or speed which are inappropriate for catching X. In such a case the fact, say, that X appears to S to be moving in the direction in which he himself is moving and the distance between them appears to gradually decrease is causally relevant to the fact that S acts the way he does: had his experience been different in relevant ways, he would have changed his course of action accordingly. (Note also that it is most likely that a normal subject would change his course of action if somehow the change in his experience was such that, though still seeing X, he was no longer able to see X's location in relation to himself).

I am focusing on the situation in which the experience does not reveal any deficiencies in the current course of action, since it seems implausible to suggest that

⁸⁸ That subjects implicitly take the sub-personal activity into account is manifested in things like how they explain mistakes or reason about possible mistakes, etc. (the idea that subjects implicitly take the sub-personal activity into account is expressed in Eilan 1998 pp.188-9 and manuscript).

⁸⁹ Jeannerod (2003) mentions that subjects shift to conscious strategies when the discrepancies between action and feedback become quite large, and points out that the efficiency of such shifts is manifested by a comparison between normal subjects and patients who cannot shift to conscious strategies.

in such cases subjects normally attend to the *specific* fine-grained properties or relations relevant to explaining their course of action. Thus, for example it seems implausible to suggest that S, while chasing X and monitoring his action, attends to the specific directions of X relative to himself or the specific patterns of change of the relative direction. We can agree that he, generally, attends to X's direction in relation to himself *whichever direction it is and whichever way it changes*; for he is selectively sensitive to information regarding the relative direction. But as was made clear in Chapter 2, this is not sufficient for him to have the ability to predicate any of the specific directions or patterns of direction which are relevant to his monitoring. Thus such cases are clear examples of the experience of unattended aspects playing a role in explaining the way the subject acts, despite the unavailability of a demonstrative content which according to the strong-conceptualist must be present for the experience to play such a role. (In contrast, it is at least open to one to argue that, when the subject changes his course of action due to the experience of a specific aspect, he also attends to that aspect in the required way. That is, I do not think that this must be the case, but prefer to focus on what seems an indisputable case).

Now, the opponent might suggest that what I am describing as S's monitoring is not really a case of S's being sensitive to the experienced aspects *in virtue of his experiencing them*, but rather a result of a change in the range of stimuli to which the sub-personal mechanisms that control automatic shifts of attention are sensitive. A crude example of what is suggested is that if, when the subject acts without any intention to monitor a given action, his attention will be automatically captured only by sudden (large enough) changes, then when the subject performs the action with relevant intentions, the relevant sub-personal mechanisms are tuned to respond to additional types of changes. (Note that on this picture there is a subject-level element in determining how the action is monitored: the suggested type of change is due to the

subject's notion of what the task is. What is denied is only that the fact that the subject shifts his attention at a certain time towards a certain stimuli is itself a subject-level reaction to his experience of the relevant stimuli).

It is, of course, an empirical question whether it is possible to account in this way for all cases in which subjects manifest sensitivity to characteristics of their environment which would *not* draw their attention without the intention to monitor their action. But it seems rather unlikely that, in all cases in which we take ourselves to be monitoring our actions (without attending to a specific property or relation), there is a specific set of parameters (associated with a certain general attitude of the subject towards the current situation) which can account for the fact that the subject is selectively sensitive to those aspects of the situations to which he is, in fact, selectively sensitive. Situations of the kind described above seem to make this clear. For it seems that in this case there just is no specific type (or set of types) of stimuli which can be determined in advance as the only relevant stimuli (e.g., there seems to be no fixed set of patterns of stimuli that corresponds to exactly the type of visual information which S is likely to view as requiring a change in his course of action (and which he would normally be sensitive to in the type of situation in question). To give some crude examples: a sudden shift in X's direction of movement may sometimes, but not always, be regarded by the subject as requiring a change in his course of action; similarly, moving in a different direction than that in which X is moving may be the appropriate thing to do but might as well not). If so, it cannot be that the explanation is due to the tuning of sub-personal mechanisms to be sensitive only to stimuli of the relevant type.

Note also that a related role is also played by experience in forming an initial intention to perform a certain action. For example, a subject who cannot see where an object is located, or to whom the object appears (veridically or not) to be quite distant

and rapidly moving farther away from him will not form the initial intention to catch it by following it on foot.⁹⁰ It does not seem that one can explain such effects in terms of relevant sub-personal mechanisms being tuned differently; whereas suggesting that in all such cases the subject attends to all the relevant *specific* aspects of the situations seems implausible.

IV

It may seem inconsistent to claim that S is monitoring whether he is moving in an appropriate direction given the direction of X in relation to himself and also that he need not know which specific direction (or pattern of change in direction) is in question. But remember that it is only denied that he has to single out a *specific* direction (or pattern of change in direction) by visually attending to it, and thus it is only denied that he should know what it is, generally, for something to be located in that specific direction (or to be changing direction in that specific way) rather than any other. The knowledge of which direction is in question in this sense is not what explains the normative bearing which, *prima facie*, a subject takes a given experience to have on the way he acts (and on his propositional attitudes in general). Specific variations in the normative bearing the subject takes the experience to have are due to the way the relevant experienced aspects currently appear to him. It was argued in Chapter 2 that a plausible view of demonstrative abilities must allow for the possibility that the subject knows which property is in question while the property is currently presented in his experience in a misleading way. Thus even if S was attending to a specific direction - and in this sense said to know which direction is in

⁹⁰ One should not compare here normal subjects with subjects who due to a brain lesion cannot see an aspect which is relevant to deciding on the appropriate course of action. As far as I understand such brain damaged patients are at first unwilling to initiate relevant visually-guided actions and would act only on the psychologist's request or unintentionally. They may consequently learn that they have the ability to perform the action even when they cannot see (at least not directly) whether they are in a position to do so, and might then, in certain circumstances, perform the relevant actions intentionally.

question - he could have been misled about the appropriate way to act when X is in the attended direction. Since, generally, he takes such possibilities into account and in certain circumstances may doubt the veridicality of the experience, it is possible for him to know which direction is in question in the discussed sense but still not be sure as to what he takes to be the appropriate way to move in order to catch X.

It might be suggested that, although the relevant knowledge is not sufficient for explaining the immediate normative bearing, from the subject's point of view, of a particular experience on his thoughts and actions, it is necessary for explaining this. However, it should be remembered that such knowledge requires that S attend to a *specific* direction or pattern of change in direction rather than others, while it seems that all that can be required is his attention to the actual changing direction of X in relation to himself *whatever it is and whichever ways it changes*. Specifically, there is no reason why S should have an interest in singling out a specific direction or pattern of change, and it is quite unlikely that normally in such a situation subjects actually do this. Furthermore, in the discussed example it is clear that S's monitoring the appropriateness of his action only requires him to be sensitive to things like whether he is, *more or less*, moving in the same direction as X, the *general* direction in which he should turn if he is not, etc.

At this point the opponent might agree that S, when monitoring his action, need not attend to any of the relevant spatial relations with the intention to single out a specific fine-grained spatial relation, but suggest that S has an intention to single out a certain rough spatial relation (e.g., more or less the direction in which X is moving). But this seems wrong. To begin with, S's general interest is to monitor the appropriateness of his movement in relation to X, and this does not imply an attempt to keep moving in a way which preserves one coarsely defined pattern of changing directions between himself and X, or a disjunction of a number of such patterns. That

is, it seems that, *from S's point of view in the given situation*, the range of patterns which he would regard as appropriate is not distinguished *in a general manner* from all patterns which he would regard as inappropriate. Suppose, however, for the sake of the argument, that there is such a roughly specified pattern. There is no reason, in the standard case, to ascribe to S an interest in singling out a specific spatial relation (e.g., the relevant rough pattern of changing direction) which he knows what it is for it to hold between any two suitable objects. His aim is simply to determine whether his current way of acting is appropriate or not (for him in the current situation); he is not, presently, concerned with evaluating the appropriateness of the same pattern of movement to other situations (e.g. those in which the chased object is not X, the chaser is not himself, etc.).

To clarify, it is not claimed that S does not take his current action to be, generally, appropriate (or inappropriate) to fulfilling the type of intention he currently has in situations which are exactly like the present one except for the identity of the chaser and the chased thing. Neither is it denied that his general grasp of his relation to the environment enables him, when the question arises, to reflect on the extent to which the (in)appropriateness of his action, in the given situation, depends on conditions which relate to his current physical state, to how interested he is in catching X, X's physical state, the layout of the environment, and so on. Rather the claim is that S's monitoring the action in the above example does not involve a current interest in the relevant generalizable aspects of the situation as such. That is, it does not involve an interest in the aspects which make his current way of acting (in)appropriate to a specific range of situations and not others, where he can currently be ascribed a knowledge of which range is in question.

We can clarify the point by considering the possibility of saying that from the subject's point of view what defines the relevant range of spatial relations is that they

all have the same affordance for the subject. Now the relevant affordance might be individuated in relation to the subject's current state whatever exactly this state is. Alternatively it can be individuated in relation to certain parameters regarding the subject's state (so that once they change, a different affordance would be required for recommending the action for him). It seems that if we wish to express the way things are viewed from the subject's point of view, then, to a certain extent, we must ignore changes in the subject's state; while if the subject is to single out a specific generalizable relation these specific details regarding the subject's state should play a role in the individuation of the affordance.

V

I have tried to show that not only do the empirical data not support the claim that the experience of unattended aspects play no role in explaining the subject's actions, but also that the interaction with the environment of a person who is never sensitive in his action to such experiences is rather different than ours. That is, if we do not allow for subject-level effects of the experience of unattended aspects, we rule out the possibility of *the subject's* monitoring what goes on with aspects of the situation which are not specifically selected by him, continuously noting which possibilities are open to him and to what extent the changes in the environment require a change in his course of action. It seems equally clear that monitoring and general alertness to various aspects of unattended parts of the visual field play an important role in the way we evaluate thoughts.

It should however be remembered that the argument rests on certain assumptions regarding empirical matters. Specifically, it was assumed that, given the type of situations which we can in fact monitor and the type of things we can consequently be sensitive to, it is implausible to assume that all such cases can be

explained in terms of the operations of sub-personal mechanisms alone. The vulnerability of this assumption is due not only to the possibility of being mistaken as to what a complex sub-personal mechanism may in fact explain, but also due to the fact that one's intuitions as to what one can in fact be sensitive to in the relevant situations may be misleading. However, noting this possibility, I shall continue to assume that it is unlikely that we can explain in sub-personal terms what seem to be the actual subject-level effects that the experiences of unattended aspects have on our activities. Thus I conclude that, pending further data, there is no empirical support for denying the need to allow for non-propositional contents which are immediately grasped by the subject as having certain implications to his thoughts and actions.

5 The middle position

I

I have been concerned with the question of how the notion of experiential content should be construed if it is to play a role in explaining our ability to think demonstratively about objects. Specifically, I focused on whether the relevant notion is such that one must appeal to the subject's conceptual abilities in order to account for a specific experiential content (i.e., for what it is for a specific experience to have the specific content it does rather than others), and if so, whether an account of the content of a specific experience requires an appeal to the specific demonstrative ability this experience is supposed to explain. It was argued that one cannot dispense with an appeal to the subject's conceptual abilities (thus rejecting strong-non-conceptual views), but that there is no need to appeal to the particular demonstrative abilities the particular experience gives rise to (thus rejecting the only acceptable strong-conceptual position regarding the account of particular experiences). I shall first summarize the main points made against the two strong views (section II) and what the suggested alternative is (section III). In sections IV and V I shall clarify some points regarding the specification of the content of a particular experience.

II

An experience of an object enables the subject to single out the object and entertain demonstrative thoughts about it in virtue of its (the experience) presenting the object *to the subject*, providing *him* with information from the object. Thus the notion of experiential content relevant to the account of demonstratives is that of what is presented *to the subject* in experience, where this includes the particular environmental aspects presented and the way they are presented as being. That an environmental aspect is presented to the subject in experience as being a certain way

means that the aspects' being experienced this way is part of what constitutes the subject's current view of the way things are. It follows from this that there is a certain type of link between an experience of a concept-possessor and his conceptual abilities which marks the difference between his conscious and non-conscious perceptual states: when certain environmental aspects are presented to him in experience as being a certain way, this fact could, *generally*, have a *direct* (i.e., not mediated by some further registration), *subject-level* effect on the way he is disposed to evaluate thoughts, reason and make plans.

It was argued that, in the case of concept-possessors, one cannot account for the content of a conscious perceptual state - that is, a content that can be linked with the subject's concept-applying activities in the above way - if one does not presuppose that the content is of the type which is linked with the subject's conceptual abilities in the relevant way. Specifically, it was pointed out that it is insufficient to provide an account of a corresponding content which can be ascribed to some aspect of the experiential state in virtue of the representational role it (the relevant aspect) plays at the sub-personal-level (or any other suggested level that is not the subject-level). What has to be presupposed, then, are the links between experiences and conceptual abilities in virtue of which a concept-possessor is ascribed a point of view, and in virtue of which his experiences are part of this point of view.

It was also argued that we should reject a weaker version of the strong-non-conceptual view according to which one can account for specific experiential contents without a specific appeal to the subject's conceptual abilities, if one assumes, as a general background assumption, that experiences are linked with conceptual abilities in the relevant way. The claim was that what we have to explain is the particular significance the experience has for the subject, a significance which is manifested in what the subject takes to be the implications that things being as they are presented in

experience (as opposed to others) has for his thoughts and actions. But here again, aspects of the subject's current experience which are independent of links with his conceptual abilities cannot explain the fact that from his point of view the experience is viewed as presenting him with things being a certain way.

I then argued that one cannot, generally, construe the content of a particular experience in terms of the actualization of particular demonstrative abilities. It was argued that if the subject is to know which particular fine-grained property he is currently experiencing - knowledge without which the subject is not in a position to predicate the property, in thought, in virtue of demonstrating the seen property - he has to attend to a specific fine-grained property in the following sense. He has to select information from the property with the intention to select information from the relevant seen fine-grained property (thus, an intention to select information for the relevant task only as long as the property does not change). Clearly, we do not often attend in this demanding sense to seen fine-grained properties; we do not often intend to restrict the selection of information to the specific fine-grained property, ruling out any information which would be available after the occurrence of a change which is detectable in standard conditions. Thus one should either accept that fine-grained properties can be experienced even though the subject is not in a position to predicate the property in virtue of demonstrating it, or deny that we experience fine-grained properties while not attending to them (in the demanding sense). The latter option is extremely unintuitive and seems to lead to absurdities. Thus it seems that at least the experience of fine-grained properties, when they are unattended, is not accountable in terms of the actualization of demonstrative abilities. The same consideration applies to properties in general (where I use properties to refer also to the relations in which a thing stands to other things), and it seems that a similar consideration also applies to other environmental aspects such as objects. (Although I have not argued for the latter

claim, for convenience's sake, I treat the claim as applying to environmental aspects in general).

A strong-conceptualist may be drawn to deny that we experience unattended aspects (and attempt some solution to what appears to be absurd results) if he is persuaded by a general, a priori argument that experiential contents must be, generally, accountable in terms of the actualization of demonstrative abilities. In addition, he might be encouraged to do so by empirical data showing that our intuitions regarding the experience of unattended environmental aspects are misleading. The general argument offered by strong-conceptualists purports to show that only contentful states which are a result of the actualization of conceptual abilities can be viewed by the subject as having a normative bearing on his thinking. I argued that the argument is unconvincing. I then went on to argue that one cannot take the relevant empirical data to show that, as a matter of fact, there are no aspects of our experience which cannot be construed in terms of the actualization of demonstrative abilities. It was argued that the experience of unattended aspects plays a role in the way we, as a matter of fact, monitor our actions, and generally monitor what goes on in our visual field, and that these claims are consistent with the empirical data. It should however be remembered that the argument relies on empirical assumptions which I took to be plausible but which might be found to be mistaken.

In addition, it was clarified that there is no basis for a strong-conceptualist to argue that the content of the experience of unattended aspects should be explained in terms the (non-actualized) particular demonstrative abilities which could be actualized if the subject attended to the aspect in question.

III

As an alternative to the two strong views, I suggested that we view experiences as involving the actualization of capacities which are interlinked with conceptual capacities but differ from them in significant respects. The content of a particular experience (i.e., particular environmental aspects being experienced a certain way), on this suggestion, involves the actualization of various experiential capacities - *the subject's* capacity to visually distinguish shades of colour, shapes, etc., his capacity to visually detect certain relations between them, to visually distinguish objects, to visually recognize colours, shapes, patterns, and so on - when the subject is in fact encountering the particular environmental aspects in question. The experiential capacities are said to be interlinked with the subject's conceptual abilities in that it is taken for granted that, when they are actualized with relation to a particular environmental aspect, the result is that the particular aspect is *experienced* a certain way (say, as being circular rather than any other shape, larger than the object on its left, etc.) - where this is immediately grasped by the subject as standing in certain normative relations to his thoughts and actions. That is, the mechanisms in virtue of which the subject is said to have these capacities are not just sub-personal information-processing mechanisms which produce certain sub-personal states, but rather mechanisms which produce conscious states; states whose content is grasped by the subject as standing in certain normative relations to his thoughts and actions.

In this respect experiential capacities resemble conceptual capacities. They differ from them, however, at least in the following two (related) respects. First, conceptual abilities must be general in the sense that their actualization is not restricted to a fixed set of propositions and to a fixed set of contexts (by which I mean different propositional attitudes). Experiential capacities, in contrast, are actualized only in the context of an experience. (It might be that a better way to say this is to say

that there is a sense in which having an experience with a certain content is not an attitude towards that content (though it will always be accompanied by some attitude)). Secondly, in contrast to conceptual capacities, the actualization of experiential capacities does not result in states with propositional content: the content of the resulting state or any particular aspect of it is not a result of the joint actualization of two experiential capacities one singling out a subject and the other predicating a certain property of it.⁹¹ I shall not attempt to identify general principles which characterize the relation between the actualization of the various capacities and a given experiential content. I shall only mention that I presented experiential capacities as general capacities which, when actualized in relation to particular environmental aspects, yield an experience of these particular aspects as being a certain way. Given that the subject has the relevant capacities (where this implies that he has a general grasp of the relation between cases in which they are actualized and the way things are in the given situation), the fact that they are actualized does not depend on any further *specific* grasp the subject has of the particular experienced aspects. This allows for the difference from propositional contents emphasized in the discussion in Chapter 2: the fact that a subject need not know which object and property are in question in order to experience them, while such knowledge is required if he is to be ascribed the relevant demonstrative abilities. This also clarifies that the sense in which experiential capacities might be viewed as not restricted to a fixed set of contents is completely different from the sense in which conceptual abilities are not restricted to a fixed set of propositions. The restrictions on the way

⁹¹ If experiential contents had had propositional content, the relevant propositions would have been subject-predicate ones.

such capacities can be combined is simply a matter of the way the relevant information-processing mechanisms operate.⁹²

Now, according to this suggestion, the fact that the actualization of such capacities can yield conscious states should simply be taken as primitive; specifically we should regard as primitive the fact that what the operation of the relevant mechanisms contribute to the subject's perceptual state, in appropriate conditions, is that from the subject's point of view the relevant environmental aspects are presented as being a certain way. Of course, there is room for asking what type of place such a state occupies in the subject's primitive conception; thus examining which other abilities the subject should possess and what type of implications he should take the relevant state to have for it to be the case that the experience presents a particular aspect to him as being a certain way rather than others. Also, there is room for discussing relations between different experiential capacities: the extent to which some capacities may depend on others, etc. (both from the subject's point of view and, independently of his point of view, in virtue of the relations between relevant information-processing procedures). And generally, there are various questions relating to the way in which the relevant information-processing mechanisms operate. What has to be taken for granted is that we are speaking about conscious states whose content *explains* the subject's grasp of the experience as having certain implications for his thoughts and actions (rather than other implications).

I should clarify that I am not applying a double standard when accepting that there is no explanation in simpler terms of what makes an experience the particular experience it is, while complaining that the strong-conceptualists do not make room

⁹² I should emphasize that I am rejecting the way Peacocke argues for the need to distinguish between the capacities which are actualized in experience and conceptual abilities in his 1989. The difficulty he discusses does not arise on the suggested view, since a particular experience of a property is partly individuated in terms of the particular experienced instance.

for an explanation of particular demonstrative abilities in simpler terms. The complaint against the strong-conceptualists is not based on a general requirement for explanations in simpler terms. It arises in the context of clarifying the relations between various subject-level phenomena (where it is generally agreed that such phenomena depend on sub-personal phenomena but that the latter cannot account for what makes the subject-level phenomena the *subject-level* phenomena they are⁹³). Within this framework, claims as to whether or not we should expect an explanation of certain aspects in terms of more primitive mental phenomena are based, initially, on our common-sense grasp of these phenomena, and then, where appropriate, on theoretical considerations. Now, intuitively, we take it that experiences of particular environmental aspects provide us with the ability to think about them demonstratively. In contrast, there is no intuitive force to the claim that there are more primitive subject-level phenomena which account for the fact that - given the way the visual and cognitive systems of the subject operate, the way things actually are and the relevant environmental conditions - things are experienced the way they are (experienced). From our point of view, experiencing things a certain way is simply the state we find ourselves in when the relevant systems are operating the way they do and the world is the way it is. (This is not to deny that it often seems intuitive to regard the fact that the subject has certain general concepts as relevant to his ability to have certain experiences. Such intuitions, however, suggest only a general dependence of experiential contents on the subject's conceptual abilities).

As for theoretical considerations, as mentioned above, I rejected the general consideration, offered by the strong-conceptualists, for thinking that experience must be construed in terms of the actualization of conceptual abilities, and argued that they

⁹³ Though, this is not to say that sub-personal phenomena cannot be relevant to *clarifying* various aspects of subject-level phenomena.

cannot maintain that, generally, experiential contents consist in the actualization of demonstrative abilities. Furthermore, I argued that there is no basis for holding that it is generally the case that we must, in some way, appeal to the specific demonstrative abilities the experience gives rise to in order to account for its content.

Note also that anyone who holds that propositional attitudes are not epiphenomenal is in a similar position in relation to states in which conceptual abilities are actualized. On such a view, the fact that the subject is aware of implications of an occurrent conceptual state he is in and aware of the grounds he may have for being in this state is regarded as indispensable for clarifying what it is for someone to be in this state (rather than in a similar mental state with different content). But we do not wish to say that the mere fact that the subject is disposed to reason in the relevant ways (or more accurately, that his dispositions to reason are affected in a particular way) constitutes the fact that he is exercising the relevant conceptual abilities; rather we want to say that there is a sense in which his, say, judging (or supposing, etc) that a is F (rather than, say, that a is G or that b is F) is what explains the fact that he is now disposed to reason in one way rather than others (in other words, his being in this state is supposed to be the ground of a certain second-order disposition). As far as I can see, one has no choice but to regard as primitive the fact that a given conceptual ability is such that when actualized (together with other suitable conceptual abilities) the subject grasps a specific content; where the fact that he grasps the content explains his grasp of how other states of his bear on which attitude he should have towards the content and the implications he should draw for his thoughts and actions, given his attitude towards it.

Thus the disagreement with the strong-conceptualist is about whether occurrent conceptual states (that is, the states one is in when exercising specific conceptual abilities) are the only states being in which explains the subject's grasp of relevant

implication for his concept-involving activities. I have suggested that the answer to such a question depends on considerations as to whether an accurate and illuminating description of our mental lives requires a distinction between experiential and conceptual capacities. Thus I take the discussion of the role played by the experience of unattended aspects and the claim that this role cannot be due to the actualization of conceptual abilities to provide a strong motivation for allowing that there are two types of capacities the actualization of which results in states whose content is immediately grasped by the subject as having a normative bearing on his thoughts and actions (which differ at least in the respects mentioned above).

IV

In the rest of the chapter I wish to clarify what I take to be the particular content of a particular experience, and point at some of the limitations on our ability to specify such contents accurately. I shall first present what seems the natural way of distinguishing experiential contents and specifying what each content is. A discussion of difficulties this suggestion encounters will point to what I take to be a more accurate view of the specification of particular contents.

The content of an experience was said to be what is presented to the subject in experience, where this includes both the particular experienced aspects (the particular objects, collections of objects, instantiations of properties and relations, events, etc., from which the subject currently has experiential information) *and* the way they are experienced by the subject (or the way they are presented or appear to him). ‘The way an aspect is presented’, or more accurately, ‘the way it is presented to the subject as being’, is a way the environmental aspect can actually be, and is supposed to capture what the subject, simply in virtue of the fact that he has the experience, takes to be the way the aspect is if his experience is veridical. Thus talk about the way an

environmental aspect is presented captures the aspect of the experience in virtue of which we say that certain (veridical or non-veridical) information (rather than other information) from the particular aspect is immediately available to the subject, enabling *him* to direct and modify his thinking and acting accordingly (that is, he can currently do so without any need for *him* first to perform an additional operation such as an inference or a calculation). It is, in this sense, the ground of the experience's specific potential to affect the way the subject performs tasks to which he takes information from the aspect to be relevant.

When attempting to specify the particular way a certain environmental aspect is presented to a subject in a particular experience, it is natural to appeal to the effect the experience has on the subject's dispositions to evaluate thoughts whose truth depends on the way things are with the relevant aspect when he has no relevant doubts regarding the veridicality of his experience and is in fact sensitive to the relevant experience⁹⁴ (where the relevant judgements include judgements of similarity and difference between the aspect and other seen and unseen aspects). This seems the natural approach since the effect that taking the experience at face value has on the way the subject evaluates such thoughts manifests what, from his point of view, is the way the aspect is presented to him in his experience, and assuming that he is in fact

⁹⁴ This qualification is required for ruling out cases in which the subject experiences things a certain way but, due to some further non-visual effect, his current dispositions do not manifest the way things are experienced by him. Such cases may occur, for example, when the subject reacts hastily with minimal or no sensitivity to his actual experience, or when certain expectations or certain thoughts or memories the subject is occupied with have a brute effect on the resulting activities. I am assuming here, without further argument, a distinction between (i) cases that can be seen as involving factors which affect the subject's disposition in addition to the effect of the way things actually appear to the subject, and (ii) cases in which such factors affect the subject's dispositions in virtue of their effect on the visual appearance. Such a distinction is based on the thought that visual appearance is the product of the operation of the visual mechanisms (mechanisms whose function is to process current visual-information), and that the products (or states) of other cognitive systems may affect the appearance by affecting the operation of visual mechanisms, or alternatively interfere with the effect of the appearance at some higher level. Note that it does not matter whether we can correctly detect cases of type (i), and further, there need not be a clear-cut boundary between the two types of cases (for there need not be a clear-cut boundary between visual and non-visual mechanisms). In what follows I shall assume that all the cases discussed do not involve effects of type (i).

sensitive to the experience, this should also be the way things are, in fact, presented to him in experience.⁹⁵ Furthermore, one's own reflection on what one is disposed to judge to be the case when taking the experience at face value is what enables one to articulate how things appear to one to be.

It should be clear that if we appeal to such effects we have to take into account the potential effect the relevant experience could have on a wide variety of relevant judgments. For experience, even if we narrow our view to the experience of a specific limited environmental aspect such as the colour of a particular object, immediately provides the subject with more than one specific bit of information. Thus, for example, saying that the colour of an object is experienced as red leaves out details such as whether it appears to be red in bright light or dim light, shadowed or partly shadowed, whether or not it appears to be a homogenous red, whether it is experienced as, say, darker than its background, similar in colour but not in shade to the colour of the object on the right, and so on. It might be that in some cases, due to the way the subject attends to the colour, no such additional information is immediately available to him, but there is no doubt that if there are such cases, they are the exception. Often, even if the subject's only interest is to determine the object's colour, his experience immediately provides him with some such additional information. Furthermore, in the case of aspects such as particular objects it is essential to the experience of the aspect that more than just one bit of information from it is immediately available to the subject (this will be clarified in Chapter 6). The need to take into account such a variety of effects might make it impractical for one to actually provide a full, accurate specifications of experiential contents, but it does not,

⁹⁵ The way an aspect is presented to the subject is also manifested in its effect on other activities, but the effect on the relevant judgements (i) seems to provide the most straightforward manifestation, (ii) is more likely to be systematizable, and (iii) it is natural to think (though I shall mention a reason for doubting this) that we can fully capture in this way any of the effects an experience may have.

by itself, raise special difficulties regarding what should count as sameness in the way things are presented to a subject and what he takes to be the way things can be which is thus presented.

Difficulties arise, however, due to (i) the role played by attention in our evaluation of thoughts on the basis of visual experience, and (ii) the fact that changes in attention can affect the way things appear to the subject. A subject's experience provides him with more information than he can, at the time, use for evaluating thoughts. Consider, then, a case in which a subject experiences a certain aspect (say, the shape of a particular object) which is not taken by him to be relevant to any question he is currently occupied with (I shall focus on an experience of the, roughly bounded, region of the visual field towards which the subject directs his gaze. This will enable separating the effects of changes in attention from those of a change in the amount of information available due to the aspect's location in the subject's visual field). We wish to clarify what the potential effect of this experience on relevant shape judgements would have been, had the subject intended to answer relevant questions and taken the experience at face value. To do so, we have to take into account the subject's interests when making the judgement. There are, however, two ways in which his interests can affect which judgement he would make, only the second of which is relevant here. First, his interests are relevant to determining what he would count as similarity or dissimilarity in shape in the given context. Secondly, assuming that the first question is determined, they can also affect the judgement by affecting the way he makes it. This is so since they can affect the extent to which it matters to him whether the resulting judgement is accurate, and thus the extent to which he would focus his attention on the task; similarly they are relevant to determining the amount of time he devotes to the task, the amount of exploratory behaviour he may perform, the extent to which he is sensitive to relations between the aspect and other

seen aspects, etc. Changes in any of these factors can change the amount and variety of visual input processed by the visual system, and thus the way the aspect appears to the subject when the judgement is made. For example, in the case of a motionless subject who sees an elliptical disc facing him, an immediate judgement would be that the disc is circular, while a more careful judgement which is made only after, say, the subject moves a bit, is likely to result in the judgement that the disc is elliptical. This would be insignificant if in the latter case the movements result in a change in the way the disc appears to the subject (the type of case described in Chapter 2). The crucial point is that in certain circumstances an immediate judgement could have differed from a more careful judgement in the above way, while in both cases there would have been no change of apparent shape. That is, from the subject's point of view, the first case would be a case in which he is reacting to the sight of a slanted circular disc by judging that it is circular, and the second would be a case in which he is reacting to the sight of an elliptical disc (where the disc appears elliptical all along) judging that it is elliptical.⁹⁶

One might suggest, then, that we limit our view to the experience's effect on judgements which the subject could make without any further change in visual attention. There are various difficulties with such a suggestion. To begin with, there is a sense in which it is incoherent to suggest that a judgement can be based exclusively on an experience of an aspect which is seen while the judgement is made without some relevant adjustment of visual attention. For it seems that basing the judgement on experience, that is, being sensitive in evaluating the relevant thought to the relevant experiential information, just is a specific mode of visual attention. It might, then, be suggested that we should focus on judgements which can be made with only the minimal, necessary change in visual attention: judgements which are based

⁹⁶ See Dennett & Kinsbourne 1992 on this type of effect of further visual input on 'prior' appearance.

exclusively on the experiential information which can be said to be possessed by the subject at a given time (so that had a relevant question been raised at that time, this information alone - excluding further information which may be gathered while the subject is making the judgement - would serve as the basis for the judgment). It seems that in practice we cannot make such judgements when the aspect is in sight (or at least cannot do so intentionally), but one may suggest that it would be sufficient if they were in principle possible. Further, it may be suggested that we can think of such judgements as, in effect, the same as judgements that occur when the relevant question is asked immediately after the relevant aspect disappears from view.⁹⁷

One may doubt that judgements made immediately after the aspect disappears from view can be regarded as experience-based rather than memory-based. But for the sake of the argument I shall suppose that they are;⁹⁸ thus, we can rely on intuitions as to what one would judge in such a case, when attempting to specify (according to this suggestion) how an aspect appears to the subject. There seems however to be a further problem with such judgements. Though taken by the subject to be based on his recent experience alone, it seems that to some degree they are affected by memories of earlier experiences, by general assumptions regarding the type of scene, etc. (In a familiar environment we seem to experience more details than in an unfamiliar one, and similarly we seem to experience more details when the environment is of a familiar type than when it is not). This seems to raise the following problem.

Suppose that what the subject takes to be the way he experiences what I shall label 'an unconsidered aspect' - an aspect which is not currently considered by him to

⁹⁷ This is the type of thought behind Mack and Rock's inattention paradigm (see their 1998). I should stress that I am discussing a different type of case: one in which the subject is supposed to have experiential information from the aspect, and is likely to be able to answer correctly multiple-choice questions regarding relevant general categories. To the best of my knowledge such cases are not currently examined by psychologists; thus I have to rely on intuitions which are likely to be at least partly mistaken.

⁹⁸ It is assumed that a judgement should still count as experience-based if it is based on what is often called iconic memory.

be directly relevant to a specific question he is currently attempting to answer on the basis of vision - is often affected by memory and general knowledge in addition to current visual input. I mentioned in footnote 94 that when a subject attempts an experience-based task and his performance is affected by further factors, such as his expectations, there is room for distinguishing cases in which the effect is additional to the effect of the experience and those in which the expectations (or other relevant factor) affect the way things are experienced. Such a distinction also seems in place in the case under discussion. Effects of the first type need not interest us; they only create a practical difficulty. Suppose then that memory and general knowledge affect the way unconsidered aspects are experienced, and suppose that the explanation of this effect is as follows. It is a reasonable hypothesis that mechanisms which are operative in visual recognition are such that factors like memory and general knowledge play a role in determining which visual information is selected and processed as well as the course of the recognition procedure (and in this way contributing to the speed of the process).⁹⁹ We may, then, assume that in the lack of the relevant modes of visual attention there is less control of the processing by visual input, and thus in such cases memory and general knowledge are often the factors which dominate the process. If something of this sort is the case, one may argue as follows. It is true that the relevant mechanisms are those which, when an aspect is considered, contribute to determining the way the aspect is experienced. But in the case of unconsidered aspects, the operation of the mechanism is, generally, such that the aspects' appearance is due to a process in which the effects of current visual input, memory and general knowledge are mixed (rather than dominated by the visual input). Thus the appearance is only partly sensitive to the way things actually are and

⁹⁹ See Palmer 1999 ch.9.

thus it seems that, strictly speaking, it should not be regarded as providing *experiential* information.

However, if we consider the situation more carefully and take into account the role played by the experience of unconsidered aspects in the subject's interaction with the environment, we will see that this reaction is exaggerated. First, one should remember that the way things are presented to the subject in such cases is, to some extent, constrained by visual input. Thus even when the appearance is misleading, it is likely that the mistaken appearance bears some relation to the way the aspect actually is. It should also be remembered that we are discussing a wide range of cases where the effect of memory and general knowledge varies in degree; in cases in which memory and knowledge have a lesser effect (though still possibly greater than when the aspect is considered) - as, for example, when a subject experiences the unconsidered shape of an object he is currently attending to - it seems implausible to conclude that the subject is not provided with experiential information from the aspect. More important, even when memory and general knowledge are dominant, the appearance of changes as well as the general outline of boundaries and of where things are located are, normally, systematically dependent on the way things are; thus, at least regarding these aspects, the subject is provided with experiential information.

Now, it seems that all this is taken into account by ordinary subjects; that is, the experience of unconsidered aspects is, in the first place, regarded by the subject as indicating the general features of the surroundings and providing information about changes, while he takes it that if more specific information is required for a specific task, it is best pursued by shifting attention to the relevant aspect. Furthermore, when it is impossible to attend to the aspect, the information the subject takes himself to have is normally treated as more likely to be misleading than the information he would have had had he attended to the aspect (where, in addition, subjects are

sensitive to the degree to which aspects are currently remote from being considered¹⁰⁰). Thus we may agree that what we take to be the way unconsidered aspects are presented to us in experience provides us with some genuine experiential information, and that we are sensitive to the qualifications there are on the reliability of what we take to be the relevant available information in such cases.¹⁰¹

There is however a more fundamental problem with the suggestion under discussion. The suggestion to appeal to the effect of the information available prior to any change in visual attention was put forward since we saw that the way one attends to the aspect may affect the appearance. But the problematic cases were those in which what we take to be the appearance of an aspect at a given time seems to be affected by further visual input. And the immediate problem created by such cases is that it is unclear whether we can assume that there is specific relevant information available to the subject at the time in which the question is raised. Moreover, it seems to me that the lesson to draw from the existence of such cases is that we cannot construe a continuous appearance as a sequence of brief appearances, where each brief appearance can be considered as being the appearance it is independently of its place in the sequence. If so, it is wrong to suggest that the appearance at a particular time could be specified in terms of the potential effect which the appearance at that time, considered in abstraction from its place in the sequence, would have had on the subject's dispositions to judge.

¹⁰⁰ The terminology I am using makes it difficult to express this properly. The fact that information from an aspect is not currently playing a role in a focused vision-based task leaves us with a very wide range of possibilities - it may be taken by the subject to be somewhat more remotely relevant to the task, or may be relevant to more general on-going projects.

¹⁰¹ If the second type of effect (the effect of memory and general knowledge on experience-based reactions which does not involve an effect on the appearance) occurs frequently, then there will also be a need to mention it in the above considerations. I do not know enough about the relevant mechanisms in order to speculate about the occurrence of such effects. However, presently I do not see a reason to think that they are significantly frequent.

Of course, given a certain continuous experience, we can ask which information was available to the subject at a given time in addition to the information which, at that time, was considered as relevant to a specific focused task (if there was such a task). Since the specific continuous appearance is influenced by the subject's attention, this would require taking into account the facts about the particular tasks the subject was performing at the time, and considering in this context which effects the relevant elements of the appearance could have, given that he is performing the relevant task; for example, we may ask which aspects could have drawn his attention and in what way, if he had relevant general intentions (that is, intentions which do not involve any direct reference to a visually-guided task) in addition to his intentions to perform the tasks he is performing. It is natural to think about this in terms of what the subject would have judged about the unconsidered aspects, had they disappeared from view immediately after the relevant time. But it is important to note that now we are treating this question as a tool that may give us an indication of which further information was available at the time, rather than as directly pointing at one of the possible effects of the appearance by which it (the appearance) is to be specified. That is, we are not assuming that there must be a fact as to what the subject would have been disposed to judge at the particular time in question on the basis of the information available to him at that time alone, and that our specification of the content is correct to the extent that it corresponds to this fact.

One's intuitions as to what one would have judged in such a case are far from reliable, but in the lack of a better indication, the following is a tentative suggestion based on such intuitions. It seems that the information we have from an unconsidered aspect is to a certain degree unspecific, indicating a roughly bounded range within which rests the way the aspect actually is if the experience is veridical. Thus, for example, it seems that we can be aware of the fact that there is a rectilinear-shaped

object behind the object we are attending to, but that in order to gather more specific information about its shape or about how far behind the attended object it is we have to attend to the relevant shape or distance (correspondingly). There seem to be different factors that can be responsible for this. It seems that generally when less attention (in a wide sense) is paid to a seen aspect, less information is processed for one or more of the following reasons. It might be that less input is available from the start (for example, due to the fact that the aspect is not foveated), that attentional mechanisms inhibit further processing at various stages, or it might be that certain aspects (like fine details) are not processed further without a specific intention.

There is also a somewhat different sense in which unconsidered information at a given time is unspecific. If the subject, at the time, is not basing a judgement on certain experiential information (or basing on it some similar focused task), talk about this information being available to the subject at the particular time is an abstraction from the continuous flow of information available to the subject from the aspect (this is also true about the information on the basis of which the judgement is made, but as the subject is making the judgement there is a sense in which he selects the information given at a particular time). Being part of such a flow, the relation with further information is not irrelevant to the question of which information is then available: further information may affect the meaning of what is seen (for example, whether he sees a 2D or 3D object, whether the object is moving or not), and it may provide more specific information or more accurate information. That is, I am suggesting that this is also the way things are from the subject's point of view. Thus, from his point of view, as long as a specific fragment of the flow is not actually distinguished - due to the subject's making a judgement or a similar type of decision at a particular time, or simply because the aspect disappears from view or undergoes

an instant significant change - the information available to him at the relevant time is to some extent taken by him to be open for further determination and corrections.

It seems that the best way to capture the sense in which, from the subject's point of view, the available information is not specific is to say that, when unconsidered (which implies that it is unattended in one or other everyday sense), an aspect is presented as, say, a roundish unattended shape in a sense similar to that in which we would say that a certain colour is presented as red in dim light, a certain shape is presented as a partly occluded roundish object, and so on. For the way things appear to the subject is that he is experiencing a certain aspect which has certain determinate features about which he has some information, which is to a certain degree unspecific, indicating to him what information he may expect to gather if he shifts his attention towards it, and also (since attending to different aspects may require different things) indicating the relevant way in which the subject should shift his attention in order to gather more specific information. (The degree to which the subject has specific information from the aspect can, of course, vary; the same particular instance of a shape may be experienced as an unattended cube, an unattended rectilinear shape, and so on).

Note that the appearance of unattended aspects bears directly on the specification of the appearance of attended aspects. As I have been construing attention to a certain aspect, it involves intentional selection of experiential information from that aspect; that is, the subject intends to be sensitive in the selection to whether or not the information is from the relevant aspect. Now, attending, for example, to an object in this way, does not require attention to any of its properties. But, of course, the way the subject experiences each of the properties of the object (which are experienced at the time) is part of the way the object is experienced by him. The same holds for any other environmental aspect and its visible features.

V

The suggested picture then is one on which experience involves the continuous provision of information from environmental aspects. Attending to a particular aspect with an intention to answer a certain question can be seen as having the effect of selecting certain (relatively) well-specified information about the aspect, while other bits of information are less specific and play a role in providing the subject with a general outline of the changing current environment, thus informing him about which further specific information may be gathered by him and in what ways.¹⁰² The difficulties I have been discussing arise, I suggest, because of the need to appeal to reflection on what we would judge (in relevant conditions) in order to clarify to ourselves which further information is made available in experience, and specifically in order to find a way to articulate which information is in question. But if - remembering that a given bit of experiential information is not only relevant to determining which attitude the subject should take towards this or that proposition, but also relevant to making clear the presence of the actual aspects and guiding the subject as to ways he may gather further information from the aspects he might be interested in - we treat such reflections as merely indicating which further information is available, the difficulties we encounter are only practical.

Note that the fact that what I have been calling information from unconsidered aspects plays a role in directing the subject's attention means that there is a sense in which these aspects are considered by the subject in his current interaction with the environment (it is only that the information from them is not immediately involved in

¹⁰² Such information can also play a role in the subject's control of actions other than exploratory actions; thus, to be more accurate one should add that the available information can be directly taken to provide information about possibilities of action. I focus on cognitive tasks and exploratory actions in order to simplify the picture. Before adding relations with action in general to the picture, there is a need to discuss issues regarding the way such information is to be specified, and regarding the relation between what we would intuitively describe as practical and cognitive tasks. (Remember that the descriptions of the relevant experiential contents in Chapter 4 were only meant to be rough pointers).

the subject's performance of a focused task). Note also that there is room for distinguishing different degrees in which experienced aspects are 'considered' by a subject. For example, while considering what shape an object has, various relations to the surrounding objects, as well as their shapes might not be specifically considered but still the subject may be disposed to be more sensitive to them than to other surrounding aspects. At the same time other aspects can be said to be considered simply as part of his current general interest in what is going on around him ('current', since this may change both in relation to the type of things which he is likely to be interested in and the extent to which he is currently sensitive to such things).

At this point there is a further question as to where exactly to draw the line between information which is available to the subject though unconsidered in the strong sense and cases in which visual information may affect the subject's reactions (say, draw his attention to a relevant aspects) but the effect is only sub-personal. A decision as to what to say here requires more knowledge than I have about the mechanisms involved. However, if we agree that the main role played by information from unconsidered aspects is in directing the subject's attention, we can accept that there is a continuum between cases in which *the subject* is guided by experiential information and cases in which visual information affects his behaviour at the sub-personal-level and that there might very well be borderline cases regarding which there is no clear fact as to whether we should regard them as of the one type or the other.

I have mentioned the analogy between the fact that information from an aspect is somewhat unspecific and other cases in which the conditions are such that the way in which an aspect is experienced indicates to the subject that more specific information is available from the object and also indicates ways in which this

information can be gathered. In effect, this seems a general feature of the way things are presented to the subject in experience; a feature which is due to the fact that the experience provides the subject with information both about the way things are with the relevant aspect independently of its relation to the subject and about the obtaining of conditions which can affect the appearance together with the fact that the subject has a grasp of the appearance as dependent on both types of factors. There are various degrees and various ways in which the possibility of further information is indicated to the subject. The type of case I have been discussing requires only a shift in attention, and the information which the subject could be said to have prior to shifting his attention can be quite specific. Cases of occlusion suggest specific ways in which further information can be gathered and, again, there are various degrees in which the subject may be provided with information as to which information to expect. In other cases, such as objects seen at the far distance or in thick fog, the information the subject may have can be rather minimal and the indication as to what can be done in order for the subject to gather more specific information may be quite impractical. We may also view as a phenomenon of the same type the fact that certain apparent features of objects indicate the availability of information which can be gathered by observing certain causal effects on the object (e.g., the object's appearance as having a volume indicating information which would be available when the object is opened or broken, etc.). And in a sense it is also the case that seeing mind-independent environmental aspects, generally, indicates the possibility of further facts to be discovered (where there is always the possibility that the facts are not perceivable). These points are relevant to clarifying the sense in which the aspect itself is said to be part of the content of the experience. The above claim - that from the subject's point of view the experience does not just provide him with information that bears on the way he should currently evaluate thoughts, but also provides him with information as

to which further information is available and in what ways it may be gathered - when embedded in the subject's more general conception of his relation with the environment, explains the sense in which he grasps his situation as one in which he encounters a particular environmental aspect which he is experiencing as the *particular* aspect it is. This will be central in the next chapter.

Part II: Vision-based demonstratives

6 Attending to an object and knowing which object one is demonstrating

In this chapter I outline a suggestion as to how attention to a seen object (construed as explanatorily more basic than the particular demonstrative ability it may give rise to) enables a subject to entertain demonstrative thoughts about that object. It seems unobjectionable to say that by attending to a seen object the subject singles out the object and this provides him with the ability to entertain singular thoughts about it (since it provides him with the knowledge of which object he is thinking about). The challenge is to clarify what attention to a seen object involves and how it is related to the relevant demonstrative thoughts in such a way that, despite the fact that it is construed as more basic than the particular demonstrative ability it may give rise to, it can explain how the object is singled out *by the subject* and taken to be the object of the relevant thoughts - that is, how it is that *from the subject's point of view* the truth values of the thoughts in question depend on the way things are with that particular object. It should be remembered that the claim concerns only the relation between particular acts of attention and particular demonstrative abilities; I am not denying that the general ability to attend to particular objects and the general ability to think about them demonstratively are interdependent.

I shall first sketch, in a general manner, what I take attention to an object to involve and how a certain act of attention to a particular seen object is related to a certain demonstrative thought which is based on it. It will be suggested that what explains the subject's knowledge of which object he is thinking about is his grasp of the relations between the object and himself while he is attending to it, especially his grasp of the way in which his experience provides him with information from the

object. In the rest of the chapter I shall further develop the initial sketch and discuss some possible objections.

Bundles of information, attention and demonstrative thought

I start, then, by outlining what I take the subject's attention to an object and his exercise of a particular demonstrative ability to involve, and by introducing some terminology.

Normally, a subject who is attending to a particular seen object is in a state in which information from that object is continuously available to him as information from one and the same object. There are three points here. (i) Information (that is, visual experiential information) from the object is available to him in the sense that at present the object (visually) appears to him a certain way and thus there is information from the object which he can presently take into account in evaluating thoughts, reasoning, etc., and also in the sense that he can gather more information from the object by continuing to attend to it, possibly, while performing relevant exploratory activities. (In what follows I shall use 'information available to the subject' to refer to information which is available in both the above senses, and shall use 'information the subject currently has' or just 'current information' to refer only to the former; the latter will be distinguished by contrasting it with current information).

(ii) Information from the object is available to the subject *continuously* as long as conditions which enable gathering visual information from the object obtain (e.g., as long as he keeps looking at the object and there is sufficient light). What counts as continuous in this context, and therefore also which gaps in the obtaining of the enabling conditions matter, is relative to the subject's point of view. Gaps in the visual input processed which are unnoticed by the subject, like those due to blinking

and saccadic suppression, as well as gaps which are noticeable but do not affect the subject's sense of a continuous encounter with one and the same object, like those due to brief occlusion, should not be regarded as interrupting the continuity. Thus, in effect, the fact mentioned in (i) that information which the subject does not possess at present is available to him, together with (iii) entails that information is continuously available in this sense. I mention this point only for emphasis and in what follows will omit the reference to continuity.

(iii) The information is available to the subject as information from one and the same object in the sense that those aspects of his (actual or possible) experience in virtue of which he is (or would be) said to have the relevant information are all aspects of a (actual or possible) continuous experience as of one object; in other words, the relevant appearances are or would be aspects of a (possibly changing) appearance of an object. for the lack of a better expression, I shall often speak about the information *appearing* to the subject to be information from one and the same object in order to stress that what is in question is simply a matter of the way in which things are presented to the subject in experience; that is, we are dealing with cases in which if the subject does not have relevant doubts regarding the veridicality of his experience, there is nothing further required for understanding why he takes the information to be from the same object.¹⁰³ This is to be contrasted with cases such as a subject's simultaneously seeing two parts of the same building through two widely spaced windows, or his seeming to see an object dissolving and suddenly reappearing.¹⁰⁴ In these cases the subject might have grounds for believing that what is experienced through the two windows, or before and after the gap, is the same

¹⁰³ Remember that I use 'appear' as meaning visually appear, referring to the aspect of a particular experience in virtue of which, from the subject's point of view, this experience provides him with certain information about the environment.

¹⁰⁴ Scholl and Pylyshyn (1999) show that interruptions of this type (as opposed, for examples, to cases in which an object is momentarily occluded) impair subjects' ability to keep track of moving objects.

object - and thus take the available information to be from the same object - but these grounds go beyond his taking the current experience at face value when having no reason for relevant doubts in its veridicality. (A similar contrast exists with cases in which the subject imposes boundaries between objects where no boundaries are seen, as may happen when, say, a subject takes what appears as one bar, occluded at some point, to be two bars lying in succession). I should clarify that I am relying here on what seems to me an intuitive way of describing the phenomenology *in certain clear cases*. I do not assume that in all cases in which a subject takes given visual information to be from one and the same object it is clear whether this is due only to the way things appear to him or whether other factors (other sources of information, inferences, etc.), are involved; neither is it assumed that there must always be a definite answer to this question.

That information from a particular object is available to a subject as information from one and the same object is crucial to his ability to selectively attend to particular objects: this is what immediately (that is, without the mediation of further considerations) distinguishes, from his point of view, between distinct, or possibly distinct,¹⁰⁵ objects experienced by him (simultaneously and at different times), and thus what enables him to select (without the mediation of further considerations) information available from one object (as distinct from information available from other objects) and to keep doing so as long as the object is visible to him (a period during which the object, its relation to the subject, and various environmental conditions may change). When information which is available to the subject appears,

¹⁰⁵ In cases like that of a subject seeing two parts of one building through widely spaced windows, the subject, due to further knowledge, may believe, or take it to be likely, that the two 'apparent objects' are different parts of the same object; but experience does not present the two parts as parts of the same object. Also, when there are pauses between different episodes of the subject's attending to an object, he may take it to be unlikely that he is attending to different object, but experience alone leaves open the possibility that the information gathered before and after the pause is from different objects.

or would appear, as information from one and the same object, I shall say that it is bundled together, and I shall use the expression ‘a bundle of information’ to speak about available information which is bundled together in this sense. I am introducing the expression as referring to any collection of pieces of information which are made available to the subject in experience as information from one and the same object; I shall shortly make further distinctions between types of bundles according to the restrictions on which information is to be included in a bundle. It should be clear from the above attempt to explain what is meant here by ‘information appearing as being from one and the same object’ that saying that certain information is bundled together should not to be understood as implying that, from the subject’s point of view, the appearance is as of separate aspects (e.g. shape, size, colour, etc.) together with some further distinct aspect of the appearance which connects them. From the subject’s point of view the appearance is as of an object which has such and such colour, shape, size, etc., or is changing colour, shape, size, etc., in such and such ways; the relevant information is, in the first place, information that the object (which appears as having several other features) is such and such.¹⁰⁶

It was pointed out that the bundling of information from particular objects is crucial to the subject’s ability to selectively attend to seen objects; that is, to his ability to single out a particular object and keep track of it in virtue of seeing it. In effect, for a certain type of bundle and a certain construal of what it is for the subject to select the information which is included in a single bundle, the subject’s selecting the information which is in a specific bundle (of the relevant type) is an aspect of *his*

¹⁰⁶ There are at least two senses in which the different aspects can be said to be *grasped* by a subject as separable. First, he grasps the independence (or partial independence) of the question of the veridicality of the appearance of one aspect from that of others. Secondly, due to the organization of the visual system, he is able to attend to certain aspects of an object, ignoring others. I should also clarify that the way in which I refer to the object in the above description of the information should not be regarded as an indication that the information relates to the object descriptively.

visually selecting (or singling out) an object. (When a subject selects the information which is included in a single bundle I shall say that he selects the relevant bundle).

First, we should remember that the information the subject can be said to be selecting is the information available to him in virtue of the way the particular object appears or would appear if he keeps track of the object in various possible conditions, where the particular object is a constituent of the appearance. Given his primitive conception of perception and objects the subject takes the information which is currently bundled together to be information available to him from the particular object in question and takes it that by continuing to gather information which appears to be from the same object he can gather more information from it. Thus *from the subject's point of view* his ability to distinguish the object and keep track of it involves his continuous sensitivity to which information appears or would appear to be from this object.

Note that what the subject takes to be the information which would appear to be from *this* object, is not simply the information which would appear to be from the same object (as the one currently seen). The subject's grasp of the relation between appearances and the way things are makes room for the possibility that what continuously appears to him to be one and the same object is, in fact, a number of objects replacing each other. Thus the further information which he takes to be relevant to his ability to keep track of the object is information which appears to be from the same object as long as information from this object continues to be gathered. (In effect, since it is possible that more than one bundle from the same object be available to the subject at the time, what is required is that information which would be bundled in the relevant bundle should continue to be gathered. Hereafter, I shall

omit this qualification).¹⁰⁷

This may seem more sophisticated than what seems to be involved in visually singling out an object. But remember that from the subject's point of view the appearance of a particular object as such provides indications as to which further information may be available to him and how it may be gathered, and that generally the object is grasped by the subject as a continuous source of information. The further complications of the above description are simply what is implied by the fact that from the subject's point of view the information is from the object he is currently experiencing (where the subject's point of view is best captured by the initial formulation referring to 'information from this object'). We can thus say that the subject attends to an object in the relevant sense when *he* is (intentionally) selecting a specific type of bundle: the bundle consisting of the information which, given current bundled information from a particular object, appears or would appear as from the same object as long as information from the object in question (i.e., the object the relevant current information is from) continues to be gathered. Henceforth, unless specified otherwise, when I speak about a bundle I shall refer to this type of restricted bundle.

I shall later discuss these claims in more detail. The point I wish to emphasize at present is that the fact that singling out an object involves singling out a certain bundle of information, together with the fact that the subject has a grasp of the relation between the object and the bundle, provides him with a grasp of what

¹⁰⁷ There is also a need to take care of further special cases. For examples, it is possible that an unnoticed replacement of one object by another takes place gradually, and thus that there are stages in which information from the first object, which appears as from the same object, is still gathered but is negligible (in the next section I shall clarify the exact sense in which it is said to be negligible). To prevent the inclusion in the bundle of the information available if such a situation occurs, one has to add that information from the object which continues to be gathered also continues to be dominant in the bundling of information in the relevant bundle (this too will be clarified in the next section). For simplicity's sake, I shall focus on cases in which there is only one bundle, dominated by information from one object.

currently distinguishes the object, for him, from any other object. He views it as the object from which he currently has the relevant selected information, and from which further information is available to him if he keeps selecting information that will be bundled in the same bundle. And if he is simultaneously attending to other objects as well, he also distinguishes it from the other attended objects by virtue of certain relations between current information in the different selected bundles (for example, by its appearing to be the only red object among them, the closest one, the one at the middle, etc.).¹⁰⁸

If this picture is accepted, then there is a clear sense in which a subject who attends to a particular object knows which object he is attending to, and is thus able to entertain singular thoughts about it. Furthermore, the subject's grasp of the relation between the object and the selected bundle of information explains what makes this mode of distinguishing an object basic to our ability to evaluate thoughts about objects and to intentionally direct actions towards objects. As the subject immediately takes the information in the selected bundle to be from the object, he also, when entertaining a certain demonstrative thought on the basis of this act of attention, immediately takes the information in that bundle to bear upon the way in which he evaluates the thought (that is, whether he takes it to be true, false, probable, etc.) and on what implications (for other thoughts and for action) he takes the thought to have. Borrowing Evans's expression, I shall say that the subject immediately takes the information in the bundle to bear on the evaluation and appreciation of the thought.¹⁰⁹

¹⁰⁸ It is assumed that the relations between the bundles enable the subject to distinguish each of the objects. Some cases in which subjects are described as simultaneously attending to a number of objects might not enable doing this. For example, when a subject observes a number of qualitatively indistinguishable objects moving rapidly in random ways and attempts to track 4 of them (see Pylyshyn 2001), he might not, all along, be in a position to distinguish each of the attended objects (due to the spatial relations between them). The way I use 'attention to an object', when the subject is not in such a position, he should not be said to be attending to each of the objects, but only to all of them as a group.

¹⁰⁹ Evans pp.121-2. This schematic structure of what a demonstrative mode of thought involves is based on Evans. For a similar schematic description see Campbell 1997 p.57.

It should be emphasized that ‘taking the information to bear’ is meant as a description of how things are from *the subject’s point of view*. He (immediately) takes the information to be from the object the thought is about and for this reason immediately takes it to bear on the evaluation and appreciation of the thought. Thus it is not a matter of brute dispositions to react in certain ways or make certain transitions in thought. Further, it is not necessary that when the subject evaluates the thought or draws implications from it, each bit of information in the bundle has a certain effect on these activities; in fact, some of the information is not yet in his possession, and might not be gathered by him at all.

Note that the immediacy in question relates only to the subject’s basis for taking the information to be from the object the thought is about. There is another sense in which information can be said to bear either immediately or mediately on the evaluation and appreciation of the thought, which is *not* relevant here: one can distinguish between (i) cases in which the subject’s evaluation of the thought involves an inference or some other consideration as to whether or not he should take the predicative element of the thought to apply to the object (for example, a subject may take the experience of an object as a *G* to bear on his evaluation of the thought ‘this is *F*’ due to his belief that most things that are *G* are *F*), and (ii) cases in which no additional inference or consideration is involved (for example, a subject immediately takes the experience of an object as *G* to bear on his evaluation of the thought ‘this is *G*’). (A similar distinction can be made regarding the basis for drawing implications).

Note also that a subject immediately takes the information to bear on the evaluation and appreciation of the thought even when he does not take the information to be veridical. If he takes the information to be from the object, he takes it to systematically depend on how things are with the object; thus misinformation can both be relevant to his gathering more accurate information about the object, and,

combined with whatever views he has regarding the illusion (or possibility of one), relevant to the particular way in which he evaluates and appreciates the thought. It thus has an immediate bearing on his evaluation and appreciation of the thought in the sense that no consideration regarding the object's identity is required. Things are different when the subject believes, or considers the possibility, that certain information which appears to be from the object is not actually so. However, in such cases, not taking the information to bear on the evaluation and appreciation of the thought involves an additional consideration on the subject's part. (Thus the immediacy is not only a matter of the lack of a need for further consideration but also of the subject's attitude being prior to further considerations which might overrule it).

The suggestion then is that visually attending to an object provides the subject with knowledge of which object he is attending to since it involves the subject's selection of a particular bundle of information and a grasp that the object he is attending to is the object the selected bundle is from. This knowledge accounts for the subject's ability to entertain thoughts about the object, as he then takes his thought to be about the object the selected bundle is from. It further accounts for the particular way in which we evaluate and appreciate demonstrative thoughts - the fact that we immediately take the information in the bundle to bear upon the evaluation and appreciation of the relevant thoughts.

It should be clear that this is not a suggestion that the subject identifies the object descriptively; namely, that he first selects a certain bundle of information (where this could be done independently of his ability to select the object) and then entertains a thought about 'the object, whichever it is, which this bundle is from'. First, the view is that the relevant information cannot, generally, be specified without reference to the object and that as long as the subject does not have relevant doubts he grasps the information as such. Furthermore, the restriction as to which further

available information is included in the bundle involves appeal to the object (it is the information bundled while information from the object continues to be gathered), and is grasped in this way by the subject. Thus the subject relies on his grasp of which object is in question when selecting the bundle. (In the third section I shall discuss this point in more detail and mention another contrast with the descriptive view).

The point is that without the grasp of the relation between the object and the bundle, whatever else is involved in the subject's singling out the object will not suffice for making it a case of *the subject* singles out a particular object; that is, a case in which he is intentionally visually singling out the object, as opposed to a case in which the object is discriminated, as a matter of fact, by his actually being selectively sensitive, or being disposed to be selectively sensitive, to information which is from it. In effect, this is simply an attempt to spell out how, given the way the visual system works and the type of environment with which we interact, the relevant aspects of the subject's primitive conception contribute to his ability to experience a particular object as such and his ability to intentionally single it out.

In what follows I shall develop this picture further and clarify that attending to an object in this sense is explanatorily more basic from the demonstrative ability it may give rise to. However, before turning to these tasks, there is a need to discuss the relation between bundles of information and objects in virtue of which the bundling enables subjects to single out particular objects and to keep track of them. So far it has been taken for granted that there is a certain unproblematic relation (a relation which, as I did when describing the subject's grasp of his situation, I shall express by saying that a bundle is from a certain object), but we shall shortly see that it is not immediately clear what this relation is.

What is it for a bundle of information to be from a particular object?

According to the suggested view attention to an object involves the subject's selecting a specific bundle of information which is from this object. Further, it is suggested that when a subject selects such a bundle, his grasp of the fact that the bundle is from the attended object is an essential part of what makes it the case that he knows which object he is attending to, and thus also of what explains his ability to entertain demonstrative thoughts about the object. But what exactly is this relation between a particular bundle of information and a particular object supposed to be? (Our main interest is, still, bundles which include information available as information from one and the same object as long as the subject keeps gathering information from the object in question. However, I am now clarifying what it is for any type of bundle - that is, any collection of information bundled by the fact that it appears as information from one and the same object - to be from a particular object).

The most straightforward answer would be that each bit of information in the bundle should be from the object (that is, it should be due to an aspect of the appearance which is systematically dependent on the corresponding feature of the particular object in question, given the relation between the object and the subject and relevant environmental conditions). However, if we accept this answer, the above suggestion as to what a demonstrative thought involves (namely, that the subject selects a bundle of information which is actually from the object and grasps it as such) will imply that whenever the selected bundle includes information from more than one object, the subject cannot entertain a demonstrative thought about it (similarly, it would be implied that in such cases the subject cannot attend to the object in

question).¹¹⁰ But it is undeniable that there are cases in which it is possible to think demonstratively about a seen object even though the way the object appears to the subject is partly dependent on other objects (that is, the information in the selected bundle includes bits of information which are, at least partly, from different objects).

Simple examples are cases in which an object appears to the subject as having a certain pattern on it, or a patch of a different colour, while in fact the seen differences in colour are due to colour information from a different object; as can happen, for example, when a thread which is lying on a tablecloth appears to a subject as part of the pattern of the tablecloth, or the black tail of a cat with a white feather stuck to it appears as a black tail with a white patch. Clearly in such cases we take it to be possible to attend to one object (in the above examples the tablecloth or the cat) and entertain simple demonstrative thoughts about them, by being selectively sensitive to information which includes information from other objects (like the thread or feather). Similarly a subject can misperceive an object's shape due to shape information from a number of objects being mixed together, without this preventing him from being able to entertain simple demonstrative thoughts about the relevant object (take, for example, a case in which it appears to the subject that he is encountering an object which is spherical apart for a small triangular protrusion on its right side, where in fact what he is seeing is a spherical object and the corner of a triangular object partly occluded by the spherical one).

The question, then, is in virtue of what a subject in the above examples can select a bundle which can be said to be from just one of the objects, even though only

¹¹⁰ In the following discussion any claim about what enables thought about a particular object also applies to what enables attention to that object and vice versa. I often prefer speaking about whether or not a demonstrative thought is possible because talk about attention to an object can be understood in various ways and therefore less helpful in attempting to examine intuitions as to how to describe various example (and possibly also generally less clear). However, at some points, for ease of exposition, I speak about what enables attention to an object.

bundles which include information from more than one object are currently available to him (for the current information in relation to which we ask whether further information appears to be from the same object is from a plurality of objects). Clearly there are several cases in which, because the information bundled together is from more than one object, a subject who selects the bundled information cannot be regarded as attending to just one object, and if he takes the selected information to bear on the evaluation and appreciation of an attempted demonstrative thought we should say that he is mistaken in taking himself to actually be entertaining a demonstrative thought about a particular object. An example of the latter type will be a situation in which a subject is attending to what appears to him as one object but is, in fact, two copulating flies (of more or less the same size), or to what appears to him as one object but is, in fact, two entangled bushes (each of which has more or less the same amount of parts visible to the subject).¹¹¹ (It should be mentioned that attending to the combination of the two (or more) objects which appear to be one could enable the subject to entertain visually-based thoughts about the combination of the objects, and we might express such thoughts by using 'this' or 'that'. But such thoughts differ from the type of demonstrative thoughts discussed here in that *the subject does not take them to be about a particular object*. This will be manifested in his not taking such thoughts to conform to the same principles which thoughts about particular objects do; for example, he will not draw from such thoughts implications which presuppose cohesion. To emphasize, if the subject takes himself to entertain a thought about a particular object, this thought will fail).

¹¹¹ The additions in brackets are only a rough indication of one type of condition in which the subject cannot be regarded as attending to any one of the objects in particular. It might not be sufficient and certainly need not be necessary.

What, then, distinguishes between the two types of cases? It might be suggested that in the former cases but not in the latter there is one object such that most of the current information bundled together is from it, and that it is in virtue of this condition that a subject who selects the bundled information can be regarded as attending to an object even when some of the information in the bundle is from other objects.¹¹² The immediate problem with this suggestion is that it is not clear what measures are relevant here. It does not seem that it is simply the amount of detail that matters, for it seems possible to think demonstratively about a particular tree even if, being partly covered by a vine, there is no obvious sense in which the bundle contains more bits of detailed information - regarding shape, colour, texture, movements, etc. - from the tree. It also seems that it is not the number of dimensions affected by information from additional objects which matters; for example, it is possible to describe a case of seeing a tree partly covered by a vine in which one can entertain simple demonstrative thoughts about the tree though most dimensions include information from both objects (that is, a case in which information about colour, shape, texture, movements, and also about exact location and size are all partly due to information from the vine).

It may seem that some dimensions are more important than others and thus the condition should be that a bundle is from the object most of the information relating to these dimensions is from. For example, it may be suggested that location, shape and size have such a priority, as they determine the apparent portion of space occupied by the object and thus seem to be responsible for the appearance being an appearance of a distinct object. To assess such a suggestion, there is a need to clarify how the contribution of the location, shape and size of the different objects to the apparent location, shape and size should be compared (for as mentioned above, it is possible to entertain simple demonstrative thoughts about an object when the

¹¹² Campbell makes such a suggestion when considering a version of this problem (2002 p.99).

information available to the subject about these three aspects depends on the location, shape and size of more than one object), and it is not immediately clear how to do this. Suppose it is suggested that the attended object is the one such that significant global changes in its location, shape and size systematically affect the apparent location, shape and size (where any changes in the location, shape and size of the other objects may only have an effect on details or have rather limited global effects). This is still quite vague,¹¹³ but even without attempting to clarify what should count as significant global changes, the following example seems to show that it cannot be correct. If it were correct, then a subject who sees something which looks to him as some kind of tent but is in fact a plastic pyramid covered by a blanket should be regarded as attending to the plastic pyramid alone and demonstrating it when entertaining a simple demonstrative thought. This seems counterintuitive. It seems that if the subject is to be said to attend to anything at all, it would be the combination of the pyramid and the blanket rather than any one of them. That is, it seems that attention to the covering material alone or to the pyramid alone - if the latter is at all possible - is more sophisticated than simply attending to the combination. The important point, however, is that as long as it is agreed that it is not uniquely the case that a subject in such a situation attends to the pyramid alone, this is a counterexample to the above suggestion.

The comments in the last two paragraphs are not meant as a conclusive

¹¹³ Think about a white, flat, round clock with a black hook at its top, hanging on a larger, black, flat, square board. A subject might see this as a square object - a clock with a black wooden frame - of the size of the board. On the face of it the global changes in the location, size and shape of the board will have a global affect the location, shape and size of the whole apparent object. While it is not obvious that the same can be said about changes in the location, shape and size of the clock (in effect, it seems that apart from small changes occurring in specific ways, the effect in this case would be that the two objects will appear as two separate objects). There is thus a need for a more complex story about how to compare the contributions (for otherwise the above suggestion commits us to the unintuitive result that the subject is attending to the board).

argument showing that there is no possible interpretation - which conforms to our intuitions about whether or not a subject is attending to one object (and thus can refer to it demonstratively) in a given situation - of the suggestion that what determines one object as the object a certain bundle is from is that most of the information in the bundle should be from it. The aim was only to point out that it is not straightforward what this interpretation should be. One way in which one could continue looking for an appropriate interpretation would be, first, to try further to pin down which aspects of the appearance are dominant in making it the case that a certain appearance of an object (extending over some period of time) is a continuous appearance of one object distinguished from the appearances of other objects (where this will probably require specifying a complex relation between the different aspects¹¹⁴). Secondly to clarify in what sense one of the objects the information about these aspects is from could be regarded as the one on which the information (about these aspects) available to the subject mostly depends (where a suggestion would be acceptable if it accords with our intuitions about which object is attended to, if at all, in various cases). But when the task is presented this way, it seems that an explication of what it is for a bundle to be from just one object need not require knowledge of the exact way in which various aspects contribute to the appearance being the appearance of one and the same object. The latter, it seems, concerns the principles according to which the mechanism responsible for the information appearing as from one and the same object operates, and thus required for explaining how it is that a particular object is, in fact, the one the bundle is from. To clarify what it is for a bundle to be from one object, however, we only need to clarify the sense in which the fact that the relevant information is bundled together - that is, that it appears (or would appear) as information from one

¹¹⁴ One relevant aspect which was not mentioned explicitly so far, and which complicates things further, is the kind something appears to be (when it appears to be of a certain kind).

and the same object - depends on how things are with just one object as opposed to cases in which this depends on how things are with more than one object. I shall try to sketch a way this can be done while leaving open the question regarding the principles according to which the information is bundled together.

It seems helpful to appeal here to conditionals and counterfactuals which bring out the way in which changes in the bundling depend on changes in conditions such as the spatial relations between the subject and the relevant objects and between the objects themselves; specifically, conditions which bring out the dependence of the bundling of information over time on whether or not the information from just one particular object is continuously gathered. (Note that the question of what counts as continuous gathering of information, like that of what counts as information being continuously available to the subject, is relative to the subject's point of view). I suggest the following as at least a close approximation of what a bundle being from a certain object involves.

Given a bundle of information b , which includes some information b' gathered at a certain time t_1 from a number of objects $o_1, \dots, o_n$, **o_i ($1 \leq i \leq n$) is the object b is from** iff (i) if the subject has selected b' at t_1 and continues to select information from o_i till a later time t_n , and at some time between t_1 and t_n there is a change in his position in relation to $o_1 \dots o_n$ or in the spatial relations between $o_1 \dots o_n$ which affects the bundling of the information in such a way that the information (gathered after the change) from each o_j ($1 \leq j \leq n$) appears as information from a separate object¹¹⁵ (and no other change affecting the availability of information from the objects occurs), then the information from o_i would appear to him as information from the object he has

¹¹⁵ This should be read as restricted to cases in which the relevant change does not cause a change in the visible features of the objects which would affect the way information from the object in question is bundled, or if such changes are unavoidable, to cases in which the minimal amount of such changes takes place.

been attending to (that is, it would appear that all along he has been selecting information from the same object); and (ii) for any $o_j, j \neq i$ ($1 \leq j \leq n$), if between t_1 and t_n the subject continues to select information from it and the change in the bundling of the information specified above takes place, then it would appear to him as if he had shifted his attention to what is only a part of the object he was attending to,¹¹⁶ an object which was attached to it in some way or another, or an object (or part of one) which was simply located close to it.

To see how this is supposed to work, consider the examples mentioned above. Continuing to select information from the tablecloth while the thread is removed from it or from the cat while the feather is removed from it, it will still look to the subject as if he is attending to one and the same object, but if instead he goes on selecting information from the thread or feather while they are removed, it will surely look to him as if he is shifting attention from one object to another (or in certain conditions, from one object to what was previously a part of it; e.g., the conditions may be such that removing the feather appears as removing a bit of fur). Similarly, if the subject moves around the spherical and triangular objects while continuing to select information from the spherical object, it will appear to him that he is attending to the same object, while continuing to select information from the triangular object (or from the corner which was visible to him before he started moving) the appearance would be one of his shifting his attention to a different object.

In contrast, in the relevant cases of the copulating flies and the entangled bushes (the cases in which the flies are of more or less the same size, etc.), it seems that *if* there is a situation in which the objects are separated and the subject's continuing to select information from one of them appears to him to be a case in which he is

¹¹⁶ As would happen, for example, if a subject who was attending to a tree will go on attending to a leaf or a branch falling off the tree.

continuing to attend to one and the same object, then there will also be a possible scenario in which if he continues to select information from the other object, while the objects are separated, it will appear to him that he is continuing to attend to one and the same object. (It might be the case that in all situations in which the objects are separated, the appearance will be such that the subject realizes that what he took to be one object was in fact two (it seems that this is what would happen in the blanket and pyramid case)). Note also that the conditions in which there might be room for saying that the subject is attending to one of the flies or bushes - say, when one of them is significantly larger or occupies a significantly larger part of what is currently visible to the subject - are conditions in which it seems plausible that there is an asymmetry as to which fly or bush will appear to be the same as the object initially attended to (while the other appears to be a different object or merely a fragment of the initial object).

There are cases which seem to complicate the above suggestion, specifically cases in which the change required for bringing about the separate bundling affects the objects themselves in such a way that the change in the objects is sufficient for explaining why the current information from any of them does not appear as from the same object. I shall not try to deal with the various possibilities and what one may say about them, partly because the way things will appear in such cases is an empirical matter which, because these are not the kind of cases we encounter often, I can only hypothesize about. It might be that in, at least, some of these cases it is not clear to the subject whether or not any of the objects appear as the same after being separated. If the suggestion is correct, cases of this type should also be ones in which it is unclear which object is demonstrated.

What determines which conditionals and counterfactuals are true is the way in which the visual system works: the way in which the information available to the

subject is organized by the visual system (where this should include any aspect of the operation of the visual system relevant to whether or not different bits of information, either simultaneous or successive, appear or would appear to the subject as information from the same object. Location and gestalt organization principles are surely relevant to this, but also the visual recognition of the object as of a certain familiar shape, kind, etc., can play an important role). As mentioned earlier, the exact details of how this is done need not be known. What matters is that there are such mechanisms and thus that there are facts about what would and what would not appear as one and the same object in certain conditions in a certain range of cases (as well as facts about the conditions relevant to determining this range). (The range in question excludes cases in which it is unclear, from the subject's point of view, whether or not he continues to attend to the same object. It need not have a clear cut boundary; what is important is that there are clear cases and that one can, generally, characterize the type of factors which distinguish them from the unclear ones).

Note that this account of what it is for a particular bundle to be from a particular object can be generalized to an account of what it is for a particular bundle of information to be from something: a particular object, a definite combination of two or more objects, some indefinite combination or a plurality of things, etc. For the above suggestion identifies the thing (in this wide sense) on which its appearing to the subject that he is seeing one particular object depends.

The subject's grasp of the relation between bundles and objects

I

The question, to repeat, is how, from the subject's point of view, the object he is attending to - and, if he is entertaining a particular demonstrative thought about it, the

object the thought is about - is distinguished from any other particular object. The suggested explanation is that the subject's selection of the object involves his selection of a bundle of information (of the relevant type) which is from the object, and that he grasps his current situation as one in which he is selecting such a bundle. In the previous section I tried to clarify what it is for a certain bundle of information to be from a certain object. The clarification involved appeal to facts about what would appear to the subject to be information from one and the same object in relevant possible situations. Assuming this is the way to understand what it is for a bundle to be from a particular object, there is a need to clarify in virtue of what an ordinary subject can be ascribed a grasp of this relation.

Such a grasp, I suggest, is simply part of the subject's primitive conception of perception and objects. An ordinary sighted subject, operating in the types of environments in which we normally operate, would undoubtedly have some grasp of how various conditions may affect the way information is bundled. He should, for example, take it that in the absence of movement (his and the objects') two separate objects might appear to be one object, depending on their locations relative to each other and to himself, their colours, light conditions, whether any of them is recognized by him, etc.; that two attached objects moving together may appear to be one, and so on. And he will take it that otherwise - i.e., if these and other conditions with similar effects¹¹⁷ do not affect the bundling - the information will be bundled according to whether or not it actually is from one and the same object.¹¹⁸ (As with other aspects of

¹¹⁷ The subject should also have a grasp of conditions which cause information from the same object to be bundled separately. I shall ignore this aspect of the subject's grasp, as it is not immediately relevant to clarifying what his taking a bundle to be from one object involves.

¹¹⁸ This asymmetric description (that is, speaking about conditions which may affect the bundling while assuming that without their effect the bundling and the source of the information correspond) is preferred here to speaking about general rules which are operative both in correct and incorrect bundling, since it seems more suitable for capturing the subject's point of view. The latter type of general rules should be relevant when one explains the way the visual system enables bundling.

his primitive conception, the subject need not know all the relevant conditions, and may be mistaken about some of them; particularly about the exact range of cases in which they apply and the exact way their effect in a given situation depends on further conditions).

A subject who has no relevant doubts regarding the veridicality of his current experience thus takes the information provided to him due to an appearance as of one object to be from one object, but takes into account the possibility of a mistake. One type of mistake he takes to be possible is that what appears to be one object is not in fact so; where he takes it that if this was in fact the case, the appearance in question would not enable him to attend to a particular object and to entertain demonstrative thoughts. In addition, he also takes into account a less radical possibility; namely, that what appears to be one object is one object but that some aspects of the appearance do not provide him with information from the object but rather with (mis)information from some other object (or part of object) or with misinformation which is a mixture of (mis)information from a number of objects.

Consider, then, what it is that the subject takes into account in the second case. The subject's grasp of such a possibility is his grasp that certain conditions which affect the bundling may obtain. As he has a grasp of the way various conditions can cause information from other objects to be bundled together with the object in question (the one the appearance is of), he also grasps how, if such mistakes occur, changes in the conditions can lead to the information from each of the different objects being bundled separately. For example, he may grasp that information from each of the objects would be bundled separately if they were viewed from a different angle, or if he got closer, recognized the objects, saw them while at least one of them was moving, saw them when they were somehow separated from each other, etc. Now, the subject takes the appearance to be the appearance of a particular object; thus

he takes it that when the conditions change so that the information from the two objects is bundled separately (and there is no further change in the conditions), further information from the object the appearance was of would appear to be from the same object (that is, it would be bundled with the information the subject has in virtue of the initial appearance). For it is assumed that the only effect the changing conditions have is that the information from the different objects is now bundled separately, thus it is assumed that there are no conditions which prevent the bundling of further information from the same object with the information currently available due to the appearance in question.

Furthermore, this is exactly the condition the subject takes to be missing if what appears to be one object is not in fact so. In such a case he takes it that changes in the conditions which will separate the information are likely to result in the dissolution of the initial appearance as of one object, or alternatively, that different changes in the conditions, all similarly relevant to affecting the bundling, may allow that the current information be bundled with information from different objects.

The claim, then, is that the way in which I have described the relation between the bundle and the object it is from (when there is such an object) is the kind of relation the subject takes to obtain between a particular object and the bundle of information he selects when attending to this object, if the current appearance of the object is affected by other objects as well.¹¹⁹ This conception of what it is for a bundle to be from one object is manifested in the way the subject uses the information in the bundle and deals with the possibility of mistakes. Specifically, as long as he takes the bundle to be from one object, he takes it to be the case that, although some of the information might not be from the object, continuing to be sensitive to information

¹¹⁹ The same holds for his grasp of the possibility that at a later stage information from other objects would be gathered simultaneously with information from the attended object.

from this bundle will ensure that he will keep being sensitive to the information available to him from the object and, as far as possible, will be able to correct mistakes by gathering more visual information. (Note that the conditions which may make it impossible for the subject to correct 'bundling mistakes' are not limited to conditions which affect the availability of the relevant information at the time, such as the disappearance of the object from view. In some cases the factors relevant to the individuation of the objects might be unobservable or at least not directly observable. As mentioned earlier, in those cases in which two objects have to be separated from each other in order for the information from them to appear as information from separate objects, the appearance of the separation process can be misleading. Seeing such a separation, a subject may experience it as the division of one object into two, or it may be a case in which it is unclear to the subject whether what initially appeared as one object was actually so. The subject will take such possibilities into account, and have, at least, some partial grasp of the type of considerations which may be relevant to inquiring further whether the two were or were not distinct objects. But often the relevant considerations would relate to things which are not directly observable: the objects' origin and history, their function, the designer's intention, and so on).¹²⁰

I have been discussing the question of what it is for the subject to take a bundle of information to be from a particular object, and implicitly also what it is for him to take an object-appearance to be of a particular object. It was made clear that when the appearance is not of one object the subject cannot select the required bundle and

¹²⁰ The subject need not know in detail what the exact considerations are and might be mistaken about several details, but he should be disposed to take certain *types of considerations* into account. (In the case of artificial objects this means that the ability to demonstrate objects which are not physically distinct from other objects, or which consist of a conjunction of separable objects, depends on the subject's having some grasp of the relevance of considerations other than the causal considerations which seem to be more basic. These issues require further discussion).

cannot entertain demonstrative thoughts. Note however that the structure of the subject's grasp of the relation between a bundle and an object can be applied by the subject when he does not take the experience at face value and therefore considers, in general, what thing a particular bundle is from (thus allowing that the thing in question is not necessarily a particular object but rather might be a (definite or indefinite) combination of a plurality of objects, etc.). In such a case, the subject may, on the basis of his experience, entertain thoughts about whatever it is that the bundle is from. As mentioned earlier, we may find it natural to express such thoughts by means of demonstrative expressions. But the thoughts themselves are of a different type, as they do not involve the same commitments singular thoughts involve.¹²¹

II

It is now possible to see more clearly how different this suggestion (the suggestion that the subject's knowledge of which object he is demonstrating should be explained by the fact that he grasps his situation as one in which the object of his thought is the object the bundle he is selecting is from) is from a descriptive suggestion (the suggestion that the subject singles out the object of a demonstrative thought by selecting a bundle, which is in fact from a certain object, and taking the object of the thought to be whichever object the bundle is from).

As mentioned earlier, the bundle which is supposed to be selected by the subject when he attends to an object, and which is then taken by him to be relevant to the

¹²¹ One may be willing to accept that in such a case the subject's attempt to entertain a demonstrative thought fails, but might argue that regardless of the subject's view as to what the appearance is of his attempt to attend to what he takes to be an object should be regarded as his attending to whatever it is that bundle is from in this wider sense. I should clarify that I am not denying that there is a sense in which he can be said to be attending to that thing. However the notion of attention which I take to be required for explaining the subject's ability to think demonstrative thoughts involves his conception of the type of thing he is attending to and thus is specific to cases in which the appearance is in fact of one object. The subject's conception matters exactly because principles regarding the object's causal structure are relevant to his grasp of the relation between the appearance and the way the object is.

evaluation and appreciation of the demonstrative thoughts he entertains on the basis of this act of attention, is partly individuated in terms of the object it is from: in addition to information which the subject can currently be said to possess in virtue of a certain appearance as of an object, the bundle should include the information which would appear to be from the same object *as long as he continues to gather information from the relevant object*. The descriptivist cannot deny this. The selection of further information which appears to be from the same object is a necessary aspect of *the subject's* attending to the object; it is an immediate result of his grasp of the situation as one in which he is singling out a mind-independent object which has its own causal progression. And, as clarified earlier, the restriction of the relevant information to information gathered while information from the object continues to be gathered is a further aspect of his grasp of what is involved in his visually keeping track of the relevant object.

However, a descriptivist may agree that attending to an object as well as thinking about it demonstratively must involve selecting a bundle which is individuated by appeal to the object, but suggest that such a selection depends on a prior descriptive identification of the object which requires only the selection of a narrower bundle: a bundle which includes only the information the subject can be said to have in virtue of the current appearance of the object; or to simplify the formulation we may present the suggestion as requiring only the selection of a current object-appearance. A subject who selects a certain object-appearance can identify the relevant object as the object which satisfies the description 'the object this appearance is of'.¹²² This, in turn, will enable him to select the information which is available to

¹²² If objected that the subject's conception of what it is for an object to be from the bundle (or of what it is for an object-appearance to be of one object) involves appeal to whether or not he continues to gather information from this or that object, the descriptivist would reply that the subject can grasp this without actually identifying any of the objects in question, he only has to grasp that the relevant conditionals relate to whichever objects are the sources of the information in the (narrow) bundle (or of the appearance).

him as information from the same object when information from the object this appearance is of continues to be gathered.¹²³

One problem with this suggestion is as follows. According to the descriptivist, the selected appearance is supposed to play a role in determining the condition by which *the subject* identifies the object. Thus it would not be sufficient to construe such a selection as merely a matter of the subject's being sensitive, as a matter of fact, only to the relevant object-appearance (say, in the context of a certain task). He must have a grasp of what he is selecting as an appearance, something which he can view as the appearance of a particular object. But the subject's grasp of a specific appearance as an appearance is not independent of his grasp of it as the appearance of the particular environmental aspect it is in fact an appearance of: from his point of view what he experiences is the object and its properties (or possibly some other thing - a combination of objects, etc. - and its properties), and it is only due to his grasp of what is involved in his experiencing the particular object and properties (which he is in fact experiencing) that he is able to single out the appearance in abstraction from its source. That is, he can be said to select a mere appearance only in virtue of, first, selecting an appearance which he does not grasp to be independent of a particular object and, then, abstracting from this relation with the object.¹²⁴

Contrast this with the view I am suggesting. The current object-appearance is supposed to play a special role in the individuation of the bundle and in the subject's ability to select it. It provides a point of reference in relation to which we ask which information appears to be from the same object: thus determining both what would count as available information which appears as from the same object, and which

¹²³ Searle's view of demonstratives in his 1983 (that the object is identified as 'the object which is causing this experience') can be construed as such a suggestion.

¹²⁴ Things are different if he believes that (or proceeds as if) he is hallucinating. But this cannot be the most basic case, which is what the present discussion concerns.

bundle among those the subject is presently in a position to select is in fact selected. But this role does not depend on *the subject's* selecting the appearance prior to and independently of the identification of the object: for the current information to serve as the required reference point, it does not matter that the subject's selecting the relevant appearance is an aspect of his selecting the object.

Another contrast with a descriptive view is that according to it the subject's grasp of the relations between the way things appear and the way they are is supposed to determine a condition which the attended object satisfies (namely, the condition that it be the object the relevant appearance is of) prior to his singling out the object. But it is clearly implausible to assume that ordinary subjects have a general grasp of these relations which, considered independently of its application in a particular situations, is accurate and detailed enough to suffice for determining a condition which, in all those cases in which it seems implausible to say that a subject cannot single out the object, would pick out the object the appearance is actually of. The view I am suggesting, in contrast, is not affected by such a problem. The subject's grasp is required for making it the case that his actual relation with the object is *generally* grasped as a relation of this type. Thus the details may be, to some extent, mistaken or unknown, and to a large extent can be of a kind which the subject cannot articulate without relying on his ability to refer to particular aspects of the environment and to the states he is in.

The view, then, is that the subject's seeing a particular object as such is a matter of there being a bundle of information which is, in fact, from the object in question and which is currently available to the subject. (Where the fact that the information is bundled the way it is is due to way the subject's visual system operates). Seeing the object, the subject is in a position to visually single out the object: first, as a matter of fact, continuous sensitivity to information which is in the bundle would enable the

subject to keep track of the object and generally to make sure that tasks he wishes to direct towards the object will be controlled by information from the object. Secondly, the subject has a general grasp of the relation between the information in the bundle and the seen object and thus can knowingly single out the object in question. When he does in fact single out the object, intending to be selectively sensitive to the information in the relevant bundle, the fact that he grasps which object he is attending to provides him with the ability to entertain thoughts about the object. When entertaining a particular thought on the basis of his attention to the object, he immediately takes the information in the bundle to bear on the evaluation and appreciation of the thought (provided he has no relevant doubts as to the source of the information), and further, his grasp of the object as the object the relevant bundle is from is also manifested in the way he considers possible mistakes and reacts when he believes that a mistake occurred.

The basicness of the subject's attention to an object

I

The aim of the discussion is to characterize a notion of attention to a seen object which can play a role in the account of a demonstrative ability. So far I have focused on the requirement that the subject's attention to the object provide him with knowledge of which object is in question, but the further requirement was that the relevant notion of attending to a seen object be explanatorily more basic than the particular demonstrative ability it is supposed to give rise to. Does the notion of attention to an object I have been appealing to (attention as involving *the subject's* selection of the bundle which is partly individuated by reference to the object) satisfy

this latter requirement? I shall consider and reject two lines of reasoning which might seem to support the claim that it does not.

II

Suppose, first, that one argues as follows. It was claimed that when a subject is attending to an object in the relevant sense he grasps himself as attending to it, knowing which object he is attending to. This is sufficient for ascribing to him a grasp of what it is to apply any concept he takes to be applicable to objects he encounters in his environment, a grasp which involves his taking the selected bundle to bear on any such thought. But this seems sufficient for ascribing to him the specific demonstrative ability which is based on the given act of attention. It thus follows that consciously attending to an object implies the possession of a particular demonstrative ability. But if the relevant notion of attention is thus inseparable from the particular ability to think about it demonstratively, in what sense could the former be regarded as more basic than the latter?

The reply is simple. The above explanation of why consciously attending to an object in a particular situation entails having a particular ability to think about it demonstratively is consistent with holding that the fact that, in the situation in question, the subject has the relevant particular demonstrative ability plays no role in *explaining* the fact that he is attending to the object, in the situation in question, in the particular way he does. That is, the fact that he has the particular ability to think about the object demonstratively in that situation, and the fact that it is the particular ability it is, need not figure in an explanation of the fact that the subject is attending to the object in that situation and that it is the particular act of attention it is. The opponent has merely pointed out that attending to an object, given the relevant concepts and a general grasp of what is involved in applying them to particular objects, is what constitutes the subject's having the particular ability to think about the object

demonstratively in the situation in question. This does not imply an explanatory dependence of his attention to the object on his having the *particular* demonstrative ability. In fact if this is the correct picture, then the explanatory relation is the other way round: given an unchanging general ability to apply concepts to particular objects and a general grasp of conditions which apply in the case of seen objects, changes regarding which object the subject is attending to (if at all), and which bundle of information is selected by him (in virtue of this act of attention), can explain changes as to which particular demonstrative abilities he has (if at all), but not vice versa.

I am not denying that the general ability to consciously attend to objects depends on the general ability to think about them demonstratively (the latter is necessary for a subject to have a primitive conception of perception and objects). But the question under discussion is *not* how, in general, to explain the ability to think about objects demonstratively in terms of something which does not depend on it at all, but rather only how to explain, in particular situations, the fact that a subject has a particular ability to think demonstratively about a particular object (specifically, the focus was what makes it the case that it is one object rather than others which is the object of the thought¹²⁵). The claim is that the subject's particular act of attention to the object in the given situation plays a central role in such an account, and that to play this explanatory role all that is required is that the particular act of attention being the particular act of attention it is will not depend on the possession of the particular demonstrative ability this act of attention is supposed to explain.

III

However, there seems to be a stronger argument for the claim that attention to

¹²⁵ The other aspect which the particular act of attention plays a role in explaining is the question of what distinguishes between different demonstratives referring to the same object.

an object, as construed here, cannot be regarded as more basic than the demonstrative ability it is supposed to give rise to. The relevant notion of attention is such that it has to be *the subject* who is selecting the object and the relevant bundle (the bundle consisting of the information which appears or would appear as from the same object while information from the object the bundle is from continues to be gathered). But one might argue that it is only when the subject takes a seen object to be the object of a particular demonstrative thought, taking the information in an appropriate bundle to bear on the evaluation and appreciation of this thought, that *he* can be said to be selecting the object and bundle. It may then seem that attending to an object in the required sense just is an actualization of the relevant demonstrative ability.

What justification is there for the claim that a subject can be said to be selecting an object and the relevant bundle only in the context of entertaining a specific demonstrative thought? One possible line of thought is this. Merely experiencing an object as such makes it the case that the relevant bundle of information is available to the subject (that is, first, information from the object which appears as information from one and the same object is available to him, and secondly, his general grasp of the relation between objects and the experience of objects, which he takes to apply in the current situation, makes it the case that he has a grasp of which particular bundle of information is relevant to his ability to single out any of the objects he is currently experiencing and to his ability to keep track of it). The question then is what additional element is required for making it the case that the subject is selecting the relevant object and bundle rather than merely experiencing the object. Saying that the subject is currently taking the object to be the object of a particular demonstrative thought, selecting the information for the evaluation and appreciation of the thought, would provide a neat explanation of the sense in which the subject is focusing on this object. And the opponent would suggest that there is no alternative explanation.

But why should we agree to this? Suppose, first, that one suggests that what distinguishes the currently attended object (or objects) from other experienced objects is the fact that, at the sub-personal-level, resources are allocated in such a way that there is more processing and continuous binding of information from the relevant object (or objects); where from the subject's point of view we would describe the result as a case of the object's being at the focus of one's view.¹²⁶ It is agreed that we can focus in this sense on a very small number of objects at a time (at most four, but some will argue that only one). Consider, then, a case in which one object is currently focused.¹²⁷ The fact that the subject views the focused object as an object seems sufficient for there to be a sense in which he is singling out the bundle consisting of the relevant current information and information which would appear to be from the same object as long as he continues to gather information from the object: his conception is such that he takes this bundle to directly provide him with information from the object and to enable him to keep track of it.

The opponent may complain that we need a sense in which the subject is actually singling out this object (where if he cannot be said to do this, we should say only that *he* is disposed to select the relevant bundle in the above sense). And the mere fact that the object is focused is not sufficient for this. For the fact that this or that particular object is focused at a time need not depend on the subject's intending to focus on the particular object; for example, the relevant attentional mechanisms could simply be drawn towards the relevant object; alternatively, focusing on a particular object might take place while the subject is scanning the scene or be a result

¹²⁶ Alternatively Campbell (2002) speaks about the object being highlighted, and of course it is also natural to say that the object is at the centre of one's attention.

¹²⁷ I discuss this case in order to simplify. If more than one object is focused, then it would be suggested that they are all singled out by the subject. And as long as relations between the bundles distinguish them for the subject, we can also say that each of them is singled out by him; otherwise it would be a case in which they are singled out as a group of objects (see footnote 108).

of the subject's intention to examine what can be found at a certain location. So, at least when no relevant intention is involved, it cannot be said that *the subject* is selecting the relevant object and bundle.

It is not obvious that there is room for such an objection, since it is not immediately clear that the fact that *objects* are focused (as such) in these situation can be independent from the subject's having some interest in particular objects, but in any case, we may respond by pointing at cases in which the subject does have such interest and argue that in these cases - whatever explains the fact that a particular object happened to be focused - as long as the subject has some general interest in experienced objects, this would make it the case that *the subject* is to be said to single out the object (even if, only for a very short while).

The opponent might respond that those cases in which we agree that a general interest allows saying that the subject is singling out the object, are also cases in which the subject should be ascribed a particular demonstrative thought about the object. For example, if the subject's general interest implies an interest in a currently focused object (say, he is looking for a pen), then the subject currently has a *particular* interest in *this* object: he is occupied, for example, with the question 'what kind of thing is *this*?'.

We can agree that focusing on a particular with a general interest does very often imply that the subject is to be ascribed a demonstrative thought without yielding to the opponent. There seems to be room for distinguishing between a general interest in objects which is part of a certain project (like looking for a pen, finding out whether there are any obstacles on the route, etc.) and a more general sense in which we can be said to be interested in objects - our general interest in objects due to their role in the organization of the environment and to the fact that their causal unity is central to the way we interact with the environment. And it is only due to the former

that focusing on an object immediately requires ascribing a demonstrative thought to the subject. It might very well be that our attitude towards the environment is such that there always is some more specific project with which focused objects are connected (thus, that it is never the case that an object can be said to be selected by the subject without his also entertaining a demonstrative thought about it), but we can still distinguish between ascribing to the subject the relevant demonstrative thought this entails and the more general aspect of his relation with the environment: the fact that he is currently regarding the experience of the focused object as the experience of a particular object which is thus singled out by him and could then be the object towards which he directs various specific questions and intentions.

We may also put the reply to the opponent this way: a subject who is entertaining a specific demonstrative thought is thus selecting the object as the object of this particular thought and selecting the information as the information which he takes to bear on the evaluation and appreciation of this particular thought. But we wish to say that in doing so he is actualizing a general ability, an ability which is not restricted to this particular thought. That he has such a general ability is explained by the fact that he is currently singling out the particular object (and the relevant bundle of information) thus grasping which object he is attending to (and therefore grasping what it is to apply any of his relevant concepts to the object in question). Thus, his attending to the object is an element of the demonstrative ability which is actualized when he is entertaining the thought; it is not itself a specific actualization of the demonstrative ability.

7 The role of knowing which object one is demonstrating

I

The view presented in Chapter 6 resembles, in various respects, Campbell's account of demonstratives in *Reference and Consciousness* (2002). However, Campbell does not seem to view as pressing the question which is the focus of Chapter 6 - that is, how conscious attention, construed as more basic than the subject's ability to think about the object demonstratively, can be what provides the subject with knowledge of which object he is thinking about. At least one possible explanation for this is that on his view the characterization of the functional role of a demonstrative need not involve an appeal to the way in which, from the subject's point of view, the experience bears on how to evaluate demonstrative thoughts and which implications can be drawn from them. In this chapter I shall argue that this view is unjustified.

II

An account of what the knowledge of the reference of a demonstrative consists in is constrained by the need for it to enable an account of how the knowledge of the reference has the functional role it actually has.¹²⁸ In Chapter 6 I described this functional role in a way which was intended to capture what seemed to me an intuitive way of thinking about it. It was said that a subject who is thinking demonstratively about an object on the basis of a certain act of attending to it immediately takes the *experiential* information in a given bundle to bear upon the evaluation and appreciation of the thought in question. Talk about the way the subject takes the information to bear upon the evaluation and appreciation of the thought was meant as relating to the way

¹²⁸ Campbell's discussion relates both to the subject's knowledge of which object she is thinking about when entertaining a demonstrative thought and to her knowledge of which object is referred to when she utters or hears a verbal report expressing such a thought. In both cases he speaks about the knowledge of the reference of a demonstrative. I continue to focus on thought. For convenience's sake I shall occasionally use 'knowledge of the reference (of a demonstrative thought)' and 'knowledge of which object one is thinking about' interchangeably.

things are *from the subject's point of view*; that is, to his viewing certain judgements and actions as correct, or appropriate, in the light of the information, given other intentions and beliefs of his. (Where viewing an action or a thought as appropriate - given his other propositional attitudes - would, in the absence of physical obstacles, cause him to act in the relevant way or make the relevant judgement). Given this characterization, the account of the subject's ability to think about the object demonstratively, knowing which object he is demonstrating, is constrained by the need to account for how his knowledge can explain (causally and normatively) the fact that he takes the information available to him from the object to bear upon the evaluation and appreciation of the thought. The claim that the subject's attending to the object involves his selection of a relevant bundle and taking this bundle to be from the object, immediately accounts for this; it immediately follows that when his attention to the object is his basis for entertaining a thought about the object, he takes the information in the bundle to bear on the evaluation and appreciation of this thought (unless he has doubts regarding the source of certain pieces of information in the bundle).

In contrast, when Campbell discusses the functional role of the knowledge of the reference, he discusses only the relation between the relevant propositions and sub-personal input and output. If it is assumed that this aspect of the use of demonstrative propositions is all that has to be accounted for when accounting for the fact that the knowledge of the reference has the functional role it does, then the main issue is how conscious attention to the object causes and justifies the selection of sub-personal information for affecting the evaluation of the thought and the implication for action drawn from it. The discussion of this issue, however, does not, by itself, require dealing with how attention to an object (construed as more basic than the subject's ability to think about the object demonstratively) can be said to single out the object *for the*

subject.¹²⁹ I shall argue that one cannot ignore, in this context, the common-sense aspects of the use (namely, the relation between *experiential* information *experienced as being from the object*, on the one hand, and judgements and intentional actions directed towards the object, on the other hand), and thus that accounting for the relation between knowledge of reference and its functional role requires a discussion of the sense in which conscious attention singles out the object *for the subject*.

This may seem a minor point, for it seems that there are other ways to raise the question of how conscious attention to the object singles out the object *for the subject*. However, the constraint from the need to explain the subject-level aspect of the use is also a constraint on how we should construe talk about the subject's knowledge of which object he is thinking about.¹³⁰ Thus the following discussion helps clarifying that the robust construal of knowledge of reference which I took for granted to be required, is in fact required. (I should emphasize that I am not arguing that one can ignore the aspect discussed by Campbell. I shall say more about this aspect in Chapter 9).

III

Why does Campbell, when discussing the procedures used for evaluating demonstrative propositions and finding their implications for action, consider only input and output at the sub-personal level? When first introducing the question of how attention to the object affects the role that the experience of a particular object plays in the way the subject verifies and acts upon the relevant demonstrative propositions, Campbell mentions two types of explanation of why a subject makes a certain

¹²⁹ Campbell is clear that the relevant notion of attention to an object is more primitive than the ability to think about it demonstratively, e.g., p.45 (Hereafter, unless specified otherwise all pages references to Campbell are to his 2002). He also emphasizes that what is in question is conscious attention, by which I understand that it is a case in which the subject, in virtue of experiencing the object, singles it out. For present purposes it will not matter whether or not this yields exactly the same notion as the one characterized in Chapter 6.

¹³⁰ As Evans points out on p.89, it is open to one to construe such talk as requiring no more than a causal link between the object and the subject.

experience-based judgement or performs a certain visually-guided action directed towards a demonstrated object: (i) by appeal to the way the object is experienced by the subject - for example, explaining that S judges that this [an attended object] is blue because it looks to him blue, (ii) by appeal to the relevant sub-personal processing - for example, explaining that S judges that this [an attended object] is blue because the cell-firing in V4 is registering blueness at location p .^{131,132} (It should be emphasized that since we are discussing the functional role of the demonstrative element, the focus in (i) is on the fact that accepting the proposition as true is due to the fact that the demonstrated object, rather than anything else, is experienced as having the relevant property and in (ii) the emphasis is on the fact that accepting the proposition as true is due to the relevant information being registered at location p rather than any other location¹³³).

Campbell says that both types of explanation seem legitimate (p.11), and later (p.16) that they are actually descriptions of different aspects of the same causal process.¹³⁴ However, he then goes on to discuss only the second type of description, that is, he discussed only the connection between conscious attention and the selection of sub-personal information to affect judgements and action. The only passage which may be read as suggesting a reason for ignoring the first type is on p.15 where he says:

¹³¹ p.11. The example in (ii) is meant only to clarify which *type* of explanation is suggested; Campbell mentions that an actual explanation may require appeal to other relevant brain areas, and that the appeal to location has to be supplemented by appeal to Gestalt organization principles.

¹³² Similarly, we may explain implications for action by appeal to the effect of the way the object is experienced on the way the action is performed, or by an appeal to the effect of sub-personal information registered at location p on the performance.

¹³³ The reason why this should be so is presented in Chapter 9.

¹³⁴ On p.11 Campbell says: 'both types of explanation are, *on the face of it*, legitimate.' (my emphasis) Thus it might be that in the end he does not think that both types identify a cause of the verification or of the way in which one acts. Regarding implication for action his view is that several cases in which we tend to think that there is a subject-level explanation of certain aspects of the action are such that we are mistaken in this respect (see p.55. But this does not entail that this must generally be the case; thus he might agree that subject-level explanations of the way one acts are legitimate, only that often we are mistaken about whether a particular case should be explained in this manner). Also, I shall shortly point out that there is room to suspect that according to Campbell subject-level explanations (as they are normally construed; namely, as citing a cause the effect of which is due to the subject's taking it to be the appropriate effect) are actually always mistaken. On the other hand, the formulations on pp.15-6 seem to suggest that the subject-level type of explanation can be regarded as legitimate.

Once we accept the legitimacy of B-type explanations [type (ii) above] at all, it is hard to see how conscious attention could play a role in bringing it about that your verbal report is controlled by a particular aspect of your conscious experience, except by bringing it about that your verbal response is controlled by an appropriate aspect of the underlying information-processing.

The view seems to be that although the two types of explanation are descriptions of different aspects of the same causal process, the level-crossing description (that is, the one mentioning information-processing) is more relevant to accounting for the effect conscious attention has on the process: the fact that conscious attention to the object makes it the case that certain experiential information is selected to affect the judgement is explained by the fact that conscious attention to the object makes it the case that sub-personal information from the object is selected to affect the judgement.

If such a claim is to justify ignoring the purely subject-level descriptions, then it must be understood as the claim that there are two types of descriptions - (i) descriptions of the sub-personal process in virtue of which the selected sub-personal information controls the subject's judgement (in the sense that it plays a role in determining which property the subject judges the object to have), and (ii) descriptions in which the selected experiential information is specified as what controls the judgement - and that for any case in which a description of type (ii) is true, there is a description of type (i) which is a true description of the same process and which explains the fact that the type-(ii) description in question is true. That is, it must be that the effect which the selected experiential information has on the judgement is wholly explained by the fact that by selecting specific experiential information one is selecting specific sub-personal information and the latter then affects the judgement due to its sub-personal processing. However, on this picture, if descriptions of type-(ii) are ever true, then the relation between the experiential information and the judgement which such descriptions are supposed to describe should not be read as what is normally regarded as the type of causal relation typical to subject-level explanations; that is, the

effect that the selected experiential information can be said to have on the judgement is not due to the fact that this particular experience is taken by the subject to justify the judgement - that is, given his other propositional attitudes, experiencing the object this way makes it correct, from his point of view, to make the relevant judgement. (Of course, those who hold that there is such an effect accept that it is underlain by certain sub-personal information-processing. What is denied is the stronger claim that the sub-personal processing can suffice for explaining the fact that there is such an effect.) Thus, not only is it the case that on this picture the subject-level explanation adds nothing to understanding how conscious attention explains the use of the relevant procedure, also what seems to be the common-sense understanding of such explanations turns out to be mistaken.

The passage quoted above could be read as only pointing out that the truth of a type-(i) description is necessary for the truth of a type-(ii) description. It is thus possible that Campbell ignores descriptions of type-(ii) simply because he assumes that explaining the sub-personal effect of conscious attention is a more pressing task than explaining the subject-level effect. In any case, my aim is to clarify that one should not ignore the description of type-(ii) whatever the reason for this is.

I shall argue that *the way* the object is experienced is causally relevant to the control of judgements and actions, where the causal effect is due to the subject's taking the experience to justify the judgement and the relevant ways of acting, and that for this reason an account of how conscious attention affects the procedures used by the subject cannot leave out the subject-level description (understood in the common-sense way). I shall first discuss the effect on judgements and then comment on the effect on actions.

IV

The first claim I shall defend, then, is that the subject's selecting experiential information and regarding it as relevant to his making a certain judgement is causally relevant to whether or not he actually makes the judgement which the sub-personal procedure is supposed to lead to; where its causal relevance is due to the subject's taking the information to justify the judgement (rather than only due to an effect on the way information is selected at the sub-personal-level). Thinking about the following possibility may help seeing that this is the case. We may assume that when a subject judges (on the basis of vision) that a seen object is F , there is a certain sequence of sub-personal processing starting with visual input from the object and resulting in the activation of the concept of F (i.e., resulting in the neural activity which is specifically necessary for a subject to apply the concept). Some stages of this sequence are surely shared by the sequence which would lead to the subject's experiencing the object as F . Suppose, however, that in the sequence resulting in an experience there are some stages which are not shared by both sequences, and that a malfunction at one of these additional stages may affect the experience in such a way that, while relevant processing leads to the activation of the concept of F , the object is not experienced as F (it may, then, be experienced as having a different property of the same dimension, or it may be that regarding the relevant dimension the subject does not experience the object as having any particular feature; for example, if F is a shade of red the object might appear to be of a different colour or colourless). It seems that when this is the case there is a sense in which the subject is inclined to judge that this is F , though as long as he is sensitive to the way the object appears to him, he would not make such a judgement: *he* would not take the propositions 'this is F ' to be true (unless he believes or suspects that his experience is misleading in a relevant way). For judging that this is F , when one intends an experience-based judgement, involves taking the way in which the object is

experienced to bear on whether the thought is true. Thus if the subject is sensitive to the object's appearance, and has no specific beliefs or suspicions about the relevant aspect of his experience not being veridical, he would not make the experience-based judgement in question.

The main assumption here is that an ascription of a judgement implies that the subject, in making the judgement, is rationally responsive to what he takes to be evidence for or against it as well as to other propositional attitudes of his. The situation in which he makes a judgement is contrasted with a situation in which, while intending to make a judgement about some aspect of the attended object (say, its shape), at the sub-personal-level a certain concept (e.g., the concept of round) is activated but *the subject* does not take himself to have the kind of evidence which he takes, in that situation, to justify judging that that concept applies to the object in question (that is, the object does not appear to him round). In such a situation, the activation of the concept might not reach consciousness at all (I assume that in such cases, though the subject is unaware of any inclination to judge, say, that the relevant object is round, had he been *forced* to make a statement about its shape, he would have stated that it is round), in which case it seems indisputable that he should not be ascribed the relevant judgement.¹³⁵ But even if he is aware of the relevant inclination, this will not amount to a judgement, as long as the subject does not actually endorse the proposition as true. And the claim is that the subject's endorsing the proposition as true depends on whether or not he takes himself to have the type of evidence for its truth which, in that situation, he takes to be relevant to the evaluation of the proposition (and does not have any particular doubts regarding what he takes to be the relevant evidence).

¹³⁵ The difference between this state and a state in which the subject acquires a belief without making an explicit judgement is more complex; generally the latter, but not the former, should have specific implications as to what the subject is disposed to *judge* in virtue of the way things appear to him and what he will be disposed to judge on the basis of his memory of the experience. (The issue can be left aside as the discussion concerns the procedures used in explicit evaluation of thoughts).

Note that the question of whether or not a subject endorses a certain proposition *p* is a question as to whether his current state is such that *he* currently takes it to be the case that *p*. The contrast between such a state and a mere inclination to judge would be manifested in the way each of these states affect the subject's reasoning and actions. When a proposition is endorsed as true it would affect reasoning and action according to which implication *the subject* takes it to have for his thoughts and actions; an effect which depends on the subject's being aware of his endorsing the proposition and on what *he* takes to be its implications given his other occurrent propositional attitudes. On the other hand, the effect of a mere inclination is independent of which implication the subject takes the endorsement of the relevant proposition to have; it is thus independent both of the subject's awareness of the inclination, and of whether or not he takes it to make the effect appropriate given his other propositional attitudes.

It was said that the reason the subject does not make the relevant judgement in the situations in question is that he does not take himself to have the kind of evidence which he takes, *in that situation*, to justify judging that the relevant concept applies to the attended object. There are two aspects to this relativization of what the subject takes to be relevant evidence: first it seems that subjects, depending on their particular past experience and general tendencies, may vary in what exactly they regard as evidence and how reliable they take the evidence to be. Secondly, when intending to make a particular judgement the subject has a certain conception of the type of evidence which, in that particular situation, he takes to be relevant to the evaluation of the proposition and of the extent to which he is willing to rely upon them.¹³⁶ Thus the above claim is consistent with the possibility that, for a certain subject, awareness of his having an

¹³⁶ Such a conception may, in some cases, be quite fuzzy; the important point is only that in each particular case there must be some such conception (where the case in which the subject does not accept anything as evidence for or against the judgement might be regarded as a borderline case).

inclination of this type would serve as a basis for a judgement (which might be the case if a subject who lacks conscious experience of certain features of objects which he can see and can attend to, learns that his guesses regarding the relevant features are quite reliable¹³⁷). The point is only that normal subjects take the way an object is experienced to bear on the evaluation of their thoughts about that experienced object; that they regularly attempt to make judgements about the object on the basis of their experience of it; and that when they do so, whether or not the object is experienced in a particular way is causally relevant to whether or not they will actually make the judgement in question.¹³⁸

The point of the above example was to show that due to the fact that the subject takes his making an experience-based judgement to require his being responsive to the way the object appears to him, the object's appearance is causally relevant to whether or not he actually judges what he is inclined to judge in virtue of the sub-personal processing. Now, whether or not the inclination to judge and the experience can actually come apart in this way is an empirical matter. But the above point holds even if, given the way our actual sub-personal mechanisms work, this is impossible. The causal relation between the knowledge of the reference and the subject-level aspect of the procedure has to be taken into account if one wishes to explain how the knowledge of the reference causes not simply an inclination to judge but rather a judgement. For if what the process leads to is a genuine judgement, and the judgement in question is

¹³⁷ The case is supposed to be analogues to the imaginary blindsighted mentioned in Chapter 1 (we might think of visual form agnosia or achromatopsia as a basis for such a story).

¹³⁸ As mentioned above, Campbell's examples are about verbal reports rather than judgements. But this should not make a difference. Suppose, for example, that due to the subject's consciously attending to the relevant object, sub-personal processing of information from the object causes him to utter the sentence 'this is *F*'. If the object does not appear to him to be *F*, then according to the above discussion his utterance does not express the judgement that this is *F*, thus his making the utterance cannot be regarded as a case in which he verifies the proposition this is *F*.

experience-based, then whether or not the subject makes the particular judgement in question is responsive to the way the relevant object appears to him.¹³⁹

One might point out that my description of what is required for the subject's state to count as an experience-based judgement rather than a mere inclination to judge makes it, at least in principle, possible that there are cases in which the sub-personal processing by itself (that is, without the specific way the object is experienced affecting whether or not the subject endorses the proposition) results in a judgement (while the claim was that the sub-personal processing by itself can only yield an inclination to judge). This is so because what is required for ascribing to the subject a judgement rather than a mere inclination to judge is a (rational) disposition to fit the judgement to the way the object is experienced *when* he is sensitive to the way the object is experienced (that is, to whether the object is experienced as having the relevant property). It is thus, at least in principle, possible that there be occasions on which the subject is disposed in the relevant way without the specific way the object is experienced causally affecting the judgement.

Suppose, for example, that a subject is attending to a seen object and considering what shape it has. Suppose that at the sub-personal-level the correct information is selected and processed, and that consequently a certain shape concept, say square, is activated, and that due to this the subject is inclined to judge that this is square-shaped. It seems possible that this inclination brings it about that the subject judges that this is square-shaped when he is not sensitive to which shape the object appears to have but mistakenly takes himself to have been sensitive in the required way to the object's

¹³⁹ Note that a discrepancy between the experience and what the subject is inclined to judge (in virtue of the activation of a concept) might occur due to a malfunction at a stage which is specific to the process leading to the activation of the concept (and it seems quite likely that such cases can and do occur). I did not appeal to this possibility in arguing that the experience plays a role in the process, since I wanted it to be clear that experience plays the relevant role when all aspects of the procedure captured by the sub-personal description are in order.

appearance. It seems, for example, that this might happen if the subject considers the question of the object's shape hastily, and immediately after making a hasty judgement becomes occupied with some other task.¹⁴⁰ As he intends to make an experience-based judgement and takes himself to be responsive to the way the object appears to him, his state is not a mere inclination to judge (*he* endorses the relevant proposition). Still his making the judgement is not affected by which shape he experiences the object as having (had the processing of the input resulted, say, in the activation of the concept *round*, all other things being equal, the subject would have judged that this is round). Thus there seems to be a counterexample to the claim that the sub-personal process by itself cannot result in a judgement.

However, this description of the situation is misleading. The fact that the subject is disposed to take the experience to bear upon the evaluation of the thought (which is necessary for it to be the case that the situation is one in which he can be ascribed a judgement) is simply part of what constitutes the particular procedure he is using: a procedure which, when he is sensitive to the relevant aspect of the object's appearance, makes this aspect of the appearance causally relevant to whether or not he makes the judgement. In the situation described above, the subject uses this procedure, but fails to do so successfully.

To recap, the question was whether it is possible to account for the way the knowledge of the reference of a demonstrative causes a subject to use particular procedures leading to an experience-based judgement about that object without taking into account the subject-level description of the procedure. I first argued that if we completely ignore the subject-level description of the procedure, then we are actually considering procedures which result in a mere inclination to judge rather than in a

¹⁴⁰ There might be reasons for denying the plausibility of such cases. Note, however, that the problem addressed here arises only if situations of this type are (at least in principle) possible.

judgement,¹⁴¹ while what we wanted to explain was the way knowledge of reference causes the procedures leading to judgements. The objection then was that there might be cases in which a subject can make an experience-based judgement about an attended object without the relevant aspect of the way the object is experienced playing a role in the causal explanation of the fact that the subject makes this particular judgement. In response it was pointed out that it is still the case that the procedure used in these cases is of the type which cannot be described accurately without appeal to a possible subject-level effect on the judgement, and that it is only due to the aspect of the procedure which requires the appeal to the subject-level description that applying the procedure in the described situation yields a judgement.

V

It might seem that the above argument is flawed since I have ignored the effect that the subject's knowledge of which property is predicated may have on the selection of the procedure. An objector may claim that if we take into account both the effect of the subject's knowledge of which object he is thinking about and his knowledge of which property is predicated (when evaluating the truth value of a given proposition), then we would have a satisfactory account of what causes the selection of the relevant *judgement-yielding* procedures without a need to appeal to a subject-level description of the procedure. The thought, it seems, is that, an experience-based judgement as to whether a seen object has a property which can be decided on the basis of vision, involves, in addition to the subject's conscious attention to the object, his conscious attention to the relevant property *of the object*. For example, it may be suggested that the subject's conscious attention to the property is what ensures that the sub-personal-

¹⁴¹ Or rather 'we are considering an aspect of our actual procedure that, by itself, only explain how the subject comes to have the relevant inclination'.

level procedure required for the judgement will involve the correct type of visual information, e.g. shape information rather than, say, colour information.¹⁴² It is unquestionable that the subject's intentionally attending to a seen property of a seen object is guided by the relevant aspect of the way he experiences the object, namely, its being experienced by him as having the relevant property. Thus it may seem that the subject's experience of the object as having the relevant property is acknowledged as causally relevant to the subject's judgement and therefore there is no need for a further appeal to a subject-level description of the procedure which is selected due to the subject's attention.

Now, the suggestion mentioned in the previous paragraph - that attention to the property is required for selecting information about the relevant property at the sub-personal-level - does not depend on which particular property (of the relevant dimension) the object is experienced as having. For this reason, the mere fact that the attended property is experienced as the property of the relevant object is not sufficient for affecting the judgement in the way which I have claimed to be necessary for the procedure to be a judgement-yielding procedure: whether or not the subject makes a judgement he inclined to make depends on whether it appears to him that the object has the *specific* property predicated (or at least, that he takes it that this is how the object appears to him).

Suppose, however, that we were offered a view on which the effect of the subject's knowledge of the property on the selection of the procedure did depend on the subject's experiencing the object as having a specific property *F*. This would still not suffice for showing that the subject-level description of the procedure is not needed for ensuring that the procedure yields judgements rather than merely inclinations to judge.

¹⁴² Campbell suggested such a view in a seminar.

The point of the above discussion was that if the procedure (selected in virtue of the subject's attention to the object and property) is to be of a type which results in a judgement, then there is a need for the procedure itself to include the subject's sensitivity to whether or not the object is experienced as being *F*. The fact, if it is one, that the experience of the object as *F* plays a role in causing the judgement due to its playing a role in determining which procedure is to be carried out does not imply that it also affects his decision as to whether or not to endorse the proposition he is inclined to judge (due to the relevant sub-personal processing), and thus does not imply that a sub-personal description of the procedure suffices for ensuring that it is a judgement-yielding procedure. (This would be manifested when there is a discrepancy between the experience and the activated concept due to a malfunction at a stage of the processing which results in the activation of the concept; the relevant experience may affect the selection of the information for the procedure, but then only the activation of the concept would be relevant to determining the content of the alleged judgement). Thus it is still the case that if we ignore the effect of the subject's attention to the object on the subject-level aspect of the procedure, we will not have a full understanding of how the procedures which result in *judgements* are caused.

VI

I turn now to the implication that a demonstrative thought has for visually-guided *intentional* actions. The subject-level description, I maintain, plays here a similar role to the one it plays in the case of judgements. The claim is that an appeal to the relation between the knowledge of the reference and the subject-level description of the procedures leading to the actions is required for the relevant procedures to be of a type which yields *intentional* visually-guided actions.

It may seem that there are clear counterexamples to this claim. In Chapter 4, when discussing the role played by the experience of unattended aspects in explaining action, I mentioned that in several cases in which the subject directs a visually-guided action towards a seen object (for example, common cases of reaching out towards a glass which is in front of one at a hand-reaching distance away from one) there is no subject-level monitoring of the way the subject reaches out towards the glass. Thus, it may seem that in such cases we should accept Campbell's picture according to which all we can say about the relation between the demonstrative proposition and its relevant implication for actions is that the subject's attending to the object makes it the case that the right sub-personal information - the information from the object which is required for setting the parameters for the action - is selected.

However, even in cases of this type (that is, when no further subject-level monitoring is involved), questions like whether the object appears to the subject to be at a hand-reaching distance, whether it appears to be of a size and shape which are graspable without any need for special manoeuvres, etc., can matter to whether the *subject intends* to act one way or another, and thus to whether his acting in the relevant way, when acting this way, is intentional (under the relevant description). If, for example, the object appears to the subject beyond reach or he simply cannot visually detect its distance, or if it appears to be too large for grasping with his hand, then he will not have the intention to grasp it by merely reaching out with one hand and grasping it (as he does in ordinary cases in which he performs such an action).

I am not denying that, at least in principle, there can be cases in which a subject simply intends to pick up the object and the sub-personal mechanisms are wholly responsible for determining the course of the action (including whether the subject just reaches out to the object or first stands up and walks a few paces towards it; whether he reaches with one hand or two, and so on). But this does not seem to be the general case.

There are cases in which we are aware of the type of action that is required in the current situation in order to pick up a particular object (given its distance, direction, size, shape and so on): and such awareness could matter to whether or not we intend to pick it up in the situation in question (for example, I may wish to pick it up only if this does not require me to stand up, or only if I think I can grasp it with one hand). Furthermore, as explained in Chapter 4 such awareness can be relevant to whether or not the subject changes his course of action. (Note that in both cases there is no implication that the subject has to explicitly consider any particular aspect of the action).

VII

I shall end with a brief comment on the role of the knowledge of the reference in *justifying* the procedures which the subject uses in evaluating and acting upon demonstrative thoughts. Campbell clarifies that the sense in which he means that knowledge of reference justifies the use of the relevant procedures is that it determines what their aim (or point) is, thus setting the standard in relation to which one can ask whether the procedures used by the subject are correct or not.¹⁴³ In this way Campbell clarifies that he is not committed to saying anything about what justifies the procedures from the subject's point of view. Now, I have just claimed that the subject's having a grasp of which procedures he should use and whether he is actually using them is an essential part of the practice of making judgements, reasoning and acting intentionally

¹⁴³ Note that there are two ways in which the procedures can be evaluated: we can ask whether the correct type of procedure has been selected (specifically, whether the sub-personal selection of information for the control of a thought or action is of the type which normally ensures selection of information from the attended object); secondly, we can ask whether a given procedure is carried out correctly. It seems that Campbell is mainly thinking about the former question (see, for example, pp.26 & 87), but occasionally he points out that determining the aim is what enables an evaluation of particular performances (e.g., p.226). In any case, one may say that when the correct procedure is selected (or carried out), the question of what makes it correct is to be answered by indicating its aim, and in this sense attention to the object can be said to justify it.

(e.g., the claim that making judgements involves some conception of the procedures which the subject is currently taking to be relevant to the evaluation of the thought, and a disposition to make the judgement only if he takes himself to be evaluating the thought in the relevant way). Thus the above discussion immediately implies that we should also think about the knowledge of the reference as playing a role in determining the aim of the procedures *for the subject*; thus playing a role in *his* evaluation of the appropriateness of the procedures.

8 Demonstratives and spatial location: Evans's view

I

It is widely agreed that spatial location plays a central role in our ability to entertain demonstrative thoughts about seen objects, though views differ as to what this role is. In this and the next chapter I criticize the views of Evans and Campbell on this matter. The comparison with the two views will clarify the role location plays in the suggestion outlined in Chapter 6.

II

According to Evans, the fact that a subject can, on the basis of an ordinary perceptual information-link with an object, spatially locate the object which he is thus linked to is what explains the fact that experiencing the object (that is, the fact that there is an ordinary information-link between them) provides the subject with a genuine ability to think about it (i.e., an ability to entertain singular thoughts which are about it).¹⁴⁴ In what follows I shall describe Evans's argument for the need to appeal to the ability to locate the object. I shall then point out that reading Evans as requiring that the subject have knowledge of the object's location, rather than merely an ability to locate it, renders the view implausible. Finally I shall argue that (given what seems to me the most plausible view of what such an ability involves) the ability to locate the object can play the role it is supposed to play in the account of demonstratives only if the subject already satisfies the condition which would allow him to think about the object, and consequently that the ability to locate the object

¹⁴⁴ See for example 1982 p.150. Evans's claim is meant to apply to ordinary perceptual information-links in general; I discuss only its application in the visual case. It should also be remembered that I construe talk about the information bearing on the evaluation and appreciation of the thought as referring to the subject's view of the relation between the information and his thoughts and actions, while at least some of Evans's formulations suggest that he construes such talk in terms of brute dispositions.

cannot play the role it is supposed to play. The argument will clarify how the alternative suggested in

Chapter 6 stands in relation to Evans's view.

Why does Evans take the ability to locate the object to be necessary? Evans clarifies that if an alleged demonstrative thought is to be a genuine singular thought, it must conform to the generality constraint; that is, the subject must be able to entertain any thought of the form 'this is F ' (where the demonstrative element refers to the same object in the same way) for any property F of which she has a concept (allowing for category restrictions). That subjects have such an ability, he claims, is explained by their understanding of what it is for the relevant object to be identified according to what he calls 'the fundamental ground of difference of that object', which is 'a specific answer to the question "What differentiates that object from others?", of the kind [generally] appropriate to objects of that sort' (p.107).¹⁴⁵ In the case of spatio-temporal objects, which are the type of objects under discussion here, this will be an understanding of what it is for the object to be identified by its sort and its spatial location at a particular time (where the way in which the subject identifies the object's location must be such that he knows what it is for this location to be distinct from any other location). Thus for a subject to be ascribed a singular thought about a spatio-temporal object, he must either know its sort and its spatial location at a certain time and think about it as an object of this sort, occupying that location at that time, or have a way of identifying the object which is such that he knows what it is for an object identified in this way to be identical with some particular object identified by

¹⁴⁵ How does this explain the conformity to the generality constraint? According to Evans, our grasp of the concept of being F consists in knowledge of what it is for an arbitrary object (of a category to which the concept applies), identified according to its fundamental ground of difference, to be F . Thus, once one knows what it is for an object to be the object identified according to its fundamental ground of difference, one also knows, for any relevant concept F he grasps, what it is for that object to be F .

its sort and spatial location at a certain time. (In the latter type of case what is required is that, in addition to a general understanding of what it is for an object to be of a certain sort and to be located at a particular place at a particular time, the subject should have *some* way of distinguishing the object from any other object. Thus, for a subject to grasp what it is for an object to be identified according to its fundamental grounds of difference is for him to have a distinguishing knowledge of the object. In what follows saying that a subject has distinguishing knowledge of a certain object should be construed as saying that the subject satisfies the above conditions regarding that object¹⁴⁶).

The need to appeal to the ability to locate the object on the basis of a given information-link (when explaining ordinary perceptual demonstratives) arises, according to Evans, since the mere obtaining of an information-link between the subject and the object does not supply the subject with the required distinguishing knowledge. To elaborate on Evans's example, a subject who is watching television and attending to a particular image of a plant seen on the screen¹⁴⁷ may have continuous information from the plant whose image it is, which he can then take to bear on the evaluation and appreciation of certain thoughts he entertains (thoughts which he might express by sentences of the form 'this plant is *F*', but which are not simple demonstrative thoughts according to Evans). Evans claims that the fact that there is such a link *by itself* - that is, without taking into account the fact that, in some sense, the subject takes himself to be seeing the plant on television - cannot suffice for him to have distinguishing knowledge of the particular televised plant. He argued in

¹⁴⁶ Also, since a subject who knows the object's sort and location at a time trivially knows what it is for an object identified this way to be identical to an arbitrary object identified by its sort and location at a time, I shall often, instead of explicitly specifying the two conditions, just say that the subject is required to grasp the truth conditions of the above type of identity proposition.

¹⁴⁷ I say that the subject attends to the image rather than to the plant since the claim that in such a situation he attends to the plant is at least controversial, while to the extent that he is, he does this via attending to the image (his keeping track of the same plant is directly responsive to changes of the image, and only in virtue of this also to changes in the plant).

an earlier chapter (Chapter 4) that the mere obtaining of a causal link between the object and the subject does not, by itself, constitute the subject's distinguishing knowledge;

thus such knowledge could only be provided by the information with which the link provides the subject. But, any description of the plant which the subject can form on the basis of the information provided by the information-link (excluding information about the plant's location relative to himself) may be satisfied by more than one plant. Similarly any description of the plant's location which the subject can form on the basis of the information from the plant and its surroundings (again excluding information about egocentric location) may be satisfied by more than one location. The information about egocentric location, on the other hand, cannot be relevant to his knowledge of the plant's location since there is no systematic dependence of the apparent egocentric location on the plant's actual egocentric location. In those rare cases in which the plant will be where it appears (egocentrically) to be, this will be a result of a rare coincidence or a special arrangement of the situation.

In contrast, according to Evans, when simply seeing an object, the subject can locate it relative to herself on the basis of the information-link, and this guarantees that she has discriminating knowledge of the object.¹⁴⁸ When the subject's visual experience provides her with information about the object's location which is veridical and specific enough to exclude the possibility of a plurality of objects (of a relevant sort) occupying it at the same time, it is quite straightforward that Evans's

¹⁴⁸ One might object to this reasoning, pointing out that had Evans been considering only ordinary perceptual information-links rather than a wider range of information-links, it would have been false that the existence of the information-link and the subject's taking the information to bear on the evaluation and appreciation of the thought do not suffice for having distinguishing knowledge of the object (for such an objection see Peacocke 1991). As far as I understand, one reason why Evans does not start by considering such a restricted range of information-links is that it is not clear how to draw the line between ordinary and non-ordinary links. Secondly, the point of the discussion is to bring out what makes it the case that ordinary perceptual information-links as opposed to other information-links provide the subject with discriminating knowledge of the object (and Peacocke seems to accept that the ability to locate is what explains this).

conditions for having distinguishing knowledge of the object are satisfied. If the subject knows the thing's sort and knows where she is located (relative to some objective frame of reference), then she can identify the object according to its sort and location at a time; if she does not know the thing's sort or is, at present, lost, she still knows what it is for it to be the case that the object which is at position p (specified egocentrically) now is identical with some object of some sort G located at a particular place (specified objectively) now to be true. This is so because we have some conception of a unified space (in which places are individuated by their relations to other objects, regardless of our *current* relation to them) and a general ability to find out where we are located relative to this frame of reference, as well as a general ability to find out the sort of objects we encounter.¹⁴⁹

Thus, at least when the subject's experience supplies him with veridical information about the object's egocentric location which is specific enough (to exclude the possibility of its being occupied by a plurality of objects of a relevant sort), the subject has distinguishing knowledge of the object as Evans requires. It is, however, implausible to hold that a subject's (simple) ability to think demonstratively about seen objects is restricted to cases in which he actually has such veridical information about the object's egocentric location. There are several cases in which it seems implausible to hold that a subject is not able to entertain simple demonstrative thoughts about a seen object even though its apparent location differs from its actual location (as, for example, when an object is seen through a shifting prism), or is not

¹⁴⁹ In this brief presentation of Evans's view, I am ignoring difficulties regarding his view as to what the objective way of identifying locations involves. It is not entirely clear what his view is, and it has been argued that at least the more obvious readings yield an implausible view. All that matters for the present discussion is that there should be some way in which subjects grasp the idea of one unified space which is objective in the sense that places in it can be identified in ways which do not depend on any *specific* point of view of the subject. I shall also ignore difficulties regarding the egocentric mode of identification of locations.

specific enough (as is the case, for example, with the apparent distance of distant objects and of objects seen against an empty background).

At least on the face of it Evans does not hold the implausible view that for having distinguishing knowledge of a seen object - and thus for having the ability to think about it demonstratively - a subject must actually know the object's egocentric location. He seems to require only that the subject be *able* to locate the object (egocentrically) on the basis of the information-link (where a subject's having such an ability is also described as his effectively being able to locate the object, and as having an effective method for locating it).¹⁵⁰ But this raises the question what exactly is meant by an ability to locate the object, and how such an ability is supposed to be relevant to the subject's knowledge of what it is for the relevant identity propositions to be true; or more specifically, to his knowledge of what it is for the object he is demonstrating to be the object presently located in a particular location which he identifies egocentrically. In what follows I shall suggest a construal of this ability which, given the facts about the information available in visual experience regarding objects' spatial locations, seems to me the most plausible construal of the type of ability Evans is appealing to. I shall then point out a difficulty for one who holds that such an ability to locate the seen object is what *explains* the subject's ability to discriminate it (in Evans's sense).

Evans does not expand on what he means by the subject's ability to locate

¹⁵⁰ On p.172 Evans says: 'in a great many cases a subject may make a demonstrative identification of an object without *actually* knowing where it is. The information-link with the object may *enable* the subject effectively to locate the object without providing very specific information about its location - for example, when one is able to home in upon a beetle eating away in a beam.' Furthermore, in his formulations of what the ability to think demonstratively requires he is careful to speak about the ability to locate rather than just knowledge of the location. (Peacocke stresses this in his reply to McDowell, 1991, pp.124-5). Nevertheless both McDowell (1990) and Campbell (2002 pp.111-3) read Evans as holding that the subject's ability to think demonstratively about an object requires his actually knowing the object's egocentric location. Campbell takes this to be a serious flaw for the reason I have just mentioned in the text, while McDowell simply ignores the difficulty.

perceived objects. However the examples he gives, his emphasis that what enables the subject to locate the object is the *fact* that there is an information-link between the subject and the object (as opposed to an ability which would rely on the subject's thought about the link), and the emphasis on the practical nature of the ability suggests the following construal.

When a subject attends to a seen object he has some experiential information as to where it is in relation to himself.¹⁵¹ In addition, when the information he currently has is not accurate or not specific enough (for some relevant purpose; in the present discussion, the purpose of distinguishing the object), certain movements of the subject (or object, as well as certain changes in environmental conditions) may enable him to gather more specific and more accurate information about the object's location. Consequently, when the subject's current information about the object's location is inaccurate or not specific enough, there is something he can do (in favourable conditions) which may provide him with more specific and more accurate information about its location (and thus, if the conditions are favourable, he may, ultimately, have specific enough veridical information about its location). For example, a subject who sees an object at a distance and consequently is only provided by his experience with rough information about the distance between the object and himself can, by moving towards the object while continuously attending to it, bring himself to a position in which he has specific, accurate information regarding the distance between the object and himself (assuming the conditions are favourable); similarly, such movement can enable a subject, who has non-veridical information about the seen direction of an object due to a the refraction of the light from it, to bring himself to a position in which he has (specific) accurate information about the object's direction.

¹⁵¹ Visual experience always provides some information about location even if in some cases this is rather unspecific. (Even patients suffering from visual-disorientation would not mistake the location of a seen object beyond a certain range).

It is not immediately clear that the claim that there is something the subject can do (in favourable conditions) in order to gather veridical information about the object's location which is specific enough for individuating it applies to *all* cases in which a subject can entertain simple demonstrative thoughts despite not having such information at present. Or more accurately, since one can fiddle with what the relevant favourable conditions are, the difficulty is that it is not clear that for any relevant case there is a sense in which the subject can be said to have an ability to locate the object in certain favourable conditions where ascribing this ability to him is also relevant to his knowledge of what it is for the object to be in the particular location it is.¹⁵² The more crucial question, however, is how, when a subject can be said to have such an ability in the most straightforward sense, the fact that he has it is relevant to his knowledge of what it is for the object to be in the particular location it is. In what follows I focus on the straightforward cases and argue that even then this question raises a problem for the view.

How then is the ability a subject has in cases like the two simple examples mentioned above relevant to his knowledge of what it is for the object to be located in the particular (egocentrically specified) location it is? A minimal requirement seems to be that the subject have some grasp of the fact that he has such an ability, a grasp which he takes to be relevant to the question of the object's actual location. And it seems that, at least in the unproblematic cases, this condition is satisfied: as with any other seen feature of seen objects, grasp of what may enable gathering more accurate and specific information and of the conditions which may prevent this is part of the subject's primitive conception of perception and objects. Thus it seems that there is a

¹⁵² For example, it seems that there is nothing patients suffering from visual-disorientation can do in order to gather accurate and specific enough *visual* information about the object's location. Thus, if one is to ascribe to them an ability to locate the object, one should count the normal functioning of the visual system as part of the relevant favourable conditions. The question, then, is whether an ability to locate the object construed in this way is relevant to their knowledge of what it is for the object to be in a certain location.

sense in which a subject takes himself to have an ability to locate seen objects (that is, an ability to gather specific, accurate information of the location, if the information he currently has is not accurate or specific enough) and takes this to be relevant to the question of where the seen object is located in relation to himself.

However, what matters to the subject's knowledge of what it is for a particular object he is seeing in a particular situation to be in the particular location it is is his grasp of his ability, *in that particular situation*, to locate *that particular object*.

Further, if his grasp of the particular ability is to be a basis for such knowledge, it must involve a grasp of the difference between cases in which exercising his ability results in his successfully locating the relevant seen object and cases in which it does not.¹⁵³ (It should be emphasized that what is required is *a grasp of the difference*, not an ability to tell in each particular case whether it is successful or not). But it seems that to grasp this, the subject must already be able to identify the seen object: he has to grasp, for example, that in order to gather more specific information about the location of the seen object he should move towards *it* while continuously attending to *it*. If so, then it seems that the ability to locate the object cannot be necessary for explaining the subject's possession of his discriminating knowledge of the object. For as explained earlier, having some way of identifying an object suffices for a subject to know what it is for this object to be identical to an object identified according to its sort and location at a time.

Why must the subject be able to identify the object? Suppose there was no such requirement and that what he grasps was specifiable without reference to the object (to be exact, reference to the object should not appear in the scope of what is

¹⁵³ More accurately, if (as seems more accurate) cases of exercise of the ability are to be individuated by appeal to the object itself, the requirement is that the subject be able to grasp the difference between cases in which he successfully exercises the ability and cases in which he does not. (I use the less accurate formulation since the more accurate one makes it difficult to see what the distinction in question is).

supposed to be part of the content of what he grasps); thus, suppose it was specifiable by descriptions of movements the subject can make, ways in which things appear to him, and environmental conditions all of which can be given without reference to the object (again, within the scope of what the subject is said to grasp). The difficulty would then be to explain the subject's grasp of the (actual) difference between successful and unsuccessful cases; for example, to explain his grasp of the difference between his moving towards the seen object and his moving first towards one object then towards another when the shift of his attention from the one to the other is unnoticed by him. (Where such a grasp is necessary if the subject's ability to locate the object is to be the basis for his knowledge of what it is for the object to be in the location it is).

It may seem that there is a simple way in which a subject can distinguish between successful and unsuccessful cases without identifying the particular object in question; he only needs to grasp that a successful case is, for example, one in which he actually continues to move towards, and to attend to, one and the same object (whichever object that is). But, as pointed out above, he must be able to understand what would make *particular* exercises of the ability, in a particular situation, successful or not, and for this it is not sufficient that he grasps that the information could be gathered by, say, moving towards one and the same object. It also has to be the case that the object he moves towards is the object the location of which is in question. But to grasp this some mode of identification of the object is required.

One might try to ascribe to the subject such a grasp by appeal to what seems a quite plausible assumption: that for any situation in which an unsuccessful exercise of the ability appears to the subject as a successful one there are some aspects of the situation (e.g., the position from which the subject views the object(s)) such that had these aspects been different in certain ways, it would have appeared to the subject that

his exercising the ability is unsuccessful: that he is not gathering more accurate information about the location of one and the same object (i.e., in the type of examples discussed here, it would have appeared to the subject that he is not moving toward one and the same object). But an attempt to appeal to this assumption in order to explain in virtue of what the subject can be said to grasp the difference between successful and unsuccessful cases (without presupposing that he can identify the object) seems misguided.

First, it seems that there is no simple way in which one could distinguish between successful and unsuccessful cases only by appeal to how things appear to the subject at present and how they would have appeared to him in relevant possible situations. It is not simply that only the unsuccessful cases of the subject's exercising his ability are such that they either appear to the subject as unsuccessful or would have appeared so if some aspect of the situation had been different. There are situations in which the subject's exercising his ability to locate the object could have resulted in his correctly locating it even though it would not appear to him to be such a case; for example, it can happen that when a subject moves towards one object, while 'keeping his eyes on it', it (visually) appears to him that he loses track of it and continues moving towards a different object. Thus it is impossible to distinguish the unsuccessful cases as those which at least in some relevant counterfactual situation would appear unsuccessful, and it does not seem that a more complex story would help here.

Secondly, even if this difficulty could be dealt with, the question is in virtue of what *the subject* could be said to take the required sets of possible situations to be relevant to his grasp of what distinguishes successful from unsuccessful cases of exercising the ability in the current situation. For example, what makes it the case that a subject who is looking at an object takes the following situations - (i) the various

possible future situations in which he changes his current position in such a way that it appears to him that he is keeping track of the object while moving towards it, and (ii) for each such situation the various possible situations that differ from it in ways which may affect the appearance (e.g., situations in which he moves differently, light conditions or the background differ, etc.) - to be relevant to the question of how he could gather more specific and accurate information about location, if the information he has is not accurate or specific enough. (That is, generally the question concerns sets of sets of possible situations, each of which includes all the possible situations obtained by taking one possible situation - which, given the subject's actual position in relation to the object and the actual environmental condition, is a possible development of his exercising his ability to locate the object - and varying the conditions which can affect the way things appear to the subject (where all this is specified in terms that do not involve reference to the object)).

There is no doubt that the subject need not think explicitly about each of the relevant possibilities; rather it seems that what would make the above mentioned possibilities relevant to his grasp is his having some general grasp of how changes in a situation in which he attends to a seen object may affect the way things appear to him, and his taking such changes to be relevant to his ability to locate the object and to detect whether or not what appears to be a successful case of locating it is actually so. But if one is to maintain that a *specific* set (of sets) of possibilities is taken by the subject to be relevant to his grasp of what locating the seen object in the particular situation involves, then there must be something about his attitude that explains, for example, which specific changes are relevant to determining sets of possibilities and which ones are not. If no reference to the object is allowed, then this should be wholly explained in terms of the subject's general grasp. But surely the subject's general

conception could include mistakes, or simply not suffice for determining all the relevant details in each particular situation.

The natural way to explain how the subject identifies the relevant possibilities and takes them to bear on the question of where the object is located is that he identifies the object and takes himself to be considering where it is located. Thus, given that he takes into account that (i) the object's state and the relation between the object and himself may vary in various ways, and (ii) such variation may have certain effects on the way things appear to him, there is a sense in which he can be said to take the relevant possibilities into account. Of course, once it is accepted that the subject has the ability to identify the object, his grasp of what it is to locate it - that is, of what a successful exercise of the ability involves - does not depend on his taking *specific* sets of possibilities into account: he simply knows that what makes an exercise of the ability correct (at least in the example considered above) is that he keeps exercising it in relation to the same object. (The specific possibilities would, however, be taken by him to be relevant to questions regarding his ability to *tell* whether or not he is successful).

III

I have been arguing that the relevance of the ability to locate an object (on the basis of an information-link) to the subject's knowledge of what it is for the object to be in the particular (egocentric) location it is depends on his ability to identify the object. I take this to show that a knowledge of what it is for the object to be in the particular location it is, which can be ascribed to the subject in virtue of his ability to locate the object (regardless of whether or not he actually knows the object's location), cannot play a role in explaining the subject's ability to identify the object. Now, it is true that the latter claim does not follow from the former; the former claim

allows for the possibility that the relation between the subject's ability to identify the object and his knowledge of what it is for the object to be in the particular location it is is one of mutual dependency. But, given the role which the ability to identify the object is supposed to play in explaining the subject's knowledge of what it is for the object to be in the particular location it is, a mutual dependency claim is rather unattractive.

It was argued that the subject's ability to identify the object is required for his grasp of what it is for him to successfully locate the object by exercising the ability in question: that, given his general grasp of how information about location depends on factors such as his changing position in relation to the object, identifying the object enables the particular grasp of what locating this particular object in the given situation would involve. The mutual dependency claim implies that whether or not the subject is actually identifying the object depends on whether he actually has a grasp of his ability to locate the object (in virtue of the information-link) and *consequently* knows what it is for the particular object in question to be located in the particular place it is. But why should this be so? If the subject has the means to identify the object in a way that suffices for allowing that he has a conception of what locating the object involves, why should it matter whether or not he actually has, in this particular case, a grasp of how he could locate the object? Furthermore, why should it matter whether such a grasp actually yields (in the particular case) knowledge of what it is for the object in question to be in the particular location it is?

The first point can be illustrated by the following example. Consider a subject wearing spectacles that shift the apparent visual field 15° to the left. Suppose that he is not presently aware of the fact that things are not where they appear to him to be, and suppose further that he had never encountered, or considered the possibility of, shifting spectacles (or other partly transparent objects with the same effect). At least

at first glance it seems plausible to say that he does not have a grasp of his current ability to locate the objects he sees. Now, this first impression might very well be mistaken, but the thing to note is that it seems rather odd to suggest that our entitlement to suppose that this subject has the ability to identify the object should depend on the decision as to whether he has a grasp of his current ability to locate the relevant object. As for the second point, consider a subject who is completely paralyzed and thus unable to locate objects in any of the normal ways (or even by giving orders to someone else to move him). One may ascribe to him the ability to locate objects on the basis of the information link had the relevant systems been functioning properly, and we may suppose that there is a sense in which he takes this to be the case. But it is difficult to see how *this grasp* provides him with knowledge of what it is for the object to be at the location it currently is. Once again, even if I am wrong about this, it is odd to think that the answer to the question of whether such a subject can identify the object should depend on our decision as to whether there is a sense in which he can be said to grasp his ability to locate the object which *also* provides him with a knowledge of what it is for the object to be in the location it is.

This is not a conclusive refutation of the mutual dependency claim, and had there been no alternative suggestion as to how a seen object is discriminated by the subject, we should have reconsidered the above points. However, the suggestion made in Chapter 6 is such an alternative. The suggestion was that the subject's grasp of the fact that an attended object is the object which a specific bundle of information is from explains in virtue of what he can be said to distinguish the relevant object from any other object. Accepting this, it is possible to make sense of the view that his grasp of his ability to locate the object and his knowledge of what it is for the object to be in its particular location depend on his identifying the object but not vice versa.

It may seem that the suggestion that the subject distinguishes the object as the object a particular bundle of information is from encounters a difficulty similar to the one allegedly encountered by Evans's view. The subject is ascribed a grasp of his situation as one in which he is selecting a particular bundle which is from the relevant object in virtue of the fact that he takes his primitive conception of perception and objects to apply to the relevant aspects of the current situation. But taking the general conception to apply to the relevant aspect of the current situation depends on the subject's ability to identify the relevant object. The reply is that - in contrast to the relation between identifying an object and a grasp of one's ability to locate it - in this case there is no room for distinguishing two different elements: the subject's identification of the object and his grasp of the relation in which he stands to the object. Due to (i) actual facts regarding the subject, the object and relevant environmental conditions, (ii) the subject's general conception of perception and objects, and (iii) his current interests, it is the case that the subject is attending to the object while taking his general conception to apply to this situation; thus singling out the object, grasping it as the object the bundle is from. In this case, then, there is no room for debating whether we should accept a mutual dependency claim.

IV

I should emphasize that I am not denying that the ability to gather more accurate and specific information about an object's location is central to our ability to think about objects demonstratively. The claim is only that this ability to locate the object is not what explains the subject's ability to discriminate it. The ability to gather more accurate and specific information about location is central because spatial location is central both to the way in which objects are individuated and to the conditions which enable and affect visual experience. Since location is central in this way, the subject's

grasp of the object's current location in relation to himself and to other seen objects - a grasp which involves his grasp of the possibility that the current experiential information he has about the object's location is not accurate, and of his ability to gather more accurate and specific information - is central to his *particular* conception of the object and of the conditions which enable him to see it and affect the way it appears to him. It should be clear, then, that on this picture, although it is significant that a subject has the ability to gather more accurate and more specific information about location and similarly significant that he has some general grasp of what this may involve, it is not necessary, *in each particular case*, that veridical information about the specific location (specific enough for the individuation of the object) be in fact available to the subject (given the current information-link), and not necessary that the subject has a full, accurate grasp of what his current ability to locate a specific object in the current condition involves.

The contrast with Evans might be described by saying that I take the subject's distinguishing knowledge of the object to be due to his grasp of the particular link which obtains between the object and himself.¹⁵⁴ The grasp of this link (which is simply an aspect of the subject's singling out the object) involves a grasp of the subject's ability to gather further information (about location as well as about any other visible feature of the object), an ability which often leads to his gathering more specific and accurate information. To the extent that information about location has a special role, this is due to more general aspects of the subject's conception of this relation with the object rather than to the specific question of whether he could currently distinguish the object by distinguishing its location.

¹⁵⁴ Which, as clarified in Chapter 6, is not a case of the subject thinking about the object descriptively and thus should not be taken to be a version of the descriptive modes of thought about the object, which Evans rules out (e.g., pp.128 & 173), where the description involves reference to the information-link.

V

It is worth noting that on the suggested view of how the subject identifies the demonstrated object, as on Evans's view, simple demonstrative thoughts differ from the thoughts about televised objects which subjects may express by sentences of the form 'this *G* is *F*' (and similarly from thoughts based on other non-ordinary perceptual information-links that allow the subject to gather continuous information from the object). The difference lies in the fact that, generally, the subject's grasp of how visual experience of objects depends on the objects' state and on further relevant conditions does not apply to the televised objects (even if for simplicity's sake we consider only cases in which the objects are seen during one shot, taken without the camera moving). That is, we should remember that the relevant grasp is not a grasp of a detached theory, but rather partly consists in the subject's ability to interact with his environment and to reason about possible and actual interactions. It should then be clear that the inapplicability of the subject's grasp of the relation between the object's apparent location and its actual location is only one instance of this. For example, turning a source of light towards the television will not affect the apparent colour of the televised objects in the same way it would affect the apparent colour of an object in the immediate environment, while changes in lighting conditions on the set may affect the colour in the relevant way but will not be recognized by the subject as changes in light conditions in the way he would have recognized such changes if they occurred in the immediate environment. Similarly, moving around the television will not yield more information about the object's shape; while such information could be gathered in virtue of movements of the camera, in which case the grasp of the relevant

change in conditions differs from anything the subject encounters in his immediate interaction with the environment.¹⁵⁵

¹⁵⁵ There is much more to be said on this issue. For example there is a need to explain why watching television, even if accompanied by an ability to act upon the televised scene, does not result in simply amending the simple theory, as for example, might be the case with seeing things in mirrors. (The reply to this particular question seems to be that the 'gap' between the principles governing ordinary vision and those governing gathering information from seeing an object on television is too big. Thus one is simply adding another set of quite different principles (which would never apply to ordinary vision), and in this sense it is not an amendment of the theory of what *seeing objects* involves.) Furthermore, there is room for asking whether the conception of how information is gathered which is in fact more basic in our own case is necessarily more basic; that is, whether it could have been possible for a subject who did not interact with the immediate environment but only interacted with objects on the basis of information he gathered from watching television screens to develop a conception of a mind-independent world.

9 Demonstratives and spatial location: Campbell's view

I

I turn now to Campbell's view of the role played by location in enabling us to think demonstratively about particular objects. Campbell maintains that the apparent location of an object plays a role in explaining the subject's ability to verify and act upon demonstrative thoughts about it.¹⁵⁶ I shall argue that we can accept this claim as well as Campbell's suggestion that this is so because of the role that the object's apparent location plays in explaining how conscious attention to the object enables the subject to verify and act upon demonstrative thoughts. However, I shall claim that we should reject the particular way in which Campbell explains why the object's apparent location plays the latter role; that is, we should reject the claim that conscious attention to the object enables the subject to verify and act upon demonstrative thoughts in virtue of a correspondence between the particular aspects of the experience which enable *the subject* to identify the object and the characteristics used *at the sub-personal-level* for selecting information for the relevant verification or action.

II

As just mentioned, Campbell's view is that an object's apparent location plays a role in explaining the subject's ability to verify and act upon demonstrative thoughts; specifically, it plays a role in explaining how the evaluation of a demonstrative thought, in which the predicated property is such that whether it applies to an object can be evaluated on the basis of vision, can be governed by visual information from

¹⁵⁶ 'The apparent location of an object' refers to the location in which the object visually appears to the subject to be. It is taken for granted that the ways locations are experienced are essentially egocentric; that subjects see objects as located relative to a frame of reference defined by the axes of left/right, up/down and nearer/farther away. (I leave open questions as to how exactly these axes should be construed).

the demonstrated object, and how the subject's visually-guided actions, which he intends to direct towards the demonstrated object, are guided by information from the object.¹⁵⁷ Apparent location plays such a role since it plays a role in explaining how conscious attention to an object causes the information-processing procedures involved in evaluating and acting upon the relevant thoughts to be carried out with the use of the relevant information from the object.

Campbell defends this last claim by first pointing out that, as a matter of fact, information about different features of the object - information for perception as well as information for action¹⁵⁸ - is processed separately in the brain (for example, information about colour is processed in one area, information about shape for perception in another, information about shape for action in yet another, and so on¹⁵⁹). This raises the question how, when attempting to evaluate a demonstrative thought, the information about, for example, the colour of the demonstrated object is selected from the information about the colour of other things in the subject's visual field, and how, when the subject intends to act on the demonstrated object, the information from that object, which is required for determining the parameters of the action for the relevant sub-personal mechanisms, is selected. Now, a common suggestion as to how it is that, in the first place, the subject experiences a unitary object rather than

¹⁵⁷ In what follows, when speaking about evaluating demonstrative thoughts and acting upon them I will be referring to these special cases. (I started by speaking about the verification of demonstrative thoughts, as this is the way Campbell formulates his view, but will often prefer speaking about the evaluation of the thought as I had been doing in previous chapters).

¹⁵⁸ These are the terms used by Milner and Goodale (1995) to speak about the distinction which was presented in Chapter 4. I shall use them here as convenient tags (however, remember that the information 'processed for perception' does have an effect on action, and that on their use 'perception' has a narrower range than on my use of the term).

¹⁵⁹ It is probably inaccurate to speak, generally, about a stream processing information about shape for action: it seems likely, for example, that information about shape which guides grasping-behaviour and information about shape which has a role in guiding walking-behaviour are processed separately. For present purposes it is sufficient to note that, generally, information for action is processed separately from information for perception. In order to simplify formulations, when discussing the selection of information in general (that is, for action and for the evaluation of thoughts) I shall describe things according to what seems to be the appropriate description in the case of information for perception; that is, I shall speak about the selection of information from feature maps; this might not be accurate in the case of information for action.

disconnected features is that information about location is encoded in each information-processing stream (in which information is processed for perception), and information from the same location (where Gestalt organization principles play a role in determining the exact location in question) is bound together as information from the same object. Given this picture, it seems that exactly the same binding parameter (current location refined by the relevant Gestalt organization principles) can be used by the visual-system to refer back to any relevant information-processing stream and select the correct information for the evaluation of a thought about the object.¹⁶⁰ Furthermore, it is suggested that the correct information for the guidance of actions directed towards the object can also be selected in a similar way.

If this is correct - that is, if, at the sub-personal-level, the relevant information is selected according to the relevant binding parameter - then there must be something to say about the subject's conscious attention to the object which explains how this can happen (remember that on Campbell's view conscious attention to the object is what provides the subject with his knowledge of which object he is demonstrating, and thus, as mentioned in Chapter 7, should play a role in accounting for the functional role of the demonstrative). Campbell suggests the following account. *The subject* identifies the object he is attending to by its experienced location (and the relevant aspects of Gestalt organization) and this guarantees that when intending to evaluate a demonstrative thought about the object or to direct an action towards it, at the sub-personal-level, the corresponding information about location (and the corresponding aspects of Gestalt organization) will be used for selecting the information to control the evaluation of the thought or the action. Thus he says:

¹⁶⁰ I should clarify that I am ascribing the role of selecting visual information for the evaluation of thoughts and for action to the visual-system only for convenience's sake: I do not wish to commit myself to any particular view about how sub-personal systems should be categorized.

Suppose now that conscious attention to the object... identifies the object as the object at a particular seen location. The identification of the target object as the thing at that location will then be enough for the visual-system to know how to search the feature maps to find the shape, colour, or orientation of the thing. The binding parameter will then provide an address for the object, as it were - a way of identifying which object is in question, that can be used by the visual-system when it has to verify or find how to act on the basis of propositions about that object.¹⁶¹

The assumption here is that when the subject identifies the demonstrated object as the object at a particular apparent location, at the sub-personal-level the processing which underlies the fact that the object is experienced at that location (which I shall refer to as the sub-personal correlate of the current experience of the relevant location) is, in some way, singled out for the visual-system as relevant for determining which information should be selected.¹⁶² Campbell comments that this might not immediately provide the system with the location from which information is to be selected, since different frames of reference may be involved in encoding the locations of features in the various information-processing streams and in the processing of the information about the location of objects for perception; but sameness of structure between the different ways of identifying locations should enable the system to determine, on the basis of the location processed for perception, from which location information should be selected.¹⁶³

The suggestion, then, is that (a) what enables a subject to evaluate and act upon a demonstrative thought on the basis of information from the demonstrated object is the fact that *he* identifies the object by means of its apparent location, and (b) the

¹⁶¹ p.37.

¹⁶² Campbell is most explicit about this being the type of picture he has in mind on pp.41-3. However, the point made there - that the system can determine the location for selecting information in virtue of the fact that what correspond to the experience of the object at the sub-personal-level is synchronized activity of the various cells responding to input from the same location - does not seem to require that it should be, specifically, the sub-personal correlate of *the experience of the location* which is singled out; in effect, this suggestion seems closer to the alternative which I discuss below. (I should clarify that the formulation I use in the text is mine).

¹⁶³ pp.37 & 89. To be accurate, Campbell speaks about the frame of reference involved at the subject-level rather than at the sub-personal processing of information for perception. However, the assumption seems to be that since the processing of information about location for perception underlies the experience of the object as at the relevant location, the same frame of reference is used for identifying locations at the subject-level and at the sub-personal-level of processing for perception. (Note that even without this assumption the claim about the similarity of structure still applies to all relevant levels).

subject-level identification has to be by means of apparent location because: (i) the visual-system selects information for evaluating demonstrative thoughts and guiding object-directed action on the basis of location, (ii) the visual-system determines from which location information is to be selected on the basis of the (sub-personal) information about location processed for perception that is singled out as relevant to the task (at the sub-personal-level), and (iii) the relevant location information is singled out as relevant to the task at the sub-personal-level in virtue of the fact that the subject identifies the object as the object at the apparent location.

I do not deny that the object's apparent location has a role to play in determining which information is to be selected at the sub-personal-level for evaluating demonstrative thoughts and acting upon them, but will argue that this is not because (ii) and (iii) describe correctly the procedure determining the location from which information is to be selected. I shall first point out a reason to doubt the correctness of (ii), and suggest an alternative story as to how the visual-system determines from which location information is to be selected. I shall then argue that, even if (ii) is in fact correct, given the sense in which it is correct to say that subjects, when entertaining a demonstrative thought, identify the object of the thought as the object at a certain apparent location (and thus, given the way in which we should read (iii) if it is to be correct), (i)-(iii) are not what explain why subjects identify the object in this way.

Three notes of clarification: First, condition (ii) requires that the visual-system determines the location for selecting information *on the basis* of the relevant information about location processed for perception. This is to be read as entailing (a) that the relation between the locations encoded by the sub-personal correlates of apparent locations and the locations used for selecting information is either one of sameness or of a (non-trivial) one-to-one correspondence, *and* (b) that the visual-

system exploits this relation in determining the location for selecting information. Secondly, to simplify formulations I have formulated the view as relating to location alone, leaving out reference to Gestalt organization principles. The same type of relations between the subject-level identification and the parameter affecting the selection of information is supposed to hold when the relevant parameter is a certain organization-principle.¹⁶⁴ Thirdly, I should explain that, as I interpret Campbell, when he says that the subject identifies the object by its apparent location, or as the object at a certain apparent location, he means that the object's apparent location plays a role, at the subject-level, in distinguishing the object as one seen object distinct from others, and thus is an aspect the subject is sensitive to when the object's identity is in question.

III

I start, then, by asking whether (ii) is correct, that is, whether the visual-system determines the location from which information is to be selected on the basis of the information about the object's location processed for perception. It was mentioned that Campbell assumes that this need not be problematic, for, even if different frames of references are involved, the ways of identifying locations will have the same structure. But there is a further issue. Information about location processed for perception is affected by the relations between seen objects. This is manifested by cases like the following. If a subject looks at a stationary object surrounded by a rectangular frame which is slowly moving to the left, it will appear to him as if the object is moving to the right while the frame stays still. However, while the information processed for perception is affected in such ways, information about

¹⁶⁴ Campbell does not give an example of the how this is supposed to work, but it is clear that he takes it that the relations are the same (see, for example, p.89).

location processed for other purposes need not be so affected. One manifestation of this is the fact that subjects who, in the above situation, are asked to point to the object immediately after seeing it and the moving frame, point to the actual location of the object (rather than the location it appeared to move to).¹⁶⁵ That is, the information processed for action is not affected, in this case, by the relation between the object and the moving frame. Given that there are such discrepancies, we should ask whether the information about location relevant to binding is affected by relations between seen objects in exactly the same way that the information processed for perception is.

It is not unreasonable to assume that the information about location used for binding is processed at early stages, which precede the segregation between the two pathways and between the various information-processing streams, and thus that it is not influenced by relations between seen objects as is the information about location processed for perception.¹⁶⁶ First, information about location is in fact encoded at these stages and thus there is a common way of mapping both the information which is later processed for action and that processed for perception.¹⁶⁷ Secondly, it is often assumed that the mapping at the various information-processing streams is due to the connections between each processing stream and areas V1 and V2 (the areas prior to

¹⁶⁵ See Bridgeman et al. 1981. I am simplifying here. The data show that the direction in which subjects point is closer to the actual location than to the apparent location, thus they show, *at least*, that the frame's movement does not have the same effect on the information used for guiding pointing-behaviour as it has on the information processed for perception. There is a debate as to how exactly to explain such data. However, the fact that after a 2-second delay subjects point at the apparent location is interpreted as showing that there is a real discrepancy between the information processed for action and that processed for perception. For present purposes it is sufficient that there is some discrepancy.

¹⁶⁶ There are cases in which relations between seen objects (specifically contiguous objects) may affect information processed at early stages. Dyde and Milner (2002) mention such an effect on information about orientation, and such an effect is also an effect on the exact location which the object appears to occupy. However, what matters for the current discussion is that there are some effects which are restricted to later stages. For simplicity's sake I shall ignore the possibility of early effects and speak as if, generally, relations between seen objects do not affect early-processed information about location.

¹⁶⁷ Campbell (2002 p.55) refers to Jeannerod (1997 p.80) who suggests that the connection between selecting an object for action on the basis of certain experienced features (say, colour) and the selection of the correct parameters for action could be explained by the possibility of the motor representation "looking back" toward areas common to the ventral and the dorsal systems where both the visual primitives and some degree of spatial localization are present on the same map.'

the segregation).¹⁶⁸ This, of course, does not conclusively prove that the information about location encoded in the various information-processing streams is in fact information processed at an early stage. However, I only wish to clarify that we cannot take it for granted that the visual-system determines the locations for selecting information on the basis of information about location processed for perception.

Suppose that the information about location relevant to binding is, in fact, processed at an early stage, and thus that neither the location assigned to features in the various information-processing streams nor the location assigned to the information for action is affected by relations between seen objects. If the system determines the location for selecting information on the basis of the information processed for perception, then whenever a discrepancy occurs, the information from the wrong location should be selected for evaluating thoughts and actions. However, it is clear that in cases like the above example the correct information is selected for evaluating demonstrative thoughts about the object: the subject is not inclined to judge, say, that the object's colour is the colour at the location which actually corresponds to its current apparent location. Similarly the fact that subjects point correctly to the object shows that the correct information for action can be selected. Thus it seems that, if the information about location relevant to binding is processed at an early stage, it cannot be that the location relevant to selecting information for the task is determined by the information about the object's location processed for perception.

¹⁶⁸ See, for example, Zeki 1993 pp.330-3, 337-8 and Robertson et al.1997 p.296. There is room for holding that due to the links between the retinotopic mapping in V1 and V2 and a more sophisticated mapping which plays a role in directing attention, one could say that information about location of the more sophisticated type is implicitly encoded in the various information-processing streams. However, this may still allow discrepancies between the information about locations processed for perception and that encoded in the information-processing streams, since it is assumed that the more sophisticated map is due to information-processing in the dorsal stream (see, for example, Robertson et al.1997).

Campbell might respond that there is no real problem, and that the apparent problem results from my ignoring the role played by Gestalt organization principles in binding features. For it may seem that the exact boundaries of the relevant early-processed location need not be identified by directly specifying an exact location; rather it is sufficient (at both stages) to identify a rough location and relevant organization principles. However, although this may enable us to explain how the correct information is selected in the previous example, it will not do so generally. Suppose that a subject is viewing a stationary, horizontal line of qualitatively indistinguishable Xs and a frame in the background, and that due to the frame moving to the left the Xs appear to move to the right; suppose also that the apparent movement is greater than the distance between any two adjacent Xs. If the subject attends to one of the Xs around the center of the line, there is no rough location which, together with the relevant Gestalt organization principles (in virtue of which an X appears as a separate object), will suffice for explaining the fact that information from the same X is continuously selected.

As the examples mentioned above involve apparent motion of the demonstrated object, one may try to resolve the difficulty by suggesting that the visual-system has to rely on the information about location processed for perception only for an initial determination of the correct early-processed location, and then it can keep track of the correct early-processed location by constantly updating the relation between it and the information about location processed for perception. But there are similar effects on the location processed for perception which do not involve change of the location over time. For example, a stationary background frame whose centre is to the left of the

subject's direction of gaze will cause stationary objects located inside the frame to appear to the right of their actual (egocentric) location.¹⁶⁹

In principle, it is possible that the visual-system somehow explicitly registers any particular effect which the relations between currently seen objects have on information about location processed for perception, and thus that, at any given time, it can directly determine the relevant early-processed location on the basis of the current information about location processed for perception.¹⁷⁰ Whether the visual-system actually does this is an empirical question I shall not try to speculate about.¹⁷¹ Instead I shall suggest that consciously attending to an object may enable the visual-system to use early-processed locations to select information from the object without the system determining the relevant early-processed location on the basis of information about location processed for perception. I shall then argue that the discussion of this alternative shows that even if information about location processed for perception is in fact the basis upon which the visual-system determines the locations for selecting information, this fact is not what explains the role played by the object's apparent location in evaluating and acting upon demonstrative thoughts.

IV

Here is a suggestion as to how the visual-system can determine the location from which information is to be selected without relying on the information about the

¹⁶⁹ See Bridgeman and Huemer 1998.

¹⁷⁰ That there has been such an effect is implicitly registered when the 'affected locations' are registered. For the effect to be registered explicitly there should be independently accessible information about any shift in location (this might be done by a continuous updating of a function connecting locations on two maps).

¹⁷¹ Though I should mention that, given my current knowledge, this seems to me a rather unlikely possibility.

location processed for perception.¹⁷² The fact that a subject is experiencing an object as an object which has certain features and stands in certain relations to its surroundings implies that the sub-personal correlates of the various bits of information bundled together as information from this object are bound together (at the sub-personal-level) on the basis of location (and relevant Gestalt organization principles). Thus there is a certain location which the system is currently using as the binding parameter for this particular experience. (The relevant location may be a changing location; the process is an ongoing process - information from the relevant location is processed and bound together as long as attention is allocated to the object¹⁷³ - and during this time the relevant location may change). Consequently, if the subject is currently singling out an object, *on the basis of a particular experience*, as relevant to a certain task (specifically, to the evaluation of a certain thought or to a certain object-directed intentional action), then the sub-personal correlate of the particular experience on which this act of attention is based involves continuous selection of information from a particular location (here, selection for the experience), and in this sense contains the information as to which location is relevant for selecting information for the task. Now suppose that when the subject singles out an object for a task on the basis of a particular experience, the sub-personal correlate of this experience (in general) is singled out as relevant to the task; since it contains the information as to which location is relevant for selecting information for the task (in the sense explained above), it should, at least in principle, be possible for the system

¹⁷² Hereafter I shall speak about the location from which the information is to be selected rather than refer to it as an early-processed location. Ultimately, the following suggestion is supposed to be independent of the assumption that the relevant information is processed at an early stage. Also, when speaking about the system's determining the location relevant for selecting information on the basis of information about location processed for perception, I mean to refer also to the possibility that this might be so trivially; that is, that the above consideration was mistaken and that the information relevant to selecting information just is the information processed for perception.

¹⁷³ Attention here is not necessarily conscious attention of the type discussed in Chapter 6, but rather the operation of sub-personal-level attentional mechanisms.

to determine the relevant location without relying on the information about the object's location which is processed for perception.

One simplified model of how this can happen is as follows. Suppose that we accept Treisman's hypothesis that information which is bound together is integrated into an object-file.¹⁷⁴ The suggestion would then be that when a subject singles out an object on the basis of a particular experience as relevant to a particular task, a particular object-file is singled out at the sub-personal-level as relevant for the task. Since the location from which information is selected for the file is continuously used for updating the file, the singling out of an object-file can enable determining the location which is relevant for selecting information for the task.¹⁷⁵

To stress, the contrast with Campbell's view is one between (i) the sub-personal correlate of a certain of aspect (or a limited set of aspects) of the experience (e.g., the experience of the object's location), in virtue of its carrying information about the relevant aspect, provides the basis for the visual-system to determine (as a function of that information) the parameters for selecting information for the task, and (ii) the sub-personal correlate of the experience of the object in general (or some aspect of it which is general in the sense that it is not related to one particular aspect, or set of aspects, of the experience) enables the visual-system to determine the parameters for selecting information for the task in virtue of the fact that relevant parameters are actually being used in maintaining this correlate of the experience. One should thus be careful to distinguish the two different claims made when (in the presentation of the suggestions) it was said that a certain sub-personal correlate of the experience is singled out. On Campbell's suggestion the relevant correlate is singled out as

¹⁷⁴ See, for example, Treisman 1993 p.24.

¹⁷⁵ This model seems to be an extension of Treisman's suggestion that attention can be controlled by the selection of object-files (1993 p.32). (This need not be the only possible way to flesh out the suggestion, and of course there is a need to expand on this simplified model).

providing the information on the basis of which the parameter for selecting information is determined as in (i). On the alternative suggestion the correlate is singled out as that which enables determining the relevant parameter in virtue of its, as it were, containing the information as to which parameters are relevant to selecting information as in (ii).

Note that since the different sub-personal correlates of the different bits of experiential information which are bundled together are linked at the sub-personal-level, the current suggestion is consistent with the possibility that the mechanism by which the sub-personal correlate of the experience of the object (in general) is singled out at the sub-personal-level proceeds via the selection of the correlate of the experience of the object's location. What makes it a case of type (ii) is the fact that the system does not determine the location for selecting information *on the basis* of the information of the location carried by the sub-personal correlate selected at the first-stage (it should be clear that the correlate of any other experienced feature could, in principle, play this role just as well).

Now suppose that the location for selecting information for the task is determined in the second way (thus without being based on the information about location processed for perception). It would still be the case that the object's apparent location has an effect on the way the visual-system determines the location for selecting information for the task. The suggestion was that when the subject singles out an object for a task on the basis of a particular experience, the sub-personal correlate of this experience is singled out as relevant to the task. And, given the way our visual experience is in fact organized, an object's apparent location has an effect on the subject's ability to single out this object on the basis of experience. This is so since what enables the subject to single out a particular object is the fact that information from it is made available to him in experience as information from one

and the same object (that is, it forms a bundle of information). Given an appearance as of an object, the subject, unless he has relevant doubts, takes the relevant bundle to be from the object, and can thus single out the object and entertain demonstrative thoughts about it. Now, a visual appearance as of one object is an appearance as of a thing that occupies a discrete, connected portion of space, and which changes location over time in a continuous way.¹⁷⁶ Thus when a subject singles out a particular object on the basis of visual experience he is sensitive to these spatial aspects of the appearance.¹⁷⁷ In addition, contrasts between the spatial relations between a certain object and the other objects surrounding it, like other contrasts between the apparent features of the object and of the surrounding objects (e.g. contrasts in colour, shape, etc.), often help the subject to single it out.

It can thus be said that on this picture the object's apparent location has an effect on the way information is selected (at the sub-personal-level) for evaluating and acting upon demonstrative thoughts. But this is so only because of its relevance to how *the subject* distinguishes between seen objects on the basis of his experience; an effect that is due to facts about the way visual experience is organized, and to the subject's grasp of the relation between the way things appear to him in experience and the way they are. No appeal is made, in this explanation, to the role played by location in determining (at the sub-personal-level) which information is to be selected for

¹⁷⁶ I am regarding this as a mere fact about how objects are presented to us in visual experience, leaving open the question of whether this is necessary for objects to be experienced as objects. It should be emphasized that saying that a thing appears to the subject as occupying a connected portion of space does *not* imply that there must be spatial continuity between all the currently visible parts of the object which appear as parts of the same object. What is required is that they *appear* as parts of a thing occupying a connected portion of space, but the appearance could be, for example, one of an object whose middle part is occluded by a post, etc. (A similar point applies to the relevant apparent changes in location).

¹⁷⁷ Martin (1997 p.90) makes a similar point when discussing the role location plays in determining whether two demonstrative thoughts involve the exercise of the same demonstrative ability.

evaluating and acting upon a demonstrative thought.¹⁷⁸

V

We have, then, two stories about how the visual-system determines from which location information is to be selected for evaluating and acting upon a demonstrative thought. The first - which I shall label 'the correspondence story' - is that when the subject singles out an object for a task, the sub-personal correlates of those aspects of the experience which correspond to the binding parameter are singled out for the task and the information they encode is the basis for determining which information is to be selected for the task. The second - which I shall label 'the inclusion story' - is that the sub-personal correlate of the experience of the object in general (or some general aspect of this correlate) is singled out as relevant to the task, and this enables the visual-system to find out from which location information is to be selected since this sub-personal correlate includes the information as to which location this is. Campbell holds that the correspondence story is the correct one, and takes this to be central to explaining the role played by apparent location in our ability to evaluate and act upon such thoughts. I tried to show that it is not straightforward that the correspondence story is correct: first, I pointed out a reason to doubt that it can be the correct story, and secondly, even if one is not persuaded by the considerations I appealed to, if the inclusion story is plausible, it is at least an open question which of the two stories is in fact correct.

However, the correctness of the correspondence story is only a necessary condition for accepting Campbell's explanation. The fact that, at the sub-personal-

¹⁷⁸ Note that it is possible to argue here that talk about the organization of the experience of objects involves an implicit reference to the parameters for binding information selected for the experience, but this claim is weaker than Campbell's claim - that these parameters are relevant to explaining the role of the apparent location in virtue of their relevance to the selection of information for thought evaluation and action (rather than only selecting information for experience).

level, the information about location processed for perception plays a certain role in enabling the subject to evaluate and act upon demonstrative thoughts need not have implications for the question of what role the fact that the subject experiences the object as at the relevant location plays in enabling these activities. That is, it does not immediately follow from the correctness of the correspondence story that, *because things are as stated in this story*, the fact that the subject experiences the demonstrated object as at a particular location (rather than just the fact that the sub-personal correlate of this aspect of the experience is singled out as relevant to the task) has a certain effect on how the subject evaluates and acts upon demonstrative thoughts. I shall try to indicate briefly why I think that, even if the correspondence story is in fact correct, this does not explain any of the effects an object's apparent location actually has on how the subject evaluates and acts upon the relevant demonstrative thoughts.

For an aspect of the subject's experience to have an effect on the way he evaluates thoughts and acts upon them, it must be the case that, *from his point of view*, the question of whether things are as experienced bears on the way he should evaluate thoughts and act upon them.¹⁷⁹ It might therefore seem that since subjects are unaware of the particular details of the sub-personal processing, it is generally the case that such details cannot be relevant to explaining possible effects of subjects' experiences, and thus that we can immediately reject the suggestion that the correctness of the correspondence story is relevant to explaining the effect of the object's apparent location on his thoughts and actions.¹⁸⁰ But this is too quick. Experiencing, thinking and acting are not simply the end result of sub-personal activity, but rather are partly

¹⁷⁹ If certain visual information has a certain effect on what the subject is disposed to do, while the information is available to the subject in experience but it is not the implication which the subject takes this information to have which explains this effect, then the effect is fully accounted for by the sub-personal effect of the corresponding information available at the sub-personal-level (see Chapter 4).

¹⁸⁰ Such a view is expressed by Martin (1997) in his response to an earlier version of Campbell's view (presented in Campbell 1997).

constituted by such activity. Furthermore, the fact that this is so is implicitly taken into account in our primitive grasp of what experience, thought and action involve.¹⁸¹ Thus one cannot, generally, rule out the possibility that there are cases in which details about particular sub-personal mechanisms are relevant to explaining particular aspects of the subject's perspective on the relation between his experiences and the relevant thoughts and actions. However, I want to suggest that the discussion of the inclusion story shows that the particular question of whether the correspondence story or the inclusion one is correct is irrelevant to explaining the role of apparent location.

It was claimed that, assuming the inclusion story is correct, an object's apparent location plays a role in enabling the subject to evaluate and act upon demonstrative thoughts in virtue of the fact that when singling out an object on the basis of an experience, subjects are sensitive to whether a particular experience is an experience as of one object, where spatial aspects are central to this.¹⁸² Now, it seems that one cannot deny the general correctness of the assumptions on which this claim was based, i.e., the assumptions about the way our visual experiences are organized and about the way we rely on our experiences when singling out objects. Thus it seems that one cannot dispute the claim that an object's apparent location, in fact, affects the way subjects single out objects (and consequently, the way they evaluate and act upon demonstrative thoughts) in this particular way and for this particular reason. Furthermore, the assumption that the inclusion story rather than the correspondence one is correct is not required for explaining these facts (i.e., the facts about the organizations of our experiences and the way we view the relation between the experience and how things are). It is true that in order to explain how it is that subjects

¹⁸¹ As mentioned in Chapter 4, the subject's implicitly taking the sub-personal activity into account is manifested in things like how he explains mistakes or reasons about possible mistakes, etc.

¹⁸² I also mentioned the fact that the spatial relations between objects help the subject to focus his attention on one experienced object. Since it should be clear how the points made below apply to this additional type of effect, I discuss only the first one.

take it that they can rely on the experience the way they actually do, one has to assume that there is a mechanism in virtue of which, when a subject singles out an object on the basis of experience, information from the object is selected for evaluating and acting upon the relevant thoughts;¹⁸³ but those respects in which the mechanism suggested by the inclusion story differs from the mechanism suggested by the correspondence story are not specifically relevant to this explanation.¹⁸⁴ This means that the effect in question is explained by facts which obtain independently of which of the two stories is correct; thus, even if the correspondence story is correct, this will not be relevant to the explanation of this particular effect of the object's apparent location on the way subjects evaluate and act upon demonstrative thoughts.

One may accept this but argue that (i) there *is* a further way in which an object's apparent location affects the way subjects single out objects, and (ii) an appeal to the correspondence story is required for explaining this further effect. Now, if the subject's sensitivity to the apparent location when singling out an object, is due only to the effect of the apparent location on what makes an experience an experience as of one object, then the subject only has to be sensitive to relations between simultaneous and sequential apparent locations (for the apparent location of an object matters to its experience being as of an object only to the extent that it appears to be different from the apparent locations of other currently seen objects and that its relation to the preceding and succeeding apparent locations does or does not appear as a continuous change). Specifically, the way a subject evaluates and acts upon demonstrative thoughts need not be sensitive to whether he identifies the object's apparent location by means of a particular (egocentric) frame of reference (for example, whether, given

¹⁸³ In the way it is actually selected, that is, accounting for the same patterns of mistakes.

¹⁸⁴ Remember that we are assuming that either story might be correct; thus it is assumed that we are considering versions of the two stories which, given the facts about the organization of our experiences of objects, yield exactly the same results as to which information is selected for the control of thought and action.

two objects which are roughly seen to be straight ahead, the subject can identify their locations as different not only by appeal to facts such as that this object appears to the left of that one, but also by identifying one location as, say, being exactly straight ahead and the other slightly to the left of straight ahead).¹⁸⁵ On the other hand, according to the correspondence story, the location (processed for perception) which is supposed to determine the location for selecting information should be identified in relation to a certain (egocentric) frame of reference which is independent of the information from objects currently processed (i.e., what is registered at the sub-personal-level as current visual objects is not part of what defines the frame of reference; the current information about objects can only affect which location is assigned to each object). It might, then, be suggested that, somehow, on the correspondence story, *the subject's* ability to identify the object's exact location in relation to a certain (egocentric) frame of reference should be regarded by him as relevant to his ability to single out objects. So we may at least accept that if the correctness of the correspondence story explains the role played by apparent location, then the identification of such exact egocentric location of an object must be taken by a subject to be necessary for his singling out that object.¹⁸⁶

¹⁸⁵ When speaking about the way the subject identifies the object's apparent location, I am referring to the way he grasps which location this is in virtue of seeing it; thus it is a way the information about location is given to him in experience. As explained in footnote 156, I am leaving open the question of the exact way in which the egocentric frame of reference used in visual experience is to be construed. It is often assumed that the visual straight ahead is the direction one's head is facing, I shall assume this in order to have a convenient example. The points made below apply equally to other suggestion as to what constitutes the subject's visual straight ahead (and any other location identified egocentrically).

¹⁸⁶ Note that the other two considerations I claimed to be relevant to explaining the role played by location in subjects' ability to single out objects do not require that subjects take the identification of an exact egocentric location to be necessary for singling out an object. The second point mentioned above (that various contrasts help the subject to single out the object) only implies that the subject is sensitive to the differences between spatial relations between different objects. The claim made in Chapter 8 (that experiential information about egocentric location plays a role in the subject's grasp of the relation between the experience and the way things are) implies that subjects take their ability to identify the object's location in relation to themselves to be relevant to their ability to single out objects, though the relevant location may be only a rough location.

It seems, however, that subjects do single out objects without taking their ability to identify the object's exact apparent location in relation to a particular egocentric frame of reference to be relevant to this. Consider our ability to single out any of the Xs in a line of qualitatively indistinguishable Xs with small, equal distances between them. The opponent is committed to the view that when singling out one of the Xs, a subject is sensitive to whether he identifies, in relation to a relevant frame of reference, a location which is exact enough to enable (given the relevant Gestalt organization principles) an identification of that X.¹⁸⁷ But this implies that the subject attends or is disposed to attend to very fine differences in where the object appears in relation to himself, while it seems that it is only in very special circumstances (if at all) that we attend or are disposed to attend to such differences. Singling out an X from a line of Xs does not seem, specifically, to form such a circumstance: normally, when we do so, we are not concerned about whether, for example, the apparent direction of one particular X, rather than that of an adjacent one is the exact straight ahead.¹⁸⁸

I cannot develop this claim properly here, but suppose we accept that there are counterexamples to the suggestion that subjects, when singling out objects, are sensitive to whether they can identify the object's apparent location in relation to a certain (egocentric) frame of reference, where the location thus identified can enable (given the relevant Gestalt organization principles) an identification of the object. The argument I have tried to sketch was this. Apparent location affects the way a subject

¹⁸⁷ In fact, it is not crucial that the subject be able to identify a location which only the relevant X occupies. The important question is whether at all the subject's way of identifying locations in relation to the relevant frame of reference fixes their boundary in a fine enough way. (If he could, for example, identify a location in which three specific Xs appear, then the pattern they form could have enabled the identification of just one of them).

¹⁸⁸ I am relying here on self-observation: when I try to attend to such fine differences it is immediately clear that this is not something I normally do or am disposed to do when singling out an X from such a line of Xs.

singles out objects in virtue of (a) the fact that, when singling out objects, he is sensitive to the organization of the experience as experience of objects, and (b) the fact that the relations between simultaneous and sequential apparent locations of seen things are central to what is experienced as one object, distinct from others. The question of whether the correspondence story or the inclusion story is correct is irrelevant to explaining these facts. Therefore, whether the correspondence story or the inclusion story is correct is irrelevant to explaining the effect of the object's apparent location which is due to these facts. The question then was whether there is a further way in which the object's apparent location affects the way subjects single out objects and which may be explained by the correspondence story. As far as I can see, the only candidate is an effect which is due to subjects' taking their ability to identify the apparent location in relation to a certain (egocentric) frame of reference (in an exact enough way) to be relevant to their ability to single out objects. Thus if we accept that subjects do not, generally, take the ability to identify locations in this way to be relevant to their ability to single out objects, we can conclude that, even if the correspondence story is correct - that is, even if what happens when a subject singles out a particular object as the object of the thought he intends to evaluate or act upon is that at the sub-personal-level information about location processed for perception is singled out as relevant to the task and serves as the basis for determining from which location information for the task is to be selected - the effect of the object's apparent location on the subject's ability to evaluate and act upon demonstrative thoughts is due to the above mentioned facts about the organization of the experience, and thus independent of the correctness of the correspondence story.

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