THE PROPOSITIONAL ATTITUDE IN PERCEPTION

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An Abstract of

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In Part I of this essay I distinguish perception from sensation and sensory processing, and I argue that propositional perceiving is an act, intentional, cognitive, and can go amiss. In Part II I show that perceiving must be committive to go amiss, and since a committive, cognitive, intentional act is assentive, I conclude that propositional perceiving is assentive. In Part III of the essay I argue that nonpropositional perceiving is an act, intentional, cognitive, and capable of going amiss, and hence committive. In the course of showing that nonpropositional perceiving is cognitive, I examine Bertrand Russell's views on knowledge by acquaintance and argue that such knowledge is logically propositional. Since nonpropositional perceiving is a committive, cognitive, intentional act, I conclude that it too is assentive. Thus, the conclusion I reach in this work is that the propositional attitude in perception, whether propositional or nonpropositional, is one of assent.
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A large portion of the work done by modern philosophers who have studied perception has focused on the question of whether or not there are sense-data. Another focus of study has been the justifiability of perceptual claims. Perception has also been studied for the light it sheds on certain problems in the philosophy of mind. However, in most of the work done on perception the question of whether perception involves an assentive attitude, and if so what this attitude is, has received only passing attention. Even those philosophers who have given these questions more than a cursory glance, namely the Idealists and the Materialists, have offered little argument to show why perception must involve an assentive attitude and have made no thorough study to determine which attitude is most suitable to perception. In this essay I shall attempt to show why perception must involve an assentive attitude, leaving the determination of which attitude is most suitable to perception for another essay.

At the heart of my attempt to show that perception must involve an assentive attitude is the conviction that the fact that perception can be mistaken cannot be accounted for unless perception involves such an attitude. I shall attempt to establish this in Part II of this essay. However, in order to understand the nature of perceptual error it will be necessary to consider the general characteristics of perception. The purpose of Part I of this essay is to discover these characteristics. Finally, perception is both propositional and nonpropositional, and mid-way through Part I we will find it necessary to restrict ourselves to propositional perception, leaving nonpropositional perception to be discussed in Part III of the essay.

This statement of my strategy prompts several qualifications. First, I shall only be concerned with outer sense. Secondly, the only outer sense modality I shall discuss is vision, since this is the most important sense modality for humans. Finally, I shall mainly be concerned with seeing things, because the basic problems a theory of perception must deal with can be brought out most easily in connection with the perception of things. However, I believe that if an acceptable theory of the perception of things can be developed, then there will be little problem in extending
Part I: Sensation and Perception

The purpose of Part I of this essay is to discover the characteristics of perception. I plan to do this by contrasting perception with sensation.

I shall not attempt to present a complete account of sensation in this essay; instead I shall only discuss those features of sensation that contrast with those features of perception that bear on the issue of whether or not perception involves an assentive attitude. In order to determine which characteristics of sensation we wish to contrast with perception, I shall begin by distinguishing sensation and perception. I shall take up the question of the relation between sensation and perception in the last division of this part of the essay.

However, before discussing sensation I should explain what I mean by "sensory processing," since this is a term I will be using throughout the essay. By "sensory processing" I mean the processing of the given that occurs in the physiological mechanisms of the perceiver. In particular, I have in mind such things as: (1) the convergence which results from the circumstance that although there are 120 million receptors in the eye there are only one million fibers in the optic nerve which leaves the eye, (2) the coding of the nature of the stimulus in terms of the number and frequency of nerve impulses, and (3) the lateral inhibition which occurs when the response of one nerve cell reduces or eliminates the ability of a neighboring nerve cell to respond. In addition to this peripheral processing, there is an enormous amount of central processing of the given that occurs in the cortex. Although much more could be said about this subject, the preceding should make the notion of sensory processing clear enough to distinguish it from sensation.

A. The Distinction between Sensation and Perception

It is generally recognized that the eighteenth-century Scottish philosopher Thomas Reid was the first person to explicitly distinguish sensation and perception. Accordingly, let us begin by examining his definitions of these two phenomena with the intent of discovering some clues as to the differences between them.
1. Thomas Reid's Conception of Sensation

In his introduction to Reid's *Inquiry Into the Human Mind,* Timothy Duggan says that Reid delineates four distinctive characteristics of sensation: (1) *It has no object* ("... In sensation, there is no object distinct from that act of mind by which it is felt..."\(^2\)); (2) *It cannot have characteristics it is not sensed as having and must have those it is sensed as having* ("It is essential to a sensation to be felt, and it can be nothing more than we feel it to be" (*Inquiry*, p. 216). "It is impossible that there can be any fallacy in sensation: for we are conscious of all our sensations, and they can neither be any other in their nature, nor greater or less in their degree than we feel them" (*Essays*, p. 311); (3) *It is a natural principle of belief* ("I can," says Reid, "think of the smell of a rose when I do not smell it; and it is possible that when I think of it, there is neither rose nor smell anywhere existing. But when I smell it I am necessarily determined to believe that the sensation really exists" (*Inquiry*, p. 24); (4) *We do not notice or attend to our sensations except under rather special circumstances* ("The mind," says Reid, "has acquired a confirmed and inverterate habit of inattention to them, for they no sooner appear than quick as lightning the thing signified succeeds and engrosses all our regard. They have no name in language; and although we are conscious of them when they pass through the mind, yet their passage is so quick and so familiar, that it is absolutely unheeded" (*Inquiry*, p. 95).).

I believe that three other characteristics should be added to this list: (5) *It does not involve an assenting attitude*; (6) *It presupposes a sentient being*; (7) *It is a passion* ("Sensation, taken by itself, implies neither the conception nor belief of any external object. It supposes a sentient being, and a certain manner in which the being is affected; but it supposes no more" (*Essays*, p. 249).). Let us take a brief look at this list to determine both whether all these characteristics are relevant to our task, and also whether they can be described more perspicuously.

With regard to the first characteristic, the point Reid is making in the passage cited can perhaps be expressed best in contemporary parlance by saying that sensation is adverbial.


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As the second of the two passages quoted as evidence for the second characteristic indicates, the contention that sensation has all and only those characteristics it is sensed to have is put forward as support for the claim that sensation cannot be fallacious. Since my primary interest is in the latter contention, I shall express this characteristic by saying that sensation cannot be mistaken.

With regard to the third characteristic, when Reid says "When I smell it I am necessarily determined to believe that the sensation really exists," he means that the sensation compels us to believe in the present existence of the smell in a way that remembering or imagining a smell does not. Since what Reid says is that sensation determines one to believe in the existence of the smell, rather than that sensation involves believing in the existence of the smell, the third characteristic is not directly relevant to my attempt to show that perception involves an assentive attitude, and I shall not include it in my list of the characteristics of sensation.

In the passage cited in support of the fourth characteristic, Reid says "although we are conscious of them (our sensations) when they pass through the mind, yet their passage is so quick and so familiar, that it is absolutely unheeded." Let us express this characteristic by saying that sensation is conscious.

Duggan expresses the fourth characteristic as "we do not notice or attend to our sensations except under rather special circumstances," and he claims that if one accepts the principle that "S does not notice that he has a sensation which is f" entails "S does not believe that he has a sensation which is f," then the fourth and third characteristics are inconsistent (Inquiry, p. xxii). Philip Bourdillon has argued, however, that suitably interpreted the fourth and third characteristics are not inconsistent. First, he points out that Reid distinguishes between consciousness, attention, and reflection. "We may say that consciousness is the receptacle in which all mental operations (sensations being our special interest) reside; attention, a relatively mundane act, brings these operations to the surface; and reflection, a far more sophisticated act, gives us clear and distinct notions of these operations" (Bourdillon, p. 25). Then he argues that the third characteristic should be

understood as: (3) "When one has a sensation which he attends to, he is necessarily determined to believe that the sensation exists" (Bourdillon, p. 28). Finally, he concludes that when the third characteristic is so interpreted it is no longer inconsistent with the fourth (Bourdillon, p. 29).

In the passage I have cited in connection with the fifth characteristic, Reid says that "sensation...implies neither the conception nor belief of any external object." Later, when we examine the way Reid characterizes perception, we shall see that he holds that perception involves both a conception of the object perceived and a belief that it exists. The aspect of this contrast between sensation and perception that I wish to emphasize relates to the believing rather than the conceiving, and since believing is an assentive attitude I shall generalize and express this characteristic by saying that sensation does not involve an assentive attitude.

It is not obvious what Reid means by saying that sensation presupposes a sentient being, but clearly this is not a characteristic that distinguishes sensation from perception, so we can drop it from our list.

I shall use the action-passion contrast to refer to the difference between doing something and undergoing something. Since Reid speaks of the one who senses as being affected, this suggests that he regards sensation as a passion.

Thus, the things Reid says about sensation suggest that it has the following characteristics:

(1) It is adverbial.
(2) It cannot be mistaken.
(3) It is conscious.
(4) It does not involve an assentive attitude.
(5) It is a passion.

Let us now examine Reid's characterization of perception to see how it contrasts with his characterization of sensation.

2. Thomas Reid's Conception of Perception

Although Reid holds that we are conscious of the operations of our mind, he says that we must also attend to them while they are exerted if we hope to have a distinct notion of them. And Reid thinks that "if...we attend to that act of our mind which we call the perception of an external object of sense we shall find in it these three things. First, Some conception or notion of the object perceived. Secondly, A strong
and irresistible conviction and belief of its present existence. And, thirdly, That this conviction and belief are immediate and not the effect of reasoning" (Essays, pp. 111-112).

Since Reid holds that perception involves the belief that the object conceived of exists, it is clear that he thinks that perception involves an assentive attitude. This provides us with one characteristic of perception.

In addition, the fact that Reid describes perception as an act of the mind suggests that he thinks that perception is an action. This gives us a second characteristic of perception.

Elsewhere Reid writes: "I am indeed conscious of perceiving, remembering, imagining; but that the objects of these operations are images in my mind I am not conscious" (Essays, p. 216). Here we have a third characteristic of perception; perception is conscious.

In the passage I quoted in the first paragraph of this section, Reid seems to assume that perception has an object; in the following passage this assumption is specifically stated. "Most of the operations of the mind, from their very nature, must have objects to which they are directed, and about which they are employed. He that perceives, must perceive something; and that which he perceives, is called the object of his perception. To perceive, without having any object of perception, is impossible" (Essays, p. 13). Let us express the fact that perception takes an object by saying that it is non-adverbial. Here we have a fourth characteristic of perception.

This passage not only says that perception has an object, it also informs us that perception is directed to this object, or is about it. Reid seems to think, in other words, that perception is intentional. This is a fifth characteristic of perception.

According to Reid "the objects of perception are the various qualities of bodies" (Essays, p. 252), and he divides these qualities into primary and secondary qualities to make a distinction between original and acquired perception (Inquiry, p. 210), and he holds both that acquired perception can be mistaken and that most of our perception is of this type (Essays, p. 316). This provides us with a sixth characteristic of perception: perception can be mistaken.

Thus, the things that Reid says about perception suggest
that it has the following features:

1. It involves an assentive attitude.
2. It is an action.
3. It is conscious.
4. It is non-adverbial.
5. It is intentional.
6. It can be mistaken.

If we compare this list with the one we drew up earlier for sensation, only four contrasts immediately stand out; first, sensation cannot be mistaken whereas perception can; second, sensation is a passion whereas perception is an action; third, sensation does not involve an assentive attitude whereas perception does; and fourth, sensation is adverbial whereas perception is non-adverbial. However, when we look at the sense in which sensation is conscious I believe we will see that sensation can be distinguished from perception in this respect too, yielding a fifth contrast. Moreover, although Reid did not claim that sensation is non-intentional I shall argue that it is, and this will provide us with a sixth contrast, since perception is intentional. Finally, I shall argue that sensation and perception can be distinguished in a way not mentioned by Reid, namely that the former is non-cognitive whereas the latter is cognitive. If these arguments are sound, there are the following seven contrasts between sensation and perception.

<table>
<thead>
<tr>
<th>Sensation</th>
<th>Perception</th>
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</thead>
<tbody>
<tr>
<td>adverbial</td>
<td>non-adverbial</td>
</tr>
<tr>
<td>implicitly conscious</td>
<td>explicitly conscious</td>
</tr>
<tr>
<td>a passion</td>
<td>an action</td>
</tr>
<tr>
<td>non-intentional</td>
<td>intentional</td>
</tr>
<tr>
<td>noncognitive</td>
<td>cognitive</td>
</tr>
<tr>
<td>cannot be mistaken</td>
<td>can be mistaken</td>
</tr>
<tr>
<td>non-assentive</td>
<td>assentive</td>
</tr>
</tbody>
</table>

Most of the remainder of this part of the essay will be occupied with clarifying the nature of these contrasts and arguing that they hold. In the next division of this part of the essay we shall be concerned with the list of characteristics associated with sensation, and in the following division we shall be concerned with those associated with perception. However, before approaching either of these tasks it will be helpful to introduce the attitude-content distinction.

3. The Attitude-Content Distinction

This distinction is related to the "ing-ed" ambiguity in
certain words. For example, in some contexts "sensation" is ambiguous between sensing and what is sensed, "perception" between perceiving and what is perceived, "belief" between believing and what is believed, and so on. This ambiguity has been variously referred to as "the process-product ambiguity," "the act-object ambiguity" and "the act-content ambiguity." The first way of characterizing the ambiguity is defective because it is not necessarily the case that, for example, what is believed is produced, created, or made by believing it. The second way of characterizing the ambiguity is not acceptable either because it suggests that, for example, what is sensed is ontologically distinct from the sensing of it. Finally, even the third way of characterizing the ambiguity is not a happy one because it suggests that the word ending in "ing" is an action rather than a passion, whereas I shall argue that sensing, for example, is a passion. Accordingly, I shall refer to the ambiguity in question as "the attitude-content ambiguity." In order to avoid confusion, from now on I shall only use "sensation" when I have both attitude and content in mind. When I want to refer to just the attitude in sensation I shall use "sensing," and when I want to refer to the content of sensation I shall say so in so many words. Similar considerations apply to the other words I mentioned at the beginning of this paragraph. I have drawn attention to this distinction at this point because some of the characteristics Reid attributes to sensation apply to sensation whereas others apply only to sensing. The same is true of the characteristics of perception.

Before proceeding to consider the various characteristics of sensation and perception, there is a problem caused by this distinction that should be discussed. I have just said that when I have the attitude in sensation in mind I shall use the word "sensing," and when I have the attitude in perception in mind I shall use the word "perceiving." The problem I have in mind arises when one remembers that sensation is a part of perception. This means that strictly speaking there are two attitudes and two contents in perception, namely, the attitude and content that perception would have if sensation were not a part of perception, and the additional attitude and content that perception has due to the fact that sensation is part of perception. Now the point to remember throughout this work is that when I speak of the "attitude of perception" (or "perceiving") and the "content in perception," I have in mind just the attitude and content that perception would have if sensation were not a part of perception. I wish to emphasize, however, that properly speaking the attitude in perception includes both the attitude it has if sensation is not part of perception as well as the attitude it has due to the fact that sensation is a part of perception,
and similarly for the content of perception.

B. The Characteristics of Sensation

We are now in a position to try to characterize sensation. My approach will be to examine each of the features that surfaced in our sketch of Reid's conception of sensation in order to determine whether they are indeed applicable to sensation.

1. Sensing is Adverbial

In order to determine whether or not sensing has an object, I shall briefly examine both ways of conceiving sensing to see which is least problematic.

1.1 The View that Sensing is Acquaintance with Sense-data

Although there are two versions of the classical sense-datum theory, the ontological version and the linguistic version, I shall only be considering the ontological version because it seems to me that J. L. Austin is right when he says that the linguistic version (or at least Ayer's exposition of it) is in fact ontological, i.e., although it purports to hold that there are material objects and we can talk as if there are sense-data, it in fact holds that there are sense-data and we can talk as if there are material objects.4

The classical argument for the ontological version of the sense-datum theory has two stages.5 First it is claimed that we are sometimes directly aware of sense-data; then it is argued that we are always directly aware of sense-data since our experience is uniform. I shall focus on the first stage.


5See, for example, Ayer, The Foundations of Empirical Knowledge, pp. 3-11.
of the argument since the second stage presupposes that the first is sound. There are two steps in the first stage of the argument for sense-data. The first step is to claim that on certain occasions what we perceive cannot be an object. The second step is to argue that on all these occasions we are nevertheless aware of something. Once again I shall focus on the first step because the second step cannot be introduced unless the first step is established.

At least four different arguments have been advanced to show that what we perceive on certain occasions cannot be an object: (1) the argument from perspective shows that an object may appear to be other than it is; (2) the part-whole argument shows that we never see all parts of an object at one time; (3) the time-gap argument shows that what we perceive may not exist when we perceive it; and (4) the argument from hallucination shows that we may seem to be perceiving something that does not exist at all.

In reply to the argument from perspective we can generalize a point that Austin made, and say that there is no reason why a thing must always appear to be just as it is in all circumstances.6 With respect to the part-whole argument, Chisholm has pointed out that "S sees x" does not imply that "S sees every part of x."7 As to the time-gap argument, Chisholm has also observed that what we see need not exist when we see it, any more than thunder need exist when we hear it (Per, p. 153). Finally, in reply to the argument from hallucination, R. J. Hirst has pointed out that "hallucination...may be regarded as mental images confused with or taken for perceived objects; the occurrence of this mistake is explained by there being always some factor which lessens the difference normally obvious between the two, or makes us incapable of recognizing it, e.g., fever, madness, delirium tremens, drowsiness, prior suggestion, unusually vivid imagery or bad light."8 In light of these replies I

6Austin's point was: "Does anyone suppose that if something is straight, then it jolly well has to look straight at all times and in all circumstances?" Austin, Sense and Sensibilia, p. 29.


cannot see that the first stage of the argument for sense-data is valid, and hence I cannot see any need to posit sense-data to account for the facts of perception. I shall now examine the adverbial analysis of sensing to see whether it shows any more prospect of being acceptable.

1.2 The View that Sensing is Adverbial

In his *Theory of Knowledge* Chisholm suggests that we should use adverbial rather than sense-datum terminology to describe the way we are appeared to. "When we say 'The appearance of the thing is white,' our language suggests that we are attributing a certain property to a substance. But we could just as well have said 'The thing appears white,' using the verb 'appears' instead of the substantive 'appearance.' And in 'The thing appears white'...the word 'white' functions as an adverb." In *Perceiving* Chisholm recommends adoption of the adverbial terminology on the ground that it allows us to "describe perceiving in the way which is least puzzling philosophically" (*Per*, p. 124). In particular, he has in mind the fact that the adverbial terminology allows us to avoid problems which arise if we introduce sense-data into our account of perception. The kind of problems that arise if sense-data are introduced are suggested by the questions: "Do appearances, like the things that present them, have surfaces, as well as parts which are behind or beneath these surfaces, and rear surfaces which face away?" (*Per*, p. 119) and Is "the elliptical sense-datum identical with the round penny which presents it?" (*Per*, p. 123).


persuaded by Chisholm's arguments that the adverbial conception of sensing is less problematic than the sense-datum conception, and hence I shall adopt it. We are now in a position to discuss some of the other characteristics Reid attributed to sensation.

2. Sensation is Implicitly Conscious

We have seen that according to Reid although we are conscious of the way we sense we do not attend to this, but instead "the thing signified succeeds and engrosses all our regard." Let us first consider his claim that we are conscious of the way we sense.

Reid's claim that the relation between sensation and perception is one of signification or suggestion presupposes that sensation precedes perception; if A suggests B then presumably A precedes B. The Phenomenological evidence, however, indicates that sensation accompanies rather than precedes perception. If this line of thought is sound, we cannot agree with Reid that sensation precedes perception. The question we must answer, therefore, becomes: Are we conscious of the way we sense when we perceive? I am inclined to answer this question in the affirmative, on the ground that we must be conscious of the way we sense when we perceive because if we were not then the fact that we know which sense modality is involved when we perceive could not be explained.

Roderick Firth, however, seems to think that we are not conscious of the way we sense when we perceive, since he holds that "perceptual consciousness is not a two-fold state": it is "one state of mind or nothing." Elsewhere Firth writes that "the operation of perceptual reduction destroys the state of perceptual consciousness on which it is performed; it is an operation, to be precise, which has the effect of replacing a state of perceptual consciousness by a state in which we are aware of sense-data" (Firth, pp. 236-237). These two points do suggest that if perceptual consciousness is one state of mind then we cannot be aware of the way we sense and aware of


an object at the same time, if the awareness of the way we sense is a different state of consciousness from the awareness of the perceptual object. However, the oneness of perceptual consciousness can be maintained and Firth's objection met if we construe the awareness in question as one awareness of several things instead of several awarenesses. In other words, the question we have been attempting to answer is: Are we conscious of the way we sense when we perceive? If "conscious of the way we sense" means "conscious of the way we sense as such," then the answer is: no. But if "conscious of the way we sense" means "conscious in such a way that the way we sense is part of the totality of which we are conscious," then the answer is: yes. From now on "conscious of the way we sense" will be used in this second sense.

The second claim Reid makes in the passage we are considering is that we normally do not attend to the way we are appeared to. Unlike the previous claim there seems to be general agreement on this point. Chisholm writes, for example: "Ordinarily a perceiver may not notice the way in which the object of his perception happens to be appearing... And subsequently he will find it easier to remember what it was that he perceived than to remember how it was that the objects of his perception happened to look, or otherwise appear, to him" (Per, p. 160). Indeed, if we take "attend" to mean "conscious of the way we sense as such," which it is natural to do, then it follows from our discussion in the preceding paragraph that we do not attend to the way we sense when we perceive. I think we can agree with Reid, therefore, both that we are conscious of the way we sense when we perceive and also that we do not attend to the way we sense.

As long as it was thought that sensation precedes perception then it was plausible to think, as Reid does, that we are conscious of sensation and perception in the same way. However, now that we realize both that sensation and perception occur at the same time, and that what we are conscious of when we sense is part of the totality of which we are conscious when we perceive, then it becomes apparent that our consciousness of sensation is different from our consciousness of perception. I propose to mark the difference between the two kinds of consciousness by saying that sensation12 is

12It would probably sound more natural to speak of ourselves being conscious of sensation than of sensation being conscious, but since it is common to talk of perception being conscious I shall follow this same pattern for the sake of uniformity.
implicitly conscious whereas perception is explicitly conscious. This provides us with a second way of distinguishing sensation and perception.

3. Sensing Is a Passion

We have seen that Reid seems to think that sensation is a passion because he says that sensation only supposes "a certain manner in which the being is affected." Up to this point I have been following Reid's terminology and have asked whether sensation is an action or a passion. It is clear, however, that it is the attitude in sensation rather than sensation itself that is either an action or passion. Accordingly, from this point on I shall discuss the question in terms of sensing rather than sensation.

One factor that makes it difficult to determine whether sensing is an action or a passion is the lack of an acceptable criterion for distinguishing actions from passions. One possible way of distinguishing actions and passions is to say that verbs in the active voice express actions whereas verbs in the passive voice express passions. Since I have defined sensation in such a way that it is a species of being appeared to, and since "being appeared to" is a passive construction, it would follow that sensation is a passion if this criterion were acceptable. This criterion is not acceptable, however, because "John underwent an operation," for example, is an active construction but it does not report an action.

Irving Thalberg has proposed a criterion that seems more promising: "Of anything a person does, you may say some of the following: that he did it deliberately, on purpose, unintentionally, under duress, and so on for a broad range of terms which attribute to a person various forms and degrees of control, as well as loss of control, over his actions." And it does seem that if an action is something one does whereas a passion is something one undergoes, then whether or not control terms are applicable does distinguish the two events, since one can control what one does but not what one undergoes. The next question, then, is whether control terms are applicable to sensing.

According to our criterion, if being appeared to is an

action it should be possible to say such things as, "Jones is carefully appeared to blue" or "Jones is carelessly appeared to blue." However, the awkwardness of these sentences indicates that being appeared to, and therefore sensing, is a passion rather than an action. It is true that one can purposely or intentionally be appeared to, but what is controlled in this case is whether or not one is appeared to, not the appearing itself. Later in this division of this part of the essay I shall argue that sensing cannot be mistaken, in the sense that the correct-mistaken dichotomy does not apply to it. If that argument is sound then we have an additional indication that sensing is a passion. I conclude, therefore, that sensing is passion. If it turns out that Reid was correct in thinking that perceiving is an action, then we shall have a third way of distinguishing sensation and perception.

4. Sensing is Non-Intentional

In the following familiar passage Brentano sets out a description of intentionality that has become the basis of most recent attempts to define intentionality: "Every mental phenomenon is characterized by what the Scholastics of the Middle Ages called the intentional (or mental) inexistence of an object, and what we might call, though not wholly unambiguously, reference to a content, direction toward an object (which is not to be understood here as meaning a thing), or immanent objectivity. Every mental phenomenon includes something as object within itself, although they do not all do so in the same way. In presentation something is presented, in judgment something is affirmed or denied, in love loved, in hate hated, in desire desired and so on....This intentional inexistence is characteristic exclusively of mental phenomena. No physical phenomenon exhibits anything like it."\(^\text{14}\)

The man who has done the most to introduce Brentano's thesis to English-speaking philosophers is Chisholm. In Perceiving Chisholm offers the following as a more exact formulation of Brentano's thesis:

The phenomena most clearly illustrating the concept of "intentional inexistence" are what are sometimes called psychological attitudes; for example, desiring, hoping, wishing, seeking, believing, and assuming. When Brentano said that these attitudes "intentionally contain an object in themselves," he was referring to

the fact that they can be truly said to "have objects" even though the objects which they can be said to have do not in fact exist. Diogenes could have looked for an honest man even if there hadn't been any honest men. The horse can desire to be fed even though he won't be fed. James could believe there are tigers in India, and take something there to be a tiger, even if there aren't any tigers in India.

But physical—or nonpsychological—phenomena, according to Brentano's thesis, cannot thus "intentionally contain objects in themselves." In order for Diogenes to sit in his tub, for example, there must be a tub for him to sit in; in order for the horse to eat his oats, there must be oats for him to eat; and in order for James to shoot a tiger, there must be a tiger there to shoot (Per, p. 169).

Recently Linda L. McAlister has challenged Chisholm's interpretation of Brentano's thesis. Her main objection is that Chisholm holds that both mental and physical phenomena take objects (the former being distinguished from the latter by the fact that their objects need not exist), whereas Brentano holds that the two phenomena are distinguished by the fact that only mental phenomena take objects. It seems, then, that in the passage quoted above, Brentano is saying that what distinguishes mental from physical phenomena is that they, and they alone, are related to things as objects (McAlister, pp. 336-337). Let us express this by saying that mental phenomena are always about something, or more simply that they are characterized by "aboutness."

Because it is difficult to determine whether an event, state, or process is about something, Chisholm and others have proposed various tests for intentionality. The first step is usually to shift the focus of discussion from phenomena to talk about phenomena. The next move is to say that a sentence is intentional if and only if one of its verbs is intentional. At this point it is important to recognize the distinction between intransitive and transitive verbs: that is, between verbs that do not take an object and verbs that do. The importance of this distinction lies in the fact that only transitive verbs can be intentional, because to be intentional is to be about something and if a verb does not have an object it cannot be about anything. The interesting question,

of course, is whether all transitive verbs are intentional or whether intentional verbs are only a species of transitive verbs. When we attempt to determine whether perceptual verbs are intentional we shall consider various criteria that have been proposed to distinguish intentional verbs from transitive verbs. Our present task, however, is to determine whether "sensing" is an intentional verb, and it is now clear that it is not, because "sensing" as we have defined it is an intransitive verb since we have adopted the adverbial rather than sense-datum conception of sensing. I conclude, therefore, that sensing is not intentional.

5. Sensing is Non-Cognitive

In addition to the contrasts between sensation and perception which Reid has suggested there is one more contrast which should be considered, and it will be convenient to consider it at this point rather than discussing it after we have discussed all the other contrasts he has suggested.

Traditionally it was thought that the mind has three basic capacities: cognition, affection, and volition. Perceiving was classified as a cognition since it was thought to be a source of knowledge, and sensing was classified as an affection since it was thought to be a manifestation of a feeling. However, some philosophers, for example those who conceive of sensing as the awareness of sense-data, have held that sensing is cognitive. Thus in order to discover whether there is a contrast between sensation and perception in this respect, we must determine whether the contention that sensing is cognitive is true. As soon as one asks whether sensing is cognitive, the question arises as to what we mean by "cognitive." One possibility is to take "cognitive" to be equivalent to "epistemic." When one considers the question of whether sensing is epistemic, recent arguments by Sellars immediately come to mind. Let us begin by considering one of these arguments.

Sellars' main argument against the view that sensing is epistemic is that it generates an inconsistent triad. According to a sense-datum theorist such as H. H. Price, sensing is the intuitive apprehension of particulars. Sellars points out, however, that what are known are facts rather than particulars. Thus the sense-datum theorist's claim that

16Jerome A. Shaffer, Philosophy of Mind (Englewood Cliffs, New Jersey: Prentice-Hall, 1968), pp. 4-5. I am using this tripartite division as a classification of mental phenomena rather than a classification of faculties postulated to explain the existence of these mental phenomena. Even so there are problems. See Shaffer, pp. 5-7.
what is sensed are particulars, and his claim that sensing is a form of knowing, seem to be at odds with each other. The sense-datum theorist resolves this conflict by stipulating that the kind of knowledge involved in sensing is knowledge by acquaintance, since in this sense "know" can be followed by a noun which refers to a particular. With regard to this stipulation Sellars asks us to "notice that...it is logically necessary that if a sense content be sensed, it be sensed as being of a certain character, and that if it be sensed as being of a certain character the fact that is of this character be non-inferentially known." Thus, "x non-inferentially knows that S is red." But sense-datum theorists have also held, according to Sellars, both that the ability to sense is unacquired (i.e., it does not presuppose a complicated process of concept formation) and also that the ability to know facts of the form "x is φ" is acquired. To this Sellars objects that while any two of these claims are consistent, the three of them together make up an inconsistent triad:

A. X senses red sense content s entails x non-inferentially knows that S is red.
B. The ability to sense sense contents is unacquired.
C. The ability to know facts of the form x is φ is acquired.
A and B together entail not-C; B and C entail not-A; A and C entail not-B (EPM, p. 132).

Despite the persuasiveness of this argument there is an objection to it. At one point in the argument Sellars allows that the sense-datum theorist can legitimately say that sensing is both the awareness of particulars and epistemic, if "epistemic" is understood to mean "knowledge by acquaintance." Now knowledge by acquaintance is non-propositional; it is knowledge of x, not knowledge that x. However, in proposition A Sellars expresses knowledge by acquaintance in propositional terms, and this enables him to generate the inconsistency. In other words, whether or not Sellars' argument shows that sensing is non-epistemic depends on which sense of "epistemic" we are concerned with, the propositional or the nonpropositional. Since we are attempting to contrast sensing with perceiving, the sense of "epistemic" we are interested in is the sense in which perceiving is epistemic. Let us pause briefly, therefore, to discover which sense this is.

There are three senses of the infinitive "to know." In one sense "to know" means to have a special ability, i.e., to know how to do something. In a second sense "to know" means "to be acquainted with something." In a third sense "to know" means "to apprehend that something is the case." The first kind of knowledge, knowing how, is expressed in actions rather than propositions. It is evident that perceiving is not epistemic in this sense because veridical perceiving need not entail knowing how to do anything.

Let us refer to the second kind of knowledge as non-propositional knowledge, and the third kind of knowledge as propositional knowledge. Our next question, then, is: Does veridical perceiving entail nonpropositional or propositional knowledge? Before we can answer this question we should observe that not only are there nonpropositional and propositional kinds of knowledge, there are also nonpropositional and propositional kinds of perceiving. Now in light of the obvious parallels between the two kinds of knowledge and the two kinds of perceiving, it might seem that the answer to our question is simple: veridical nonpropositional perceiving entails nonpropositional knowledge and veridical propositional perceiving entails propositional knowledge. Unfortunately, the situation is not this simple because it can be argued that nonpropositional knowledge involves propositional knowledge. There are two points to notice here. First, the question of whether or not nonpropositional perceiving can be analyzed propositionally is crucial for the thesis that perception involves an assentive attitude, because perceiving can only be shown to involve an assentive attitude if its content is a proposition, since assent can only be directed to a proposition. The second point to notice is that veridical propositional perceiving clearly entails propositional knowledge. In light of these considerations I shall restrict myself to propositional perceiving from this point on in this and the next part of this essay. Then in the third part of this essay I shall attempt to show that nonpropositional perceiving can be analyzed propositionally.

Since we are restricting ourselves to propositional perceiving, the sense of "epistemic" we are concerned with when we ask whether sensing is epistemic is the propositional sense. Now if the sense of "epistemic" we are concerned with is the propositional sense, then Sellars' argument does show that sensing is non-epistemic. Nevertheless, this is of little comfort because there is a general objection against contrasting sensing and perceiving in terms of epistemicness. The general objection is that perceiving is not epistemic! An attitude may be said to be epistemic if its content is,
true, and the attitude itself is assentive and warranted.\(^{18}\)

Now the main reason we cannot say that perceiving is epistemic
is that, as we shall see in the next section, it can be mis­
taken, and if an attitude is mistaken its content is false.

To this point we have been exploring the possibility of
taking "cognitive" to be equivalent to "epistemic." We have
now seen that this will not work. However, the situation we
discovered in the last paragraph suggests that we should say
that an attitude is cognitive if it would be epistemic if it
were veridical. There are, however, two problems with this
suggestion. First, since what we are trying to show is that
the attitude in perception is assentive we cannot stipulate
that a cognitive attitude is epistemic when it is veridical
without begging the question, because an epistemic attitude
is assentive. Secondly, we cannot assume that the attitude
in perception is warranted until we know what the specific
attitude in perception is. On the other hand, we do not
want to define "cognitive" in such a way that it loses all
connection with knowledge. Perhaps the best way to handle
this situation is to say that an attitude is cognitive if
and only if it (1) has a content which is true or false,
(2) takes a position with respect to this content, and (3) has
the potential of being warranted.

If this is what we mean by "cognitive" then all we need to
do to determine whether sensing can be contrasted with per­
ceiving in this respect is to discover whether sensing is the
kind of attitude that (1) has a content which is true
false, (2) takes a position with respect to this content,
and (3) has the potential of being warranted. Once the
question is put in these terms it is easy to see that
sensing is noncognitive. In the next section but one we
shall see, speaking in the formal mode, that the content of
sensation is a term. If so then sensing must be noncognitive,
since a term can be neither true nor false.

6. Sensing Cannot Be Mistaken

We have seen that according to Reid "it is impossible that
there can be any fallacy in sensation." I have expressed
contention as the claim that sensation cannot be mistaken. Now
that we have introduced the attitude-content distinction, it
would be more accurate to express this as the claim that
sensing cannot be mistaken. Our first task in this section

\(^{18}\)Edmund L. Gettier has shown that the traditional definition
of knowledge is inadequate in "Is Justified True Belief
Knowledge?", *Analysis*, XXIII (1963), 121-123. However, the
difficulty he raises is not one which need concern us in this
work, so I shall simply assume the traditional definition of
knowledge.

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will be to distinguish two broad senses in which something cannot be mistaken. Our second task will be to determine in which of these senses it is true that sensing cannot be mistaken.

When it is said that something cannot be mistaken, the phrase "cannot be mistaken" might mean "the correct-mistaken dichotomy simply does not apply to this thing." For example, it makes no sense at all to ask whether a board can be mistaken. A second sense in which it might be said that something cannot be mistaken is that the thing in question must, in some sense, be correct. In order to determine in which of these two senses it is true that sensing cannot be mistaken, we must discover what conditions must be met in order for the correct-mistaken dichotomy to apply to something. In the corresponding section in my treatment of perception I shall show that perceiving is sometimes mistaken. Since perceiving can be mistaken, let us try to determine what makes this possible.

Earlier I pointed out that we can identify both an attitude and a content in sensation and perception. In the next section we shall see, speaking in the formal mode, that the content of sensation is a term. In the corresponding section in our discussion of perception we shall see, again speaking in the formal mode, that the content of propositional perception is a proposition. Now obviously the bearer of correctness or mistakenness is the attitude rather than the content. In the next part of this essay I shall argue that in order for any cognitive attitude to be mistaken two conditions must be met. First, its content must be false, and second, a commitment must be made to this false content. If this line of thought is sound, then the possibility of sensing being mistaken does not even arise. First, sensing is a passion and therefore involves no act of commitment. More importantly, the content of sensation is a term rather than a proposition and hence can be neither true nor false. Sensing cannot be mistaken, therefore, not in the sense that it must be correct, but in the sense that the correct-mistaken dichotomy simply does not apply to it.

7. Sensation Involves a Non-Assentive Attitude

To this point the characteristic of sensation we are now attempting to elucidate has only been described negatively by saying that sensation does not involve an assentive attitude. I shall now attempt to describe this characteristic of sensation positively. The first step toward a positive description of this characteristic of sensation is to determine the content of sensation.
7.1 The Content of Sensation

Perhaps the easiest way to characterize the content of sensation is by reference to what Aristotle referred to as the "proper objects" of the various senses and the "common sensibles," and the relations peculiar to the proper objects and common sensibles. Chisholm provides the following examples of proper objects and common sensibles. "The 'proper objects'...may be illustrated by reference to the following sensible characteristics: such visual characteristics as blue, green, yellow, red, white, black; such auditory characteristics as sounding or making a noise; such somesthetic characteristics as rough, smooth, hard, soft, heavy, light, hot, cold; such gustatory characteristics as sweet, sour, salt, bitter; and such olfactory characteristics as fragrant, spicy, putrid, burned. The 'common sensibles' are illustrated by such characteristics as movement, rest, number, figure, and magnitude, which, as Aristotle said, 'are not peculiar to any sense, but are common to all.'" Chisholm also notes that for each of the senses there are various sensible relations that are peculiar to the proper objects of that sense: "The field of vision provides us with these examples: the relation that holds between any two things, \( x \) and \( y \), when \( x \) is similar in color to \( y \); the relation that holds among three things, \( x, y, \) and \( z \), when \( x \) resembles \( y \) in color more than it resembles \( z \) in color; the relation that holds between any two things, \( x \) and \( y \), when \( x \) is brighter in color than \( y \); and the relation that holds between any two things, \( x \) and \( y \) when \( x \) is richer, or more saturated, in color than \( y \). These relations have their analogues in the other sense spheres." Finally, there are relations pertaining to each of the common sensibles: "for example, the relation that holds between any two things, \( x \) and \( y \), when \( x \) is larger than \( y \), or when \( x \) moves faster than \( y \), or when \( x \) is to the left of \( y \), or when \( x \) is above \( y \); the relation that holds among any three things, \( x, y, \) and \( z \), when \( x \) is nearer to \( y \) than to \( z \), or when \( x \) is between \( y \) and \( z \); and the relation that holds between two events, \( x \) and \( y \), when \( x \) temporally precedes \( y \)" (T of K, pp. 46-47).

Let us refer to both the proper objects of the various senses and the relations peculiar to them, as well as the common sensibles and the relations peculiar to them, as "sensible characteristics." If we do, then we can say that the content of sensation is a sensible characteristic. When I say that the content of sensation is a sensible characteristic I am speaking in the material mode. Speaking in the formal mode we can say that the content of sensation is a term, since it is a term that refers to a sensible characteristic.
7.2 The Attitude in Sensation

When I come to this stage in my analysis of perception, I shall argue that, speaking in the formal mode, the content of perception is a proposition. It will then be plausible to say that the attitude in perception is a propositional attitude. It is obvious, however, that sensing is not a propositional attitude because the content of sensation is not a proposition but a term. Since we shall be referring to perceiving as a propositional attitude, it is natural to refer to sensing as a nonpropositional attitude. Furthermore, since assent can only be given to a proposition, it follows that sensing is a non-assentive attitude. Since our primary interest is in perception rather than sensation, we do not need to distinguish the various kinds of nonpropositional attitudes and determine which is the best candidate for the attitude in sensation. For our purposes it is probably safe to simply characterize the attitude in sensation as one of awareness.

Now that we have discovered the attitude and content in sensation we are in a position to put forward a definition of sensation.

7.3 A Definition of Sensation

Chisholm notes that "the term 'sense'...may be used for describing many types of experience other than that of 'being appeared to'," experiences such as those involved in dreaming, remembering, and imagining, and hence he concludes that "there is a theoretical advantage in defining 'appear' in terms of 'sense'" (Per, p. 143). Accordingly he suggests that "'appear' is definable in terms of 'sensing' and certain causal concepts of physics and physiology" as follows:

"x appears...to S" means: (i) as a consequence of x being a proper stimulus of S, S senses...; and (ii) in sensing..., S senses in a way that is functionally dependent upon the stimulus energy produced in S by x (Per, pp. 148-149).

Since we are only concerned with vision in this essay, and since it seems to me that being appeared to is a broader notion than sensing, I suggest that we say that S senses...if and only if:

(i) as a consequence of x being a proper stimulus of S, S is appeared to...; and (ii) in being appeared to...S is appeared to in a way that is functionally dependent upon the stimulus energy produced in S by x.
If we use "f" to stand for a sensible characteristic, then we can complete our definition of sensing as follows:

S senses f if and only if: (i) as a consequence of x being a proper stimulus of S, S is appeared to f; and (ii) in being appeared to f, S is appeared to in a way that is functionally dependent upon the stimulus energy produced in S by x.

This concludes my discussion of sensation. I have argued that sensing is adverbial, a passion, implicitly conscious, noncognitive, cannot be mistaken, and finally that it is non-assentive. With this analysis of sensation in mind it is now possible to define perception by contrast. Then, given this definition of perception I believe it will be possible to show in the next part of this essay that perception must involve an assentive attitude.

C. The Characteristics of Perception

There are two kinds of perception, propositional perception and nonpropositional perception. An example of propositional perception is "S sees that the tree is green." An example of nonpropositional perception is "S sees the tree." Although the difference between these two kinds of perception is important, I shall not formally distinguish them until I try to show that perception is intentional, because perception can be shown to be non-adverbial, explicitly conscious, and an act without making reference to this distinction.

1. Perceiving is Non-Adverbial

By saying that perceiving is non-adverbial I mean that perceiving, unlike sensing, has an object. It seems so obvious that perceiving has an object that one is tempted to take this characteristic for granted and pass on to consider the more controversial characteristics of perceiving. Perceptual verbs, however, can be used in such a way that they do not take an object, and before we proceed we should make it clear why this use of perceptual verbs does not present a challenge to our claim that perceiving has an object.

The use of perceptual verbs I have in mind is suggested by G. J. Warnock when he writes: "...a blind man may become 'able to see' merely in virtue of a physical change, brought about perhaps by surgical operation...Some blind men who become able to see remain permanently unable to make any use of vision...; and in such cases it seems natural to say that, though now able to see, they never become able to see..."
Let us refer to this use of perceptual verbs as their intransitive use.

Now the thing to notice is that when perceptual verbs are used intransitively they only refer to sensory processing. Indeed, this is true by definition, because the only thing that can be corrected by surgical operation is sensory processing; one cannot correct sensation or perception by a surgical operation because they are mental phenomena. But if perceptual verbs refer to sensory processing when they are used intransitively, then the fact that they do not take an object presents no challenge to the claim that all perceiving has an object. With this point clear we can now consider some of the more controversial characteristics of perceiving.

2. Perception is Explicitly Conscious, but Perceiving is Unconscious

No one would dispute the claim that most human perception is conscious. There are, however, some phenomena that are very much like perception which are not conscious. If these phenomena are cases of perception, then not all perception is conscious; on the other hand, if all perception is conscious, then these phenomena are cases of perception. Our task in this section is to determine which of these two alternatives presents the least problems.

In *A Materialist Theory of the Mind* Armstrong describes a situation that we can take as an example of the phenomena in question. "I am walking along in deep conversation, and, while doing so, step over a log that lies in my path, with every appearance of care and concentration. Yet I remain completely unaware that I have done so. I think we must say here that I saw that there was a log there, although I remained unaware both of acquiring any beliefs about the log, and of the behavior in which the belief was manifested."20 This phenomenon shares with its conscious counterpart the fact that it gives rise to behavior. However, it differs from its counterpart in not being conscious. In other words, although it possesses one mark of perception it lacks another. This observation suggests that there are two alternatives open to us. On the one hand we can follow D. C. Dennett and say that two senses of "aware" can be defined:

(1) A is aware that p at time t if and only if p is


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the content of the input state of A's 'speech centre' at time t.
(2) A is aware that p at time t if and only if p is the content of an internal event in A at time t that is effective in directing current behaviour.21

If we follow Dennett then we can call both the phenomenon in question and its counterpart "perception," but we will have to distinguish two senses of "aware." The other alternative is to say that there is only one sense of "aware," but hold that there are two senses of "perception," one of which involves awareness and the other of which does not. I shall adopt the second alternative because I am interested in human perception and most human perception is conscious. Thus I shall say that perceptual phenomena which are unconscious are derivative cases. In this work I shall only be concerned with the standard cases of perception.22 We can, therefore, say that perception is conscious. However, in light of the distinction we made when we were discussing sensation, what we should say is that perception is explicitly conscious.

It should be noted that it does not follow from the fact that perception is explicitly conscious that all parts of perception are conscious in the same sense, or even that they are conscious at all. We have seen, for example, that sensation is only implicitly conscious. In particular, whether or not the attitude in perception is conscious or not, and if it is in what sense it is, will have to be decided on its own merits. I shall argue later that the attitude in perception is one of commitment to the proposition which is the content of perception. If this is so, then it is obvious that perceiving is unconscious because we are not normally conscious of doing any such thing when we perceive.

21D. C. Dennett, Content and Consciousness (London: Routledge & Kegan Paul, 1969), pp. 118-119. Dennett means the same thing by "aware" here as I do by "conscious" because I am using the latter word in its intentional sense, and Dennett subsumes the intentional senses of "conscious" and "aware" under "aware" (Cf. p. 115).

3. Perceiving Is an Act and an Achievement

We have seen that according to Reid perception is an action. In the first part of this section I shall argue that Reid was correct in this contention. If it is true that perception is an action, then we can go on to ask whether perception occurs at one point in time or whether it occurs over a period of time. I shall attempt to answer this question in the second half of this section.

3.1 Perceiving is an Act

One of the issues about which there has repeatedly been disagreement in the history of the philosophy of perception is the question whether perception is an action or a passion.23 There are two considerations which seem to have clouded the issue.

The first consideration is the fact that sensation and perception were not explicitly distinguished until the eighteenth century. If it is true that sensation is a passion and perception is an action, then failure to distinguish these two phenomena will result in different answers being given to the question we are addressing according to which of the two phenomena is being emphasized. This consideration should not confuse us, however, because we have gone to some lengths to distinguish these two phenomena.

The second consideration that may have made it difficult to

23 Consider, for example, the following observations by D. W. Hamlyn in Sensation and Perception (London: Routledge & Kegan Paul, 1961), hereafter cited as S & P. Aristotle sometimes speaks as if perception is a passion and at other times as if it is an action (p. 19). "Because of the purely causal and mechanical nature of Epicurus' view of the world, the passive features of perception are stressed to such an extent that there is left only a residue of the active aspects of perception..." (p. 34). On the other hand, "according to Plotinus...the soul functions actively in perception, it does not merely receive impressions passively" (p. 40). Augustine follows Plotinus, holding that "perception is an activity of the mind which ensues when the body receives impressions" (p. 44). Descartes holds that perception is passive (p. 72). Spinoza also seems to regard perception as a passion (p. 83). "Locke is never clear whether perception is to be considered as active or as passive" (p. 96). Berkeley regarded perception as a passive affair (p. 105). With regard to Kant, Hamlyn writes: "Kant does not view perception as either the passive perception of sensations or the activity of judgment by itself. Perception is the result of the working of sensation, imagination and understanding together" (p. 139).
determine whether perception is an action or a passion is once again the lack of a good criterion for distinguishing activity from passivity. Spinoza and Leibniz, for example, attempt to determine whether an idea is active or passive on the basis of whether or not it is adequate or distinct (S & P, pp. 84, 88). However, whether or not an idea is adequate or distinct is itself hard to determine. Moreover, there seems to be little reason for associating activity with distinctness or adequateness.

In our attempt to determine whether sensing is an action or a passion, the point was made that actions can be distinguished from passions on the ground that we can control what we do whereas we cannot control what is done to us. (Speaking of "sensing" reminds us that it is the attitude in perception that is properly said to be an action or a passion. Accordingly I shall speak of "perceiving" rather than "perception" from now on.) In the case of sensing we concluded that sensing is a passion because of the awkwardness that results when we attempt to include control terms like "careless" and "careful" in sentences reporting the way one senses. By this criterion perceiving seems to be an action since it is more natural to say "Jones is carefully perceiving the tree" than "Jones is carefully appeared to blue." Later in this part of the essay I shall argue that propositional perceiving is sometimes mistaken, and in the third part of the essay I shall argue that nonpropositional perceiving is sometimes mistaken. If my argument in both cases is sound, then we have another indication that perceiving is an action, because only what is done can be done amiss. I conclude, therefore, that perceiving is an action rather than a passion.24

24 Fortunately, it has been possible to determine that perceiving is an action without specifying the nature of an action any more fully than saying that it is something we do, and therefore something we can control. An overview of the various theories of what distinguishes an action from an event can be found in Shaffer, Philosophy of Mind, pp. 77–110. For specific developments of these theories see: Antony Kenny, Action, Emotion and Will (London: Routledge & Kegan Paul, 1963), pp. 151–170; A. T. Melden, Free Action (London: Routledge & Kegan Paul, 1961); Richard Taylor, Action and Purpose (New York: Humanities Press, 1973); the articles by Arthur C. Danto, Donald Davidson, Daniel Bennett, and P. J. Fitzgerald in Norman S. Care and Charles Landesman, eds., Readings in the Theory of Action (Bloomington & London: Indiana University Press, 1968); and the articles by P. T. Geach, Nicholas Rescher, Richard Taylor ("Thought and Purpose") and Roderick Chisholm ("Freedom and Action") in Myles Brand, ed., The Nature of Human Action (Glenview, Illinois; Scott, Foresman
Alan R. White has pointed out that the taking of an action is an act. Since it is the doing of something rather than what is done that now interests us, I shall speak of perceiving as an act instead of an action. Having established that perceiving is an act, we can now go on to ask how long it lasts.

3.2 Perceiving Is an Achievement

According to Ryle "perceive" and its determinates "see," "hear," "taste" and "smell" are not task but achievement verbs. Achievements are not acts but the fact that particular acts have had certain results (C of M, p. 144). In Dilemmas Ryle supports his contention that perceptual verbs signal achievements by citing Aristotle's claim that one can say "I have seen it" as soon as one can say "I see it." He writes:

Seeing and hearing are not processes. Aristotle points out, quite correctly (Met. IX, vi. 7-10) that I can say 'I have seen it' as soon as I can say 'I see it'. To generalize the point that I think he is making, there are many verbs part of the business of which is to declare a terminus. To find something puts 'Finis' to searching for it; to win a race brings the race to an end. Other verbs are verbs of starting. To launch a boat is to inaugurate its career on the water; to found a college is to get it to exist from then on. Now starting and stopping cannot themselves have starts or stops, or, a fortiori, middles.either. Noon does not begin, go on and finish...It cannot itself go on for a time.


however short. It is a process or a state.

It will, I think, be apparent why, with certain reservations, verbs which in this way declare termini cannot be used and are in fact not used in continuous present or past tenses...I can be looking for or looking at something, but I cannot be seeing it. At any given moment either I have not yet seen it or I have now seen it. The verb 'to see' does not signify an experience, i.e. something that I go through, am engaged in. It does not signify a sub-stretch of my life-story.27

There are, however, serious objections to Ryle's contention that "perceive" and its determinates are usually achievement verbs. First, R. J. Hirst has shown that Ryle has misinterpreted Aristotle.

He was distinguishing between 'processes' (kinesis) directed to some end outside themselves and 'activities' (energela) which are ends in themselves. He meant 'end' (telos) in the sense of 'goal' not 'terminus', and his argument is not concerned with instantaneity but is to show that an 'activity' may continue indefinitely. One can at the same time say 'I see' and 'I have seen' because having seen does not prevent one seeing; one cannot say 'I am learning' and 'I have learned' because having learnt X prevents your still being in the process of learning it. In thus claiming seeing is an 'activity' not a 'process' Aristotle is using the same linguistic point to support a radically different conclusion from Ryle's. Aristotle's 'activities' may last a long time, as is seen by his other examples 'we think and have thought' or 'we are living well and have lived well, and could mostly be described in the continuous present if Greek had one....28

Secondly, Don Locke has shown that the analogy Ryle suggests between "see" and "win" does not exist. He points out that "although it is true that we can say 'I have seen it' as


soon as we can say 'I see it,' it is also true that I can say 'I have seen it, and I still see it' in a way we cannot say 'I have won it, and still win it.'" 29 Similarly, F. N. Sibley has argued that "see" need not always be an achievement verb since we can always ask, "Did you see it for long?" 30 Finally, Sibley shows that in reaching the conclusion that all perceptual verbs are achievement verbs, Ryle has restricted himself to what Sibley calls guest verbs, such as "look for" or "listen for," and overlooked scrutiny verbs like "look at" and "listen to" (Sibley, p. 128).

Zeno Vendler has proposed a classification of verbs based not on considerations of success as Ryle's is, but on tense-criteria. 31 First Vendler separates verbs that possess continuous tenses from those that do not. Within the first group he distinguishes verbs that have "no set terminal point...which has to be reached if the action is to be what is claimed to be" from those which do have such a terminal point, and he calls the former activity terms and the latter accomplishment terms (Vendler, pp. 145-146). Turning next to verbs that do not possess continuous tenses, Vendler observes that although these verbs "do not indicate processes going on in time, yet they may be predicated of a subject for a given time with truth or falsity." This allows him to make a distinction within this group of verbs between those that can only be predicated for a single moment of time, and those that can be predicated for longer periods of time. The former he calls achievement terms; the latter state terms.


With regard to perceiving, Vendler classifies "seeing" as an achievement in one sense and a state in another (Vendler, pp. 154-157). His ground for calling one sense of "seeing" an achievement is the possibility of saying such things as "At that moment I saw him." His ground for saying that the other sense of "seeing," for example "I saw him running," is a state rather than a process, is that "seeing" cannot be a process because "What are you doing?" can never be answered by "I am seeing..." in good English. In other words, as Taylor points out, verbs of perception have the peculiarity that the same verb may stand both for an achievement and for a state: "The use of 'see' in which one may be said to see something at a moment may be regarded in certain cases as marking the beginning of a state of seeing something for a time, e.g. when one sees someone as soon as he turns the corner and goes on seeing him as he comes up the road." 

If a perceptual verb can stand for an achievement at one time and a state at another, the question arises as to the

32In Chapter Eight of Action, Emotion and Will Antony Kenny also uses tense-criteria to distinguish three types of verbs of action, namely static, activity, and performance-verbs. He calls verbs which do not have continuous tenses static verbs. He divides verbs that do have continuous tenses into two classes: those verbs for which "A is ρing" implies "A has not ρed" he calls performance-verbs, and those verbs for which "A is ρing" implies "A has ρed" he calls activity verbs (Cf. pp. 172-173). Vendler's distinction between activity and accomplishment-terms corresponds roughly to Kenny's distinction between activity and performance-verbs, and his distinction between achievement and state terms represents a further subdivision within Kenny's static verbs. For further discussion of Kenny's distinctions see Timothy C. Potts, "States, Activities and Performances," and C. C. W. Taylor, "States, Activities, and Performances," Proceedings of the Aristotelian Society, Supplementary Volume, XXXIX (1965), 65-84 and 85-102 respectively. Kenny claims that his "performances correspond to Aristotle's kinesis and both states and activities to energeia (Metaphysics 1048b 18-36)" (Kenny, Action, Emotion and Will, p. 173 n.2). (I have transliterated the two words he writes in Greek). On these two terms see J. L. Ackrill, "Aristotle's Distinction between Energeia and Kinesis," in Renford Bambrough, ed., New Essays on Plato and Aristotle (London: Routledge & Kegan Paul, 1965), pp. 121-141.

relation between achievements and states of perceiving. In *A Materialist Theory of the Mind*, Armstrong points out that seeing an unchanging scene should be analyzed as a series of events, since perceptual beliefs are relativized temporally, and hence a new belief is acquired as the time-frame changes (MTM, p. 214). In other words, Armstrong is suggesting that we analyze "Jones saw Smith sitting in the chair" into a series of events like "Jones saw Smith sitting in the chair at T₁," "Jones saw Smith sitting in the chair at T₂," and so on. Since the only difference between an achievement and a state, as we have defined them, is the length of time for which the verb can be predicated of the subject, it does seem plausible to regard a state of perceiving as a series of perceptual achievements. It may be thought that the fact that an achievement verb is predicated for only a moment presents a problem since a series of points will not yield a continuum. It will be recalled, however, that perception includes sensory processing, and since sensory processing is not instantaneous, the achievement sense of "see" cannot be either. Thus the time at which a verb is predicated of the subject should be understood to refer to a moment rather than an instant of time. Since the state of perceiving can be understood as a series of perceptual achievements, and since the vast majority of perceptual scenes are changing rather than unchanging, I shall restrict myself to the achievement sense of perceptual verbs from now on.

4. Propositional Perceiving Is Intentional

When we asked in the last division of this part of the essay whether sensing is or is not intentional, we first discovered that to be intentional is to be about something. We also saw that various tests have been proposed to determine whether or not an event, state, or process is about something. We noted that the first step is usually to shift the focus of discussion from phenomena to talk about phenomena. It is then claimed that a sentence is intentional if and only if one of its verbs is intentional. At that point we noted that there are two kinds of verbs, namely intransitive and transitive verbs, and that only transitive verbs can be intentional. The next important step is to recognize the distinction between verbs that take propositions as their objects, and verbs that take names or descriptions as their objects. Let us follow Gregory Lycan in referring to the former type of verbs as p-verbs and the latter type of verbs as o-verbs. **I** have already drawn attention to the fact that perceptual verbs are of both types. In the following section a situation will arise that will lead us to postpone consideration of

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nonpropositional perception until the third part of this essay. In light of this I shall limit my discussion of intentionality to p-verbs at this time and postpone the question of whether q-verbs are intentional to Part III of the essay.

Chisholm has proposed the following linguistic criteria as tests for intentionality.

1. A simple declarative sentence is intentional if it uses a substantival expression—a name or description—in such a way that neither the sentence nor its contradictory implies either that there is or that there isn't anything to which the substantival expression truly applies.
2. Any noncompound sentence which contains a propositional clause... is intentional provided that neither the sentence nor its contradictory implies either that the propositional clause is true or that it is false.
3. Suppose there are two names or descriptions which designate the same things and that E is a sentence obtained merely by separating these two names or descriptions by "is identical with".... Suppose also that A is a sentence using one of those names or descriptions and that B is like A except that, where A uses the one, B uses the other. Let us say that A is intentional if the conjunction of A and E does not imply B (Per, pp. 170-171).

Since we are defining intentionality by reference to the 'aboutness' of phenomena, rather than whether or not what the phenomena is about exists, it is obvious that we cannot accept Chisholm's first criterion. Furthermore, whether a proposition is true or false depends on whether or not the state of affairs the proposition refers to exists. Hence we cannot accept Chisholm's second criterion either. Fortunately, the third criterion is not open to this objection. Moreover, it was introduced specifically to show that cognitive sentences are intentional, and it is in cognitive sentences that perceptual verbs occur.

The third criterion says that the substitution of co-referential expressions fails in intentional sentences. This situation is commonly referred to as "referential opacity." Assuming for the moment that the third criterion is acceptable, the next step is to determine whether cognitive sentences in which perceptual verbs occur are referentially opaque. The CN Tower is the tallest free-standing structure in the world. Nevertheless, "The CN Tower is identical with the tallest free-standing structure in the world" and "Jones perceives that the CN Tower is made of concrete," do not
imply "Jones perceives that the tallest free-standing structure in the world is made of concrete." Therefore, if referential opacity is an acceptable test for intentionality, "perceives" is an intentional verb. There is, however, an objection to the claim that referential opacity in cognitive sentences is a mark of intentionality.

The objection is that referential opacity is also a mark of intensionality.35 It seems, then, that we will either have to discover a different mark of intentionality or treat intentional sentences as a sub-class of intensional sentences. The first alternative has been followed by Chisholm who has proposed a certain set of logical relationships as a mark of intentionality.36 However, this mark does not seem to be acceptable either.37 We seem, therefore, to be forced back


to the second alternative mentioned above, namely the view
that intentional sentences are a sub-class of intensional
sentences. However, if we take this approach we are faced
with the problem of distinguishing among intensional sentences
those that are intentional from those that are not. In
particular, we are faced with the fact that there are ethical
sentences in which "ought" occurs and modal sentences in which
"necessary" occurs which are intensional but not intentional.
The best solution to this problem seems to be to stipulate
first, that an intentional sentence be of the grammatical
form subject-verb-object (where "object" is understood in a
broad enough sense to include a propositional clause), and
secondly, that the subject be either a person or an animal.
These two stipulations would seem to distinguish intentional
sentences from both ethical and modal sentences. If so then
we are free to conclude that perceiving is intentional.

5. Propositional Perceiving Is Cognitive

While discussing sensation I argued that an additional
characteristic should be added to Reid's list, namely that
sensing is noncognitive. In order to see whether perceiving
contrasts with sensing in this respect, we must determine
whether perceiving is cognitive. We decided earlier that an
attitude is cognitive if and only if it (1) has a content
which is true or false, (2) takes up a position with respect
to this content, and (3) has the potentional of being
warranted. At that time we saw that sensing is noncognitive
because its content is a term, and a term cannot be either
true or false. Propositional perceiving, on the other hand,
is clearly cognitive by this definition. First of all, we
shall see in the next section but one that the content of
propositional perceiving is a proposition, and hence is the
kind of thing which can be true or false. Moreover, proposi­
tional perceiving takes a position with respect to this con­
tent, because otherwise it could not be mistaken. Finally,
propositional perceiving clearly has the potential of being
warranted. I conclude, therefore, that propositional
perceiving is cognitive.

6. Propositional Perceiving Can Be Mistaken

In A Materialist Theory of the Mind, Armstrong points out
that "'seeing that' has 'success-grammar'" (MTM, p. 227).
By this he means that "in speaking of 'seeing that' it is
entailed that the belief acquired is true." Now the important
point to notice is that it does not follow from this that
propositional perceiving cannot be mistaken. All that follows
is that the word "that" should not be included in our
definition of propositional perception. In other words,
"seeing that" has success-grammar because of the word "that"
rather than the word "see." That this is so is evident from the fact that although it is odd to speak of "mistakenly seeing that the road is wet," there is no oddness if we speak instead of "mistakenly seeing the road to be wet."

Granted that propositional perceiving can be defined in such a way that it can be mistaken, it may be asked whether propositional perceiving is in fact ever mistaken. The answer to this question is that it is indeed the case that propositional perceiving is sometimes mistaken. We do perceive the road to be wet when it is dry, we do speak of "misperceiving," and so on. Nor is the notion that perceiving can be mistaken just held by ordinary man. The philosophical distinction between veridical and nonveridical perception clearly presupposes that some perception is mistaken. I believe it is clear, therefore, that propositional perceiving can be mistaken.

The fact that propositional perceiving can be mistaken is a crucial premise in the argument to show that perceiving is assentive. We have seen that perceiving is non-adverbal and unconscious, but these characteristics are not directly relevant to showing that perceiving is assentive. The fact that perceiving is an act is more relevant, but even so it does not immediately follow that perceiving is assentive because there are other mental acts besides assenting. The fact that perceiving is intentional is also relevant to showing that perceiving is assentive, but once again it does not directly follow that perceiving is assentive because some intentional attitudes, for example desiring, are non-assentive. The fact that perceiving is cognitive is the characteristic that is most relevant to my argument. We have seen, however, that we cannot infer from this alone that perceiving is assentive, because although a cognitive attitude must take up some position with respect to its content, this position need not be an assentive one. In the next part of this essay, however, I shall argue that it does follow from the fact that perceiving can be mistaken that it is an assentive attitude. Moreover, it will then be clear that the facts that perceiving is an act, intentional, and cognitive have an important role to play in this argument, since they determine the nature of perceptual error. But before we turn to that argument, some additional groundwork must be laid.

I have discussed them because they are indirectly relevant to this task, and also because they are directly relevant to the task of determining what the assentive attitude in perception is, which task I hope to address in a subsequent essay.
7. Propositional Perception Involves an Assentive Attitude

I shall begin my discussion of this characteristic of perception by identifying the content of propositional perception. Then I shall say something about the attitude in propositional perception. Finally, I shall conclude by offering a definition of propositional perception.

7.1 The Content of Propositional Perception

It will be recalled that we have said that the content is what is referred to by the "-ed" form of a word. This means that the content of propositional perception is what is perceived. Since we are concerned with propositional perception, let us take as our example "Jones perceives the tree to be green," or more formally "S perceives x to be F." Since we are attempting to identify the content of propositional rather than nonpropositional perception, we should speak of the content as a state of affairs rather than an object, since a proposition refers to a state of affairs. To speak of a state of affairs is, of course, to speak in the material mode. We have found it convenient, however, to speak in the formal mode. If we do, then we can say that the content of propositional perception is a proposition, since it is a proposition that refers to a state of affairs.

In the last division of this essay we saw that the content of sensation is a term, f. In the last paragraph I pointed out that the content of propositional perception is the proposition "x is F." It is important to recognize the differences and similarities between the content of sensation and the predicate of the content of propositional perception. I have used a lower case letter to symbolize the former, and an upper case letter to symbolize the latter, to mark an important difference: the former refers to a sensible characteristic, whereas the latter refers to an objective property.39 On the other hand, I have used the same letter of the alphabet to symbolize both the content of sensation and the predicate of the content of propositional perception because there is an obvious link between the two. The link consists in the fact that under standard conditions the objective property F causes the normal observer to sense f. Given this relationship it is apparent that the content of sensation finds expression in the predicate of the content of propositional perception.

39 One philosopher who explicitly makes this distinction is C. I. Lewis. See Mind and the World Order (New York: Dover, 1929), pp. 121-123. Chisholm's distinction between the noncomparative and comparative use of appear words seems to coincide with the distinction between sensible characteristics and objective properties.
It follows that the subject of the proposition which is the content of propositional perception is not sense-given. I shall not say anything further about the subject of the proposition since doing so would not shed light on the question of whether or not perception involves an assentive attitude. Nevertheless, it is important to draw attention to this element of the content of propositional perception for without it there could be no external or objective reference and hence no perception. Since we are reasonably clear about the content of propositional perception, we can now attempt to characterize the attitude.

7.2 The Attitude in Propositional Perception

We know that there is an attitude in perception because of the way we have defined the word "attitude." This does not take us very far, however, because there is also an attitude in sensation. What we need to do, therefore, is to distinguish the attitude in perception from the attitude in sensation. We have seen that the attitude in sensation is a nonpropositional one because its content is a term rather than a proposition. Moreover, because an assentive attitude is a species of propositional attitude, we also know that the attitude in sensation is non-assentive. The attitude in perception, on the other hand, is a propositional attitude since its content is a proposition. The important question is whether the attitude in perception is also an assentive attitude. We have seen that three important characteristics of perceiving are the facts that it is an act, intentional, and cognitive. But we have also seen that we cannot infer from any of these characteristics that perceiving is assentive. I have suggested, however, that we can argue from the fact that perceiving can be mistaken that it is an assentive attitude. That argument will occupy us in the next part of this essay. Before proceeding to that argument, however, one other task must be accomplished, namely setting out a formal definition of propositional perception.

7.3 A Definition of Propositional Perception

We saw in the last section that if we wish to maintain that propositional perceiving can be mistaken, we cannot express the content of perception by a that-clause. If we wish to define propositional perceiving in such a way that it can be mistaken, we will also wish to depart from Chisholm's definition of propositional perceiving in one respect. Chisholm holds that "there is something that S perceives to be f" means:

(a) there is an x which is f;
(b) x appears in some way to S;
(c) S takes x to be f; and
(d) S has adequate evidence for the proposition that x is f (Per, p. 3).

Clearly, if we are to hold that propositional perceiving can be mistaken, we must not incorporate Chisholm's first condition in its present form into our definition. One possibility would be to change the condition so that it reads: "there is an x which has some property." Moreover, instead of holding that appearing is a species of sensing as Chisholm does, I have adopted the view that sensing is a species of appearing.

In light of these points I propose the following preliminary definition. "S perceives x to be F" if and only if:

(i) There is an x which has some property;
(ii) S senses f;
(iii) S adopts an assentive attitude to the proposition, "x is F";
(iv) S is warranted in adopting an assentive attitude to the proposition, "x is F."

By phrasing (iii) and (iv) as we have we avoid the success-grammar of which Armstrong spoke, and by modifying Chisholm's first condition we have defined "S perceives x to be F" in such a way that it can be mistaken. From our point of view, the interesting element in this definition is the claim that propositional perception involves the adopting of an assentive attitude toward the content of the perception. As I have already indicated, my argument for thinking that this must be the case will be developed in the next part of this essay. However, before turning to that task something needs to be said about the relation between sensation and perception.

D. The Relation between Sensation and Perception

Reid held that the relation between sensation and perception was one of suggestion. "We all know, that a certain kind of sound suggests immediately to the mind a coach
passing in the street; and not only produces the imagination, but the belief, that a coach is passing" (Inquiry, p. 38). Reid's conception of the relation between sensation and perception clearly assumes that the former precedes the latter. I pointed out above, however, that the phenomenological evidence indicates that sensation accompanies rather than precedes perception. Now if sensation accompanies rather than precedes perception, then the relation between the two clearly cannot be one of suggestion as Reid claims, since it seems clear that if sensation suggests perception it must precede perception. It is equally clear that the relation between sensation and perception cannot be an inferential one for the same reason. Nevertheless, I shall discuss the view that the relation between sensation and perception is an inferential one because historically this view has had an important bearing on the question of whether or not there is an assentive attitude in perception. After I have argued that the relation between sensation and perception is not an inferential one, I shall attempt to show that the relation is one of justification.

1. The View that the Relation between Sensation and Perception Is an Inferential One

In the first part of this section I shall explain Helmholtz' version of the view that the relation between sensation and perception is an inferential one. Then in the second part of this section I shall consider some objections to this type of view. However, before attempting either of these tasks it may be helpful to say something about the bearing the view that the relation between sensation and perception is an inferential one has on the question of whether or not there is an assentive attitude in perception.

On the one hand, some philosophers have argued that the relation between sensation and perception is an inferential one and have then gone on to assume that it follows that perception involves an assentive attitude. This approach seems to be taken by Brand Blanshard, since he conceives of inference as "a process of arriving at judgement from grounds." I noted earlier that in some contexts "judgment" is ambiguous.

Reid's notion of suggestion has been discussed by P. G. Winch, "The Notion of 'Suggestion' in Thomas Reid's Theory of Perception," Philosophical Quarterly, III (1953), 327-341; Timothy Duggan in his Introduction to Reid's Inquiry, pp. xxxv-xl; and Hamlyn, S & P, pp. 127-130.

between what is judged, which I have spoken of as its content, and the act of judging, which I have called its attitude.

It is clear from his definition of perceptual judgment (N of T, p. 116) that Blanshard thinks that perception involves judgment in both its content and attitudinal sense. Now the point to be noticed is that if perception does involve inference, it will not necessarily follow that perception involves judgment in its attitude sense, because inference can occur without an assentive attitude being adopted to either its premises or conclusion. For example, if the attitude I adopt to the premises of an inference is only one of supposition, then the only attitude I am warranted in adopting to the conclusion is one of supposition. And in general, I can only adopt an assentive attitude to the conclusion of an inference if I have assented to the premises.

It has seemed clear to other philosophers, however, that the relation between sensation and perception is not an inferential one, and they have gone on to argue that it follows that there is no assentive attitude in perception. Hirst, for example, argues that perception does not involve judging on the ground that "judgment" has "a strong suggestion of consideration or at least awareness of the evidence for what one is judging," and he thinks the latter is absent in perception (P of P, p. 229). Here the point to be noticed is that if perception does not involve inferring, it only follows that perception does not involve an assentive attitude either, if the assentive attitude in question must be the conclusion of an inference.

I mention these points for two reasons: first, so that it will be clear that whether or not perception involves an assentive attitude does not follow from just the fact that perception does or does not involve inference, and secondly, to show that, nevertheless, the independence of these two claims has not always been recognized.

1.1 Herman von Helmholtz' Version of the View that the Relation between Sensation and Perception Is an Inferential One

Certainly the most frequently alluded to proponent of the view we are considering is the German psychologist, Hermann von Helmholtz. In volume III of his Physiological Optics Helmholtz writes: "...it is obvious that we can never emerge from the world of our sensations to the apperception of an external world, except by inferring from the changing sensation that external objects are the causes of this change."

Helmholtz describes this inference in these terms. "The psychic activities that lead us to infer that there in front of us at a certain place there is a certain object of a certain character, are generally not conscious activities, but unconscious ones. In their results they are equivalent to a conclusion, to the extent that the observed action on our senses enables us to form an idea as to the possible cause of this action;...But what seems to differentiate them from a conclusion, in the ordinary sense of that word, is that a conclusion is an act of conscious thought....Still it may be permissible to speak of the psychic acts of ordinary perception as unconscious conclusions, thereby making a distinction of some sort between them and the common so-called conclusions" (TPO, p. 4). In his later works Helmholtz refers to these psychic activities as unconscious inferences.

Helmholtz frequently draws a parallel between unconscious inference and inductive generalization. The two notions are not exactly parallel, however. Beside the fact that inductive generalization is usually conscious whereas the inference involved in perception is not, Helmholtz mentions two other differences. One is that the latter type of inference occurs much more rapidly than the former--a difference Helmholtz thinks is unimportant (TPO, p. 26). The other difference is that "the former inferences are capable of expression in words, while the latter are not, because instead of words they only deal with sensations and the memory of sensation." With respect to this difference Helmholtz concedes that knowledge which can be communicated by speech (Wissen) has some advantages over mere acquaintance with phenomena (Kennen), but he holds that the latter is knowledge nonetheless. With this account of Helmholtz' theory of unconscious inference before us as an example, we are now in a position to decide whether the relation between sensing and perceiving is an inferential one.  


45 A more recent version of the claim that the relation between sensation and perception is an inferential one can be found in Brand Blanshard, N of T, pp. 178-220. Gilbert Harman also holds that perception involves inference, but he thinks that the ultimate data from which we infer are sensory stimulations rather than the contents of sensation. See his Thought (Princeton, New Jersey: Princeton University Press, 1973), pp. 173-188. In addition to the works cited in the text see also: George Pitcher, A Theory of Perception (Princeton University Press, 1971), pp. 96-112; W. D. Joske, "Inferring and Perceiving," Philosophical Review, LXXII
1.2 Objections to View that the Relation between Sensation and Perception Is an Inferential One

We have seen that according to Helmholtz sensations are not capable of expression in words. Inference, however, is typically defined as "a process by which one proposition is reached and affirmed on the basis of one or more other propositions accepted as the starting point of the process." Given Helmholtz' definition of sensation and this definition of inference, it follows that the relation between sensation and perception is not an inferential one, because according to Helmholtz a sensation cannot be expressed in words and hence, we may assume, is not propositional. However, we often ascribe states of sensation to ourselves, and since the contents of these ascriptions are propositions it may be argued that the relation between sensation and perception is inferential once these ascriptions are introduced. However, there are two objections to saying that the relation between sensation and perception is inferential even in this loose sense.

The first objection draws attention to the fact that when we perceive we are not conscious of the way we are appeared to as such. This objection is stated in general terms by Hirst as follows. "For there to be inference or interpretation the percipient must not only be aware of a sensory datum; he must also be fully conscious of it, or else no intelligent, quasi-intellectual process occurs, and he must be aware of it as distinct from the object or properties whose existence is the alleged conclusion of his reasoning. But introspection shows that we are never normally aware in perception of any such distinct sensory given; our consciousness is simply of objects possessing various properties, not of sensations or sense-data." 47


In defense of the view that the relation between sensation and perception is an inferential one, Blanshard has argued that we need be only implicitly conscious of the premises of an inference (N of T, p. 89). Later Blanshard explains what he means by "implicit." "It is sometimes said that an old sailor knows implicitly when a storm is approaching, or that one has implicit grounds for thinking so-and-so untrustworthy. In such cases there is pretty clearly something present in experience which serves as ground, even though it may be very difficult for the judger to say what it is. One may be aware of something and use it as a ground without singling it out for full and specific attention. This is our sense of the term" (N of T, p. 96).

In discussing this objection it will be helpful to distinguish two senses of the phrase "is the basis of." Let us say that in one sense of the phrase "is the basis of," if \( x \) is the basis of \( y \), \( x \) must be the same type as \( y \), but let us say that this need not be the case in the other sense. Furthermore, let us stipulate that in the sense of "is the basis of" in which \( x \) must be the same type as \( y \) that \( x \) provides evidence for \( y \), and let us say that in the sense of "is the basis of" in which \( x \) need not be of the same type as \( y \) that \( x \) justifies \( y \). In light of these distinctions I think it is clear that premises of which we are only implicitly conscious may justify a conclusion of which we are explicitly conscious, but they do not provide evidence for it. Moreover, I think it is clear that the sense of "is the basis of" required by the definition of inference is the sense in which it means to provide evidence for, because a premise can hardly be "accepted as the starting point of the process" if we are not explicitly conscious of it. It seems to me, therefore, that the objection that we are not conscious of the premises of alleged perceptual inferences raises a valid point.

A second objection to the view that the relation between sensation and perception is inferential draws attention to the
fact that we are not conscious of the alleged inference in perception. Several philosophers have denied that perception involves inference on the ground that we are not aware of making any inference. Price, for example, writes: "If we are not conscious of inferring, what evidence is there that we do infer at all?" (Price, p. 67). In reply Blanshard points out that what counts is the fact of the passage, not our awareness of it. He writes: "...the essential thing about inference is not the conspicuousness of the stepping-stones but the fact of the passage, and if the passage is actually made, though on stones that are submerged, it is better called inference through implicit steps than not inference at all" (N of T, p. 96).

Since both Price and Blanshard share the view that there is a transition between sensation and perception, their dispute is basically a terminological one. And since the process by which one proposition is reached on the basis of other propositions typically involves reflection and deliberation, I think we have to side with Price on this question.

Thus the view that the relation between sensations and perception is an inferential one is clearly unacceptable. It does not follow, however, that there is no sense in which perception is based on sensation, and in the next section I shall try to spell out an acceptable sense in which perception may be said to be based on sensation.

2. The View that the Relation between Sensation and Perception Is One of Justification

I suggested earlier that it is useful to make a distinction between evidence and justification, such that if $x$ is evidence for $y$, $x$ must be the same type as $y$, whereas this need not be the case if $x$ justifies $y$. At the same time I said that inference is a species of evidence rather than justification. Thus this distinction provides us with one way of distinguishing justification from inference. Another way of distinguishing justification from inference is suggested by the way Chisholm proceeds. Although Chisholm denies that perceiving involves inference (Per, pp. 77, 158), he does have a chapter called "Justification and Perception." In this chapter he explains how a perceptual claim can be defended by reference to independent information and statements about how one is appeared to, where the latter statements are understood noncomparatively. The difference between justifying and inferring that this way of proceeding suggests is that whereas the latter is something one is alleged to do when one perceives, the former is something one can do if one's
perceptual claim is challenged.\(^{48}\) We have seen that the relation between sensation and perception does not seem to be an inferential one because: first, sensation does not have a propositional content; second, even if a propositional content is introduced we are not aware of it in the same way that we are aware of perception; and third, we are not conscious of any inference between sensation and perception. If we distinguish inference and justification as I have just suggested, then I think we can say that the relation between sensation and perception is one of justification without being open to any of these objections.

First, if \(x\) need not be the same type as \(y\) to justify \(y\), then although the fact that the content of sensation is a term rather than a proposition means that the relation between sensation and perception cannot be an inferential one, it is quite acceptable to say the relation is one of justification. Secondly, if \(x\) need not be the same type as \(y\) to justify \(y\), then although the fact that we are not conscious of sensation in the same way we are of perception means that the relation between sensation and perception cannot be an inferential one, once again it is quite acceptable to say that the relation is one of justification. Finally, if justifying is something we can do whereas inferring is something we are actually doing, then although the fact that we are not conscious of any transition between sensation and perception is an objection to saying that the relation is one of inference, it is not an objection to saying that the relation is one of justification.

In this part of the essay I have presented a theory of perception that will provide a foundation for the discussions to follow. In particular, I have distinguished three aspects of perception, namely sensory processing, sensation, and assenting to the proposition that gives the content of sensation external reference. As yet no argument has been advanced to show that there is an assentive attitude in perception. However, I have suggested that a certain characteristic of

\(^{48}\)The way Blanshard sometimes defends the inference theory suggests that he may be overlooking the difference between inferring and justifying. Speaking of those who hold the inference theory, he says: "What they have held, I take it, is this, that one can see on later reflection that three terms must have been implicitly present even though not singled out, and that the passage between them was effected in a way which, if the process has been explicit, we should have called syllogistic" (N of T, p. 89).
perceiving can only be explained if perceiving is assentive. The characteristics of perceiving were exposed by contrasting perceiving with sensing. The characteristics of perceiving that we discovered were that perceiving is non-adverbial, unconscious, an act, intentional, cognitive, and can be mistaken. One important decision we made while discussing the fact that perceiving is cognitive was to postpone the discussion of nonpropositional perceiving until part three of the essay. The most important characteristic of propositional perceiving for the purpose of showing that it is an assentive attitude is the fact that it can be mistaken. In the next part of the essay we shall see how the other characteristics of perceiving determine the nature of perceptual error, and I shall argue that perceptual error can only be explained if perceiving is an assentive attitude.

Part II: Misperceiving and Assenting

The thesis I am attempting to establish in this essay is that, in addition to sensory processing and sensing, perception involves an act of assent. In Part I of the essay I noted that "perception" is ambiguous between perceiving and what is perceived, and I called the former its attitude and the latter its content. If we adopt this terminology, then our task can be described as showing that perceiving is an assentive attitude. In Part I of the essay I also argued that, among other things, perceiving is an act, intentional and cognitive. We noted at that time, however, that it does not follow from the fact that perceiving has these characteristics that it is assentive. On the other hand, we also saw that perceiving can be correct or mistaken, and I suggested that it does follow from the fact that perceiving has this characteristic that it is assentive. The time has now come to develop this suggestion. It will be convenient, however, to focus our attention on just the fact that perceiving can be mistaken because, as Leo W. Keeler has observed, "in error one has the act of assent, as it were, in isolation, there being no apprehension of what is assented to, with which to confuse it."49 There are two divisions in this part of the essay. In the first division I shall argue that perceiving cannot be mistaken unless it is a committive attitude. In the second division I shall offer a classification of attitudes, and I shall argue that the only kind of attitude that is committive, cognitive, intentional, and an act is assent.

A. Misperceiving

From Part I of the essay we know that our only hope of

showing that perception involves assent is to focus on the fact that perceiving can be mistaken. I would now like to suggest that there are two conditions which must be met in order for any cognitive attitude to be mistaken. The first condition is that the content to which the attitude is directed must be false. Now the point I wish to draw attention to is that being directed to a false content is not sufficient to make an attitude mistaken. This is clear from the fact that one can entertain a false proposition without one's attitude being thereby mistaken. The only way a cognitive attitude can be mistaken is if it involves commitment to a false content. In short, only a committive attitude to a false proposition is mistaken. (Of course a denying attitude to a true proposition is also mistaken, but I shall not discuss this alternative because the principle is the same.) Now since we know both that perceiving can be mistaken and that to be mistaken an attitude must be committive, it follows that perceiving is committive. The next step will be to argue that the only committive attitude that fits perception is assent. However, before embarking on the second half of the argument, certain refinements need to be made to the first half of the argument. These refinements involve getting clearer about the nature of misperceiving.

Let us take as our example "Jones misperceives the road to be wet." Instead of saying "Jones misperceives the road to be wet" we could say "Jones falsely perceives the road to be wet," "Jones mistakenly perceives the road to be wet," or "Jones wrongly perceives the road to be wet," or "Jones erroneously perceives the road to be wet." "Falsely" is probably the least natural and "mistakenly" the most natural word in this context, but at any rate false, mistaken, wrong, and erroneous seem to be species of the same genus. It will now be helpful to make some distinctions between "false," "mistaken," "wrong," and "erroneous" in order to enable us to determine the nature of misperceiving more accurately. (The positive correlates of these terms are "true," "correct," "right," and "sound."). We have seen that not only can perceiving be mistaken, it is also an act, intentional, and cognitive. The distinctions I shall now propose between "false," "mistaken," "wrong," and "erroneous" will be based on the fact that perceiving, and therefore misperceiving, have these three characteristics. I think that these distinctions are at least implicit in ordinary usage. However, if the reader is not convinced that they are, he may regard them as stipulations.

1. Misperceiving Is Mistaken, Wrong, or Erroneous Rather than False

In The Nature of Thought Blanshard offers the following argument to show that there is an assentive attitude in perception: "...unless perception involves judgement, it cannot
intelligibly be true or false; the fact that perception may obviously be either has made the presence in it of judgement an inevitable conclusion" (N of T, p. 107). There are two interesting passages in The Problem of Perception where Hirst criticizes Blanshard's claim that perception is judgmental. The first is this: "Truth is a relation between statements or propositions and the world they are about, or perhaps between them and other propositions, but not between activities and the world. Hence it is the propositions to which perception may lead, the statements of what we see, that are true or false; but perceiving itself is correct or proper, terms which apply equally to other activities which are much less likely to be confused with judgment, e.g. playing the piano, serving at tennis, tying reef knots or dealing cards" (P of P, p. 233). The second is this: "Misperceptions...need not be regarded as misjudgments, as the wrongful joining of subject A with predicate B;...All that is required is the fusion of the wrong conceptual element with the sensory one due to the object" (P of P, p. 244). I shall consider the second passage when I argue that misperceiving is erroneous rather than wrong. There are three interesting points in the first passage. The third point Hirst makes in the first passage, namely that not all activities need be assentive in order to be misdone, will be taken up when I argue that misperceiving is wrong or erroneous rather than mistaken. The second interesting point in this passage is Hirst's suggestion that propositions are not the content of perception but rather the content of the supervenient description of what was perceived. I shall postpone discussion of this point until after I have addressed his main contention in this passage.

Hirst's main contention, namely that misperception is not false, rests on two claims: first, that the bearer of falsity is a proposition whereas the bearer of mistakenness is an activity, and secondly, that misperception is an activity. I think that Hirst is right when he says that the bearer of falsity is a proposition whereas the bearer of mistakenness is an activity. However, I also believe that an activity can be said to be wrong or erroneous as well as mistaken. Accordingly, the first distinction I would like to make among the four words we are considering is to say that propositions can be false but not mistaken, wrong, or erroneous, and that activities can be mistaken, wrong, or erroneous but not false. With regard to Hirst's claim that misperception is an activity, it must be recalled that we have distinguished an attitude and a content in perception. Since we are now dealing with propositional perception we know that the content of misperception is a proposition. Thus if we have the content of misperception in mind we will have to side with Blanshard against Hirst, because the content of misperception is false.
rather than mistaken, wrong, or erroneous. However, our main interest is in the attitude in misperception, and hence we should side with Hirst against Blanshard, because misperceiving is mistaken, wrong, or erroneous rather than false. Before attempting to be more specific about the nature of misperceiving, something should be said about the second point Hirst makes in the passage quoted above.

Hirst's second point was to claim that a proposition is not the content of a perception but rather of the supervenient description of a perception. What Hirst means by this becomes clearer when he writes a few sentences later: "...descriptions of what one sees may supervene on perceiving; but it would be a mistake to read back into the...perceiving the features of the supervenient activity." In terms of the theory of perception proposed in Part I, what Hirst is suggesting is that we should restrict the word "perception" to sensory processing and sensation, and speak of what I have called the content of perception as a later description of the perception. The problem with Hirst's suggestion is this: if perception is deprived of its content then perception is no longer cognitive. We have established, however, that perception is cognitive. Moreover, if perception has no content, and if, as I have suggested, the attitude in perception is a function of its content, then it follows that misperceiving cannot occur. However, we have seen that it does occur. I cannot agree, therefore, with Hirst that a proposition is the content of a later description of the perception rather than the content of the perception itself.

2. Misperceiving Is Wrong or Erroneous Rather than Mistaken

So far I have been arguing that when perceiving goes amiss we should say it is "mistaken," "wrong," or "erroneous" rather than "false" because perceiving is an act. We know from Part I of the essay that perceiving is not only an act, it is also intentional. I have adopted Brentano's definition of "intentionality" as "aboutness." I suggest that we restrict "mistaken" to those activities which are not intentional, and restrict "wrong" and "erroneous" to those activities which are. If we do, then misperceiving is wrong or erroneous, rather than mistaken. The fact that misperceiving is wrong or erroneous rather than mistaken is relevant to Hirst's third objection (in the first passage) to Blanshard's claim that perceiving is an assentive attitude. His third objection was this: "Perceiving itself is correct or proper, terms which apply equally to other activities which are much less likely to be confused with judgment, e.g. playing the piano, serving at tennis, tying reef knots or dealing cards." I think it is clear that although all these examples are activities, none of them are intentional. Thus, even if non-intentional activities do not
have to be assentive in order to be misdone, it does not
follow that perceiving is not assentive because perceiving
is an intentional activity.

3. Misperceiving is Erroneous Rather than Wrong

I have argued that a distinction should be drawn between
"mistaken," "wrong," and "erroneous" on the one hand, and
"false" on the other, in order to mark the fact that the
bearer of the former is an act, whereas the bearer of the
latter is a proposition. I have also argued that a distinc­
tion should be drawn between "wrong" and "erroneous" on the
one hand, and "mistaken" on the other in order to mark the
fact that some acts are intentional whereas others are non­
intentional. The final distinction I would like to draw is
between "erroneous" and "wrong" to mark the fact that some
intentional acts are cognitive whereas others are non-cogni­
tive. Not only perceiving, but also desiring and willing,
are intentional. However, the latter are not cognitive
whereas the former is. In order to distinguish intentional
activities that are cognitive from those that are not, I
suggest that we refer to the former as "erroneous" and the
latter as "wrong" when they go amiss.

Now the point I wish to stress is that being cognitive is
not a sufficient condition for misperceiving to occur, and
hence that misperceiving is not erroneous just because it is
cognitive. It may help to see this if we recall our defini­
tion of "cognitive." In the last chapter I said that an
attitude is cognitive if and only if it (1) has a content that
is true or false, (2) takes a position with respect to this
content, and (3) has the potential of being warranted.
According to this definition an attitude can be cognitive with­
out its content being true or the attitude itself being
committive. I think it is clear, however, that it is only
when the content of an attitude is false and a committive
position is taken with respect to that content that the attitude
is erroneous. In other words, it is only when a false content
is claimed to be true that error occurs. Thus, instead of
saying that a cognitive, intentional act is erroneous when its
content is false, what we should say is that a committive,
cognitive, intentional act is erroneous when its content is
false.

It should now be clear why the claim Hirst makes in the
second passage we quoted earlier is unacceptable. It will be
recalled that Hirst claimed that misperception need not be
regarded as misjudgment because misperception can be accounted
for merely by "the fusion of the wrong conceptual element with
the sensory one due to the object." Hirst may be correct in
claiming that the specific assentive attitude in perception
is not one of judging, but I think it is now evident that his
contention that fusion alone can account for misperceiving
is mistaken, because wrong elements may be fused in a
proposition one is entertaining without it being the case
that the attitude of entertaining is erroneous.

We have seen, then, that in order for misperceiving to
occur its content must be false and it must be a committive,
cognitive, intentional, active attitude. In the second
division of this part of the essay I shall argue that such
an attitude is assentive.

B. Assenting

The first task that must be accomplished if we are to
show that misperceiving is assentive is to determine how to
express assent to a proposition.

1. The Expression of Assent to a Proposition

There are two basic types of propositions: attributive
propositions and existential propositions. Let us take "The
tree is green" as our example of an attributive proposition,
and "The tree is" as our example of an existential proposition.
The first thing that immediately strikes us as we consider
these two propositions is that the verb "is" must have two
different functions in these two propositions. In the first
proposition "is" serves to indicate attribution, and in the
second proposition "is" serves to indicate existence. More­
over, further reflection suggests that "is" can have two
additional functions. First, it can indicate tense ("The
tree is green" instead of "The tree was green"), and second,
it can indicate assertion or assent ("The tree is green").
(Assertion or assent is different from attribution because I
can merely entertain an attributive proposition.)

In order to avoid confusion I recommend that we adopt
different words to represent each of the different functions
of "is." First, when "is" serves to indicate attribution, I
suggest that we replace it by the word "has." Thus "The
tree is green" becomes "The tree has greenness." When "is"
serves to indicate existence, the situation becomes more
complicated. The most natural thing to do is to replace
"The tree is" with "The tree exists." This will not do,
however, because the problems we are trying to avoid with
"is" reappear in "exists." Accordingly, I suggest that we
replace "The tree is" by the more awkward expression "The
tree's existing." Third, when "is" serves to indicate tense,
let us say so in so many words. Thus "The tree is green"
becomes "The tree has greenness, now." Finally, when "is"
serves to indicate assertion or assent let us spell this out
too. Thus "The tree is green" becomes "I assert 'The tree has greenness, now'".

In light of these distinctions it is now necessary to rewrite the definition of propositional perceiving we proposed in Part I. It will be recalled that we said in Part I that "S perceives x to be F" if and only if:

(i) There is an x which has some property;
(ii) S senses f;
(iii) S adopts an assentive attitude to the proposition, "x is F";
(iv) S is warranted in adopting an assentive attitude to the proposition, "x is F."

The distinctions we have just adopted suggest that we should say that "S perceives x to be F" if and only if:

(i) There is an x which has some property;
(ii) S senses f;
(iii) S adopts an assentive attitude to the proposition, "x has F, now";
(iv) S is warranted in adopting an assentive attitude to the proposition, "x has F, now."

2. A Classification of Attitudes

In the first division of this part of the essay I argued that perceiving must be a committive, cognitive, intentional act since it can be erroneous. I shall now argue that the only kind of attitude that is committive, cognitive, intentional, and an act is assent. In short, our task is to show that the only attitude that can be erroneous is assent.

Let us begin by considering speaking. What is the attitude of speaking when it is misdone? The attitude is not false because speaking is an act rather than a proposition. On the other hand, it is not wrong or erroneous because it is not intentional. Obviously, the answer is that the attitude of speaking is mistaken when it is misdone. Let us consider the attitude of desiring next. What is the attitude of desiring when it is misdone? In this case the attitude is not mistaken because the relation between desiring and what is desired is an intentional one. Nevertheless, the attitude is not erroneous because desiring is not cognitive. Desiring is wrong, therefore, when it is misdone. Perhaps the attitude we are looking for is that of entertaining. What is the attitude of entertaining when it is misdone? On the one hand, it is not false, mistaken, or wrong because it is a cognitive, intentional act. Moreover, its content could well be a false
prophecy. Is it erroneous, then, when its content is false? Clearly it is not, because although its content may be false the attitude makes no claim that its content is true. Thus in order to discover an attitude that can be erroneous we need to discover one which, in addition to having a false content and being cognitive, intentional, and an act, is committive. One attitude that fits this description is asserting. Not only is it a cognitive, intentional act whose content may be false, it is also committive. We are looking, however, for an attitude that has the same characteristics as perceiving and there is a certain lack of parallel between asserting and perceiving: asserting is a physical as well as mental phenomenon, whereas perceiving is a just a mental phenomenon. Thus, the attitude we are looking for must be mental as well as a committive, cognitive, intentional act whose content may be false. It seems to me that the attitude that best fits this description is assenting. I think it is clear that assenting is a mental phenomenon whose content may be false. It may not be equally clear, however, that assenting is a committive, cognitive, intentional act. Presently I shall argue that assent is these three things. However, before doing so it will be helpful to get a little clearer about what is involved in assenting to a proposition.

Some light is shed on this subject by H. H. Price in Belief.50 Price holds that to assent is to take up an additional attitude to an entertained proposition, and that this attitude has two components, namely preference and confidence (Belief, p. 207). He thinks belief involves preference because "assent, at least when reasonable, is preceded by a state of wondering or questioning, in which several alternative propositions are before the mind, together with the evidence for each of them" (Belief, p. 205). Then, sooner or later we came off the fence on one side or the other. In Price's words, "we prefer or plump for one of the alternatives, accept it or commit ourselves to it and reject the others" (Belief, p. 206). Price thinks that assent involves confidence because "though when we prefer or plump for p and reject q it is p that we prefer, and no half-way house is possible about that, we may still have great confidence or little about the alternative preferred" (Belief, p. 207).

I believe Price is right in saying that assent usually involves both preference and confidence, but I am inclined to

think that it need not always involve either. One indication that assent need not always be preferential is the fact that Price is offering an analysis of reasonable assent. It seems clear, however, that at least perceptual assent is unreasoning. (Actually a better word for the kind of assent Price has in mind would be "reasoning," because "reasonable" seems to mean "capable of being justified" and that could be said of both reasoning and unreasoning assent.) That assent is not always preferential is also evident, I believe, if one considers what Price says is a result of the preferential character of assent, namely that "in assenting to p, one ipso facto dissents from its alternatives q and r" (Belief, p. 206). In light of the phrase "ipso facto" I take it that Price's thesis is that assenting to p is equivalent to dissenting to the alternatives of p, rather than the weaker thesis that it follows from my assenting to p that I would or should dissent to its alternatives under certain conditions. A good case could probably be made for Price's thesis if he had said that in assenting to p one is ipso facto dissenting to not-p. However, Price states his thesis in terms of contraries rather than contradictories since he describes q and r as alternatives to p. That Price's thesis does not hold for all the alternatives to p is evident from the fact that there may be many alternatives to p that I am not even aware of. Nor does it seem to be true that I am necessarily dissenting to even one of the alternatives to p in assenting to p, since I may not even be rational enough to know that q is an alternative to p. Moreover, even if assent were necessarily preferential, it seems that it need not always involve confidence because I can assent to one answer of a multiple choice question with no confidence at all.

This last fact does, however, tell something about the essential nature of assent, since even though I may have no confidence I am committing myself to one answer. It is this act of commitment that seems to be at the heart of assent. That this is the essence of assent is evident from the fact that lack of commitment is characteristic of entertaining, the attitude with which we contrasted assenting earlier in this section. Indeed, Price himself suggests that the essence of assent is commitment since he says that when we assent to a proposition we "accept it or commit ourselves to it." Whether or not in committing ourselves to a proposition we also reject its alternatives, or have confidence in the proposition we commit ourselves to, is another matter. To assent to a proposition, therefore, is to commit oneself to it.

Moreover, if to assent to a proposition is to commit oneself to it, then I think it is also clear that assenting is an act. This suggestion is confirmed if we apply to assenting the test we have adopted for distinguishing actions from passions. It will be recalled that according to this test the phenomenon in question is an act if control terms and
their antonyms can be used naturally in sentences reporting the occurrences of the phenomenon. Since it sounds quite natural to speak of "Jones assenting carefully or carelessly," I think it is clear that assenting is an act.

The next step is to determine whether assenting is intentional. The test for intentionality we adopted in Part I of the essay was also a linguistic one. Let us take as our example the sentence "Jones assents to the proposition, 'the CN Tower is made of concrete'." One part of our test was first, that a sentence must be of the grammatical form subject-verb-object, and secondly that the subject of the sentence must either be a person or an animal. Our sentence clearly meets this part of the test for intentionality. The other part of the test was that the substitution of co-referential expressions fails in the sentence in question. The CN Tower is the tallest free-standing structure in the world. Nevertheless, "The CN Tower is identical with the tallest free-standing structure in the world" and "Jones assents to the proposition, 'the CN Tower is made of concrete'" do not imply "Jones assents to the proposition, 'the tallest free-standing structure in the world is made of concrete'." It seems, therefore, that assenting is also intentional.

The question now arises as to whether assenting is cognitive. I said in the last part of the essay that an attitude is cognitive if and only if it (1) has a content which is true or false, (2) takes a position with respect to this content, and (3) has the potential of being warranted. It is clear that assenting is cognitive because it (1) has a propositional content, (2) takes a position with respect to this content, and (3) has the potential of being warranted.

We have seen, then, that assenting is an act, intentional, cognitive, and committive, and it is evident that its content can be false. Hence it is precisely the kind of attitude that can be erroneous. Moreover, assenting is a mental phenomenon and hence is more suitable to be the attitude in perception than asserting. However, we also know that perceiving is unconscious. Thus in order to be sure that assenting is the kind of attitude that misperception involves, we must seek to determine whether assenting can be unconscious.

Price has observed that "the word 'assent' is quite naturally used in an occurrent sense, to denote an introspectible mental event or mental act which can be more or less precisely dated" (Belief, p. 189). If assent is defined in this way, then there is a neat contrast between assent and belief, if belief is analyzed dispositionally, because thus analyzed belief is neither introspectible nor datable. The point to which I wish to draw attention is that this neat
contrast should not lead us to conclude that assent must be conscious. Indeed, since "introspectible" is a capacity word, it follows that assent is often unconscious. And once this is recognized then it is clear that assenting does not differ from perceiving at this point either.

The time has now come to draw the conclusion that perceiving is an assentive attitude. One of the things we learned about perceiving in the last part of the essay is that it can be mistaken. In the first division of this part of the essay we discovered that misperceiving must be committive because it can be mistaken. To be more specific we learned that misperceiving must be committive because it can be erroneous (being a cognitive, intentional act). In the second division of this part of the essay we saw that a committive, cognitive, intentional act is assentive. It follows that misperceiving is an assentive attitude. It is also evident that if misperceiving must be an assentive attitude to be erroneous, perceiving must be an assentive attitude to be sound. I believe, therefore, that I have established one half of the task to which I have committed myself in this essay, namely showing that there is an assentive attitude in propositional perception. The second half of this task, namely showing that there is an assentive attitude in nonpropositional perception, will occupy us in Part III of this essay.

Part III: Nonpropositional Perception

In this part of the essay I shall argue that the conclusion I have reached about propositional perception, namely that it involves an assentive attitude, also applies to nonpropositional perception. The need for showing that nonpropositional perception involves an assentive attitude arises as follows. The first question we asked in Part I of the essay was whether perceiving is non-adverbial. We concluded that it is, and we encountered no reason for thinking that there is a difference between propositional and nonpropositional perceiving in this respect. The second question we asked was whether perception is conscious. We concluded that it generally is, and we found no reason for distinguishing nonpropositional perception from propositional perception in this respect either. We then asked whether perceiving, i.e., the attitude in perception, is conscious, and we discovered that usually it is not. This conclusion also seems to hold for both propositional and nonpropositional perceiving. The third question we asked was whether perceiving is an action or a passion. We concluded that it is an action, and once again the conclusion holds for both propositional and nonpropositional perceiving. However, when we asked the fourth question, namely, Is perceiving intentional? we found that the difference between propositional and nonpropositional perceiving is such that
what is true of propositional perceiving with regard to intentionality is not necessarily true of nonpropositional perceiving. The same situation arose when we asked whether perceiving is cognitive, and also when we asked whether perceiving can be erroneous. And since we could not conclude that nonpropositional perceiving is an assentive attitude without having answered these questions, we had to restrict our conclusion that perception involves an assentive attitude to propositional perception.

In Part II of the essay I argued that if an attitude is an act, intentional, cognitive, and can be erroneous (and hence commitative) then it must be an assentive attitude. Since we already know that nonpropositional perceiving is an act, only three additional points must be established to show that nonpropositional perceiving is an assentive attitude. First, it must be shown that nonpropositional perceiving is intentional. The first division of this part of the essay will be occupied with this task. Secondly, it must be shown that nonpropositional perceiving is cognitive. This is the most involved of the three tasks; it will be accomplished in the second division of this part of the essay. Finally, it must be shown that nonpropositional perceiving can be erroneous. This relatively simple task will be undertaken in the third division of this part of the essay. Following these three divisions there will be a fourth in which I shall put forward and defend a definition of nonpropositional perception.

A. Nonpropositional Perceiving Is Intentional

In this division of the essay I shall argue that nonpropositional perceiving is intentional on the ground that perceptual sentences which have object expressions can be recast without loss or gain of meaning into sentences which have propositional expressions.

We know from Part I of the essay that intentional phenomena are characterized by aboutness. Instead of speaking of phenomena being intentional the usual move is to talk about sentences and say that a sentence is intentional when its verb is intentional. We have been referring to verbs which take propositions as their objects as \( p \)-verbs, and verbs which take names or descriptions as their objects as \( o \)-verbs. In Part I of the essay we found that \( p \)-verbs are intentional when (1) they occur in a sentence whose grammatical form is subject-verb-object and whose subject is either a person or an animal, and (2) the sentences in which they occur are referentially opaque. We also know from Part I of the essay that \( p \)-type perceptual verbs are intentional by this criterion. Our task in this division is to determine under what conditions \( o \)-verbs are intentional and to see whether \( o \)-type perceptual verbs
meet these conditions.51

Perhaps the easiest way to argue that o-verbs are intentional is to assume that any sentence with an o-verb can be recast without loss or gain of meaning into a sentence with a p-verb. For example, it is plausible to say that one meaning of the sentence "I believe in God" is expressed by the sentence "I assent to the propositions, 'God's existing, now' and 'God has goodness, now'." If the sentence "I believe in God" has other meanings, it would seem that these too could be expressed without loss or gain of meaning by a different sentence with a p-verb, for example, "I assent to the propositions, 'God's existing, now' and 'God has omnipotence, now'." And it would seem that this process could be continued until the meaning of the sentence "I believe in God" is completely exhausted. If sentences with o-verbs can be recast without loss or gain of meaning into sentences with p-verbs, then we can say that any sentence with an o-verb which can be recast into a sentence with a p-verb which is intentional is itself intentional. And since we know that any perceptual sentence with a p-verb is intentional, it follows that any perceptual sentence with an o-verb is intentional too.

However, Dennett has pointed out that although some sentences with o-verbs may be recast without loss or gain of meaning into single sentences with p-verbs, others cannot, and he seems to think that this is a reason not to recast sentences with o-verbs into sentences with p-verbs. "Some object-sentences cannot be translated into single propositional-attitude-sentences at all. No propositional paraphrase of

51There are discussions of sentences with o-verbs in most of the literature I referred to when I argued that propositional perceiving is intentional in Part I. One important work which focuses on o-type perceptual verbs is G. E. M. Anscombe, "The Intentionality of Sensation: A Grammatical Feature," in R. J. Butler, ed., Analytical Philosophy, Second Series (Oxford: Blackwell, 1968), pp. 158-180. I have avoided commenting on Anscombe's article because she introduces the question of whether sensing is the awareness of sense-data into the discussion, and this is an issue which we have already settled. Moreover, I believe that a simpler method of showing that sentences with o-verbs are intentional is at hand. For critical discussions of Anscombe's paper see: H. M. Robinson, "The Irrelevance of Intentionality to Perception," Philosophical Quarterly, XXIV (1974), 300-315; C. V. Borst, "Perception and Intentionality," Mind, LXXIX (1970), 115-121; and Douglas Odegard, "Anscombe, Sensation and Intentional Objects," Dialogue, XI (1972), 69-77.
'John hates spinach,' for example, is remotely convincing as a translation. 'John believes that spinach nauseates him' and 'John wants that he is not served spinach' say both less and more than the object-sentence. A large enough collection of such partially successful paraphrases might serve, either in some strict alternation and conjunction system or in the looser 'family' way, as a suitable transformation of the sentence, but there is no particular payoff in setting out to elaborate these collections for each and every object-expression.  

Although Dennett is correct in saying that there is no intrinsic advantage in recasting sentences with o-verbs into sentences with p-verbs, he has advanced no reason why it cannot be done either, provided that we are willing to make the complex transformations he suggests will be necessary. Moreover, as we proceed it will become clear that there is an extrinsic advantage in recasting perceptual sentences with o-verbs into sentences with p-verbs. Accordingly, I do not think that Dennett's observation prevents us from recasting sentences with o-verbs into sentences with p-verbs. I believe we may conclude, therefore, that nonpropositional perceiving is intentional. The next step is to see whether nonpropositional perceiving is cognitive.

B. Nonpropositional Perceiving Is Cognitive

In Part I of the essay I said that an attitude is cognitive if and only if it (1) has a content which is true or false, (2) takes a position with respect to this content, and (3) has the potential of being warranted. This definition of "cognitive" clearly implies that a cognitive attitude is a propositional one, because only a proposition can be true or false. So if nonpropositional perceiving is nonpropositional, it follows that this kind of perceiving cannot be cognitive. However, in the last division of this part of the essay we saw that nonpropositional sentences can be recast in a propositional form without loss or gain of meaning. Hence there is no reason to think that nonpropositional perceiving cannot be cognitive on this ground. Moreover, if nonpropositional perceiving can be recast into propositional form, then it is cognitive because propositional perceiving is cognitive.

To this it may be objected that the definition of "cognitive" is based on the assumption that all knowledge is propositional. Some knowledge, however, is nonpropositional, and if this fact is taken into account in defining "cognitive" then it could be

D. C. Dennett, *Content and Consciousness*, p. 28.
that nonpropositional perceiving is cognitive without being recast into a propositional form. From the point of view of this work, the problem with accepting this approach is that if "cognitive" is defined as the objection suggests then it will not be possible to show that nonpropositional perceiving is an assentive attitude. The reason for this is that assent is a propositional attitude, whereas the approach we are now considering would allow a cognitive attitude to be nonpropositional. Thus if we are to show that nonpropositional perceiving is an assentive attitude, we must argue that all knowledge is propositional. Of course, if what I assumed in the last division is true, namely that all sentences with \( q \)-verbs can be recast without loss or gain of meaning into sentences with \( p \)-verbs, then all knowledge can be made propositional. Nevertheless, since it is commonly thought that there is an important difference between propositional and nonpropositional knowledge, and since this is a crucial stage in the argument, it will doubtless be worthwhile to determine just what the important difference is between propositional and nonpropositional knowledge.

Because there obviously are nonpropositional forms of knowledge, it may help to avoid confusion if I indicate at the outset what I mean when I claim that all knowledge is propositional. I am not denying the obvious fact that sometimes the grammatical objects of the verb "know" are not propositions. Rather, what I am denying is that the difference between the propositional and nonpropositional forms of knowledge, which is marked by the fact that their linguistic objects differ, consists in the fact that the former involves an assentive attitude whereas the latter does not. Instead I shall contend that the difference between them consists in the fact that the latter is direct and has a first-hand character which the former lacks. In other words, I am not really denying that there is nonpropositional knowledge, but arguing instead that its nature has been misunderstood by some philosophers. This means that I am not contradicting myself when I say that nonpropositional knowledge is really propositional, because although I am denying that this kind of knowledge is logically nonpropositional, I am not denying that it is grammatically nonpropositional.

Perhaps the most familiar example of nonpropositional knowledge is knowledge by acquaintance. I shall argue that knowledge by acquaintance is logically propositional, and I think it will be evident that the argument I employ will work against any other example of grammatically nonpropositional knowledge. Let us take Bertrand Russell as our example of a proponent of the view that there is knowledge by acquaintance.

Russell's views on knowledge by acquaintance can be found in an article called "Knowledge by Acquaintance and Knowledge by
We have first to distinguish knowledge of things and knowledge of truths. In each there are two kinds, one immediate and one derivative. Our immediate knowledge of things, which we call acquaintance, consists of two sorts, according as the things known are particulars or universals. Among particulars, we have acquaintance with sense-data and (probably) with ourselves. Among universals, there seems to be no principle by which we can decide which can be known by acquaintance, but it is clear that among those that can be so known are sensible qualities, relations of space and time, similarity, certain abstract logical universals. Our derivative knowledge of things, which we call knowledge by description, always involves both acquaintance with something and knowledge of truths. Our immediate knowledge of truths may be called intuitive knowledge, and the truths so known may be called self-evident.

truths. Among such truths are included those which merely state what is given in sense, and also certain abstract logical and arithmetical principles, and (though with less certainty) some ethical propositions. Our derivative knowledge of truths consists of everything that we can deduce from self-evident truths by the use of self-evident principles of deduction (Russell, pp. 62-63).

In the article Russell defines "acquaintance" in these words: "I say that I am acquainted with an object when I have a direct cognitive relation to that object, i.e., when I am directly aware of the object itself" (K by A, p. 152). The important words in this definition are "direct" and "cognitive." In the next sentence he explains what he means by "cognitive": "When I speak of a cognitive relation here, I do not mean the sort of relation which constitutes judgment, but the sort which constitutes presentation." What Russell has in mind by "direct," when he speaks of "a direct cognitive relation," comes out in his definition of "acquaintance" in his book. There he writes: "We shall say that we have acquaintance with anything of which we are directly aware, without the intermediary of any process of inference of any knowledge of truths" (Russell, p. 25). Russell claims that knowledge of things by acquaintance is both "essentially simpler than" and "logically independent of" knowledge of truths. Nevertheless, he holds that "it would be rash to assume that human beings ever, in fact, have acquaintance with things without at the same time knowing some truths about them" (Russell, p. 25). This, then, is the way Russell conceives of knowledge by acquaintance. Let us now look closely at this kind of knowledge in order to determine whether it is logically nonpropositional.

The distinction we are interested in is the one between knowledge by acquaintance and knowledge by description. We have seen that Russell characterizes the difference between these two kinds of knowledge in three ways: first, the former is immediate whereas the latter is derivative; second, the former is presentative whereas the latter is judgmental; and third, the former is a direct awareness whereas the latter is inferential. The first and third ways Russell distinguishes the two types of knowledge are roughly the same, and since the third is more specific let us dismiss the first. Since direct awareness and presentation are roughly the same, the difference between knowledge by acquaintance and knowledge by description seems to be basically this: first, the former is a direct awareness whereas the latter is judgmental, and second, the former is a direct awareness whereas the latter is inferential.

For the moment let us focus our attention on the first basic difference between knowledge by acquaintance and knowledge by
description. In addition, for the sake of simplicity let us speak of "awareness" rather than "direct awareness." Also, in order to indicate that we are only interested in the first basic difference between knowledge by acquaintance and knowledge by description, let us replace the term "judgment" by the term "belief," since inferring is often associated with judging.

According to Russell it is possible to have knowledge by acquaintance of both things and truths and also knowledge by description of both things and truths. Presumably truths are propositions. Therefore, let us symbolize an object by "x" and an attributive proposition by "x has F." Putting the preceding points together, and using "=" to mean "is equivalent to," we arrive at the following sketch of Russell's first basic way of distinguishing knowledge by acquaintance and knowledge by description.

\[
\text{Knowledge by acquaintance of things} = \text{awareness of x of truths} = \text{awareness of x having F}
\]

\[
\text{Knowledge by description of things entails awareness of x and belief that x has F of truths entails belief that x has F}
\]

The first thing that strikes one about this sketch is that knowledge by description of things involves both knowledge by acquaintance of things and knowledge by description of truths. We can forget about the knowledge by description of things, then, because whatever we say about knowledge by acquaintance of things and knowledge by description of truths will apply to knowledge by description of things.

With regard to knowledge by description of truths, this poses no problem because its content is a proposition and its attitude assentive.

With regard to knowledge by acquaintance of truths, the thing to notice is that although its content is a proposition, its attitude is not assentive. I assume that any kind of knowledge, whether by acquaintance or description, must be capable of being erroneous.\(^4\) I believe I showed in Part II

\(^4\)Here I am following C. I. Lewis. He says that in deciding whether a certain type of apprehension is knowledge "the ruling consideration, in each case, is the contrast of
of the essay that in order for an attitude to be either sound or erroneous, it must be assentive. Mere awareness of the proposition "x has F" is not assentive, however, and hence cannot be knowledge. The only way to remedy this defect is to replace the non-assentive attitude of awareness with an assentive attitude such as belief. But in that case there is no difference between knowledge by acquaintance of truths and knowledge by description of truths.

Moreover, a similar line of argument can be advanced to show that if knowledge by acquaintance of things is indeed knowledge, then there must be no difference between it and knowledge by description of truths either. First, in order for knowledge by acquaintance of things to be sound, its attitude must be assentive. And secondly, if its attitude is assentive, then its content must be propositional because assent is a propositional attitude. But if the attitude in knowledge by acquaintance of things is assentive and its content is a proposition, then this kind of knowledge differs in no essential respect from knowledge by description of truths.

The only way I can see of avoiding the objection I have raised against knowledge by acquaintance of things and truths would be to deny that this kind of knowledge is sound. But in that case I see no reason for calling knowledge by acquaintance knowledge at all since it would then have nothing in common with knowledge by description. In other words, as long as it was plausible to say that both knowledge by description and knowledge by acquaintance can be sound, it made sense to say that they belong to the same genus, despite the fact that one involves an assentive attitude whereas the other does not. I have argued, however, that being able to be sound and involving an assentive attitude cannot be separated, and hence that knowledge by acquaintance cannot plausibly be said to be sound if it is denied that it involves an assentive attitude. But in that case there is no reason why knowledge by acquaintance should be called knowledge at all since it shares nothing with the standard kind of knowledge.

We have been considering what happens when we distinguish knowledge by acquaintance from knowledge by description according to the first basic criterion Russell presents. I

knowledge with some corresponding kind of possible error. Only that with respect to which some misapprehension could occur is here classed as knowledge." C. I. Lewis, An Analysis of Knowledge and Valuation (La Salle, Illinois: Open Court, 1946), p. 30.
believe I have shown both that content of knowledge by acquaintance must be a proposition regardless of whether what is known is a thing or a truth, and also that the attitude must be assentive regardless of whether what is known is a thing or a truth. It follows that so far as their attitudes and contents are concerned there should be no difference between knowledge by acquaintance and knowledge by description. Now according to Russell's second criterion the two kinds of knowledge are to be distinguished by the fact that knowledge by description is inferential. The important thing to notice in this case is that knowledge by acquaintance can be non-inferential and yet have a proposition for its content and assent as its attitude. Thus according to Russell's second criterion the difference between two kinds of knowledge is not in their contents or attitudes but in the way one comes to possess the content: in the case of knowledge by acquaintance the content is possessed immediately, whereas in the case of knowledge by description the content is arrived at as a result of inference.

Many philosophers equate judging and inferring. I believe that to do so is to make a mistake. However, if Russell did assimilate the two notions, this may explain why he thought that knowledge by acquaintance does not involve an assentive attitude. In other words, if Russell assimilated judging and inferring, he may have added to the true premise "Knowledge by acquaintance is non-inferential," the false premise "Judging is inferential," and hence drawn the false conclusion "There is no assentive attitude in knowledge by acquaintance."

I shall next examine an argument which Price uses in another connection, because although Price does not put it forward as grounds for thinking that there is knowledge by acquaintance, it would provide support for the view that there is knowledge by acquaintance if it were valid, because it claims that there must be some knowledge which does not involve belief.

The context of the argument is this. Price is considering the traditional definition of knowledge as justified, true belief. He objects to the claim that all knowledge must have reasons on the ground that we know some things, for example that one has a headache, immediately or without having reasons. Thus Price writes: "...the definition of knowledge we are examining appears to assume that all knowledge is inferential (or mediate)....But it seems perfectly plain that there is in fact some knowledge which is not inferential at all" (Belief, p. 87). In this Price is clearly right. If all knowledge is based on reasons, we are involved in an infinite regress. But Price goes on to say that this non-inferential knowledge does not involve belief: "...in this case, the knowledge that
we have is something quite different from belief of any sort. If you like, it does not consist in accepting a proposition, but rather in noticing some actual event or state of affairs" (Belief, pp. 89-90). Here I believe that Price is mistaken. It does not follow from the fact that there must be some non-inferential knowledge that there must be some knowledge which is non-assentive, because inference and assent are difference acts.

In addition to the failure to distinguish judging or believing from inferring, another confusion that may have given rise to the notion that there is knowledge by acquaintance is the failure to distinguish causes from reasons. In the following passage Richard Rorty explains how failure to distinguish causes from reasons can give rise to the view that acquaintance is knowledge. He writes: "...the fact that knowledge that 0 is Q is caused by a sensation of 0 is combined with the assumption that nothing can serve to justify S's claim to know about 0 except another piece of knowledge about 0 by S. This produces the conclusion that the mere sensing of 0 is itself a case of knowing--distinct from, because giving a ground for, the knowledge that 0 is Q. Since sensing 0 is construed as a direct relation between the knower and 0, whereas knowing that 0 is Q is construed as a relation between the knower and something distinct from 0 (a fact or proposition), it is inferred that there are two sorts of knowing, one of which is primitive and direct and the other derivative and indirect. A casual condition for knowledge is thus confused with a special type of knowledge--knowledge by acquaintance." 55 In other words, the notion that acquaintance is knowledge seems to be a consequence of the mistaken view that all knowledge must be based on knowledge, where "based on" means "is made evident by" in the sense that I defined "evident" at the end of Part I of this essay.

I trust that I have shown, in my examination of Russell's account of knowledge by acquaintance and knowledge by description, that if these two kinds of knowledge are species of the same genus then the difference between them cannot consist in the fact that the former does not have a propositional content or an assentive attitude whereas the latter does, but must instead consist in the fact that the former is first-hand whereas the latter is second-hand. But if this is so, then although there is knowledge by acquaintance, it is not logically nonpropositional. Moreover, it is evident that the same argument I have employed against knowledge by acquaintance would apply against any example of nonpropositional knowledge.

But if there is not logically nonpropositional knowledge, then a cognitive attitude must be propositional. And if a cognitive attitude must be propositional, then nonpropositional perceiving cannot be cognitive in such a way that it cannot be assentive--if it is cognitive, it is propositional and hence it can be assentive.

It may be objected, however, that the contention that there is knowledge by acquaintance is not to be understood as the claim that acquaintance is knowledge, but instead as the claim that some knowledge comes by acquaintance. I shall now briefly consider this interpretation of the claim that there is knowledge by acquaintance in order to show that if the claim is interpreted in this way then it is quite consistent with my contention that all knowledge is logically propositional.

C. D. Broad has observed that three different questions can be raised in connection with knowledge by acquaintance: (1) Is there acquaintance? (2) Is acquaintance knowledge? and (3) Is there knowledge by acquaintance? I take it that the interpretation of the claim that acquaintance is knowledge that we are now considering amounts to answering "yes" to the first and third questions and "no" to the second. Now the point to notice is that answering these questions in this way has no tendency to show that there is nonpropositional knowledge, because although acquaintance is nonpropositional, it is not knowledge. Furthermore, answering these questions in this way allows us to recognize the important fact which gave rise to the distinction between knowledge by acquaintance and description, namely the fact that some knowledge is direct whereas other knowledge is second-hand.

To this point I have argued that nonpropositional perceiving is intentional and cognitive. The third task that must be accomplished if we are to show that nonpropositional perception involves an assentive attitude is to show that nonpropositional perceiving can be erroneous.

C. Nonpropositional Perceiving Can Be Erroneous

I presume that no argument is needed to show that

Cf. this statement by Herbert Feigl: "...I quite emphatically want to distinguish acquaintance from knowledge by acquaintance. 'Acquaintance as such' (in the philosophically restricted sense) is to mean simply the direct experience itself, as lived through, enjoyed or suffered; knowledge by acquaintance, however, is propositional." The "Mental" and the "Physical" (Minneapolis: University of Minnesota Press, 1967), p. 37.
nonpropositional perceiving can be erroneous; it is obvious that we sometimes err when we perceive things. Instead, the problem is to find an acceptable way of expressing this fact. According to Armstrong, perceiving that has success-grammar, and nonpropositional perceiving has existence-grammar (MTM, p. 215). In the first part of the essay I defined propositional perceiving in such a way that the word "that" is not included to allow for the fact that propositional perceiving can be erroneous. Similarly it is tempting to allow for the fact that nonpropositional perceiving can be erroneous by defining it in such a way that it lacks existence-grammar.

However, if we do this it is important to recognize that the sentence, "Nonpropositional perceiving has existence-grammar," can have two meanings. On the one hand, it can mean that if S perceives x then x must exist. On the other hand, it can mean that if S perceives x then something must exist. Let us refer to the first reading of the phrase "existence-grammar" as its strong sense and the second reading as its weak sense. It is clear that, given the analysis of sensing I have adopted, I cannot allow for the fact that nonpropositional perceiving can be erroneous by defining nonpropositional perceiving in such a way that it lacks existence-grammar, if this phrase is understood in its weak sense. To be more specific, I have adopted the following definition of sensing: S senses f if and only if:

(i) as an consequence of x being a proper stimulus of S, S is appeared to f; and
(ii) in being appeared to f, S is appeared to in way that is functionally dependent on the stimulus energy produced in S by x.

Now since even misperception involves sensing, it follows that erroneous nonpropositional perceiving must have existence-grammar in its weak sense, because the way one is appeared to is functionally dependent on the stimulus energy produced in S by x.\(^{58}\) On the other hand, we can define nonpropositional perceiving in such a way that it lacks existence-grammar in its strong sense, because all we are committed to by our

\(^{58}\)Certain problems with Chisholm's claim that "S perceives x" entails that some object exists have been pointed out by I. A. Bunting in "Perception and the Existence Criterion," Philosophical Studies (Ireland), XX (1970), 77-89. I believe that I avoid these objections since (1) I am offering a theory of perception and not a report of the ordinary usage of the term "perception," and (2) I shall shortly allow that "perception" has a derivative use in cases where there is no object.
definition of sensing is that some object exists, not that the object one takes to exist does exist. But if nonpropositional perceiving need not have existence-grammar in its strong sense, then it can be erroneous.

However, if nonpropositional perceiving must have existence-grammar in its weak sense even when it is erroneous, there remains the problem of accounting for those experiences which are exactly similar to nonpropositional perception, except that there is no object to serve as the source of the stimulus energy. Let us take Macbeth's experience with the dagger as our example of this kind of situation. Two approaches seem to have been taken in analyzing phenomena like this. On the one hand, some philosophers have argued that there are two senses of "perceive" and "see."59 On the other hand, Don Locke has argued that there are two senses of "dagger."50 My inclination is to take the first approach and say that the standard cases of perception are those in which some object exists, but allow that "perception" can be used in a derivative sense in cases where no external object exists. This approach is especially attractive because it allows us to offer an analysis of perception without an object that parallels the one we offered of perception without consciousness in the second section of the fourth division of Part I of the essay.

D. The Definition of Nonpropositional Perception

At the beginning of this part of the essay I said that if we are to show that nonpropositional perceiving is an assentive attitude three things must be accomplished, namely showing that nonpropositional perceiving is intentional, cognitive, and can be erroneous. I believe that I have now shown these three things, and hence that I have established that nonpropositional perceiving is an assentive attitude. If this is true, then I have accomplished the second half of the


task I set for myself in this essay. Nevertheless, I still have not completed the job I set out to do in this part of the essay because I have not put forward a complete definition of nonpropositional perception. To be more specific, I have argued that the attitude in nonpropositional perception is an assentive one, but I have not as yet said what its content is. It is important, however, to identify the content of nonpropositional perception because it differs from the content of propositional perception. In the first and second sections of this division of this part of the essay I shall examine Armstrong's and Chisholm's definitions of nonpropositional perception, and in the last section I shall adopt a modified version of Chisholm's definition.

1. D. M. Armstrong's Definition of Nonpropositional Perception

Whereas Chisholm has one definition for propositional perception and another for nonpropositional perception, Armstrong has one definition for both kinds of perception. This definition is that perception is "nothing but the acquiring of true or false beliefs concerning the current state of the organism's body and environment." This definition applies quite nicely to propositional perception; the problem is to show that it also applies to nonpropositional perception. Armstrong explains why his definition is also applicable to nonpropositional perception as follows: "When it is said that somebody perceives something, then the mental event that takes place is simply the acquiring of information and misinformation about the environment....But the peculiarity of the idiom 'A perceives x' is that to speak in this way does not tell us exactly what the information or misinformation is. The idiom tells us that it is information or misinformation about x that is acquired but it tells us nothing more" (MTM, p. 228). Then Armstrong goes on to draw attention to the usefulness of nonpropositional perception in these words: "...although to talk of 'perceiving that...' (or 'seeming to perceive that...') is a far more exact way of speaking, its very exactness makes it a hindrance on many occasions. Stimulation of the senses is constantly giving us a vast flood of information (and misinformation) about our environment, far more than we can ever hope to verbalize. What is more, this information varies from person to person even when their senses are trained upon numerically the same object....Under these circumstances, the noncommittal nature of the idiom whereby we speak of perceiving things or events or processes is extraordinarily useful to us" (MTM, pp. 228-229).

An important point is made by Armstrong in each of the passages I have quoted. The important point made in the first passage is that one difference between nonpropositional and
propositional perception is that the information acquired in the former is general whereas the information acquired in the latter is specific. The important point made in the second passage is that because nonpropositional perception is less specific than propositional perception, it conveys a great deal more information. Here I have in mind Armstrong's observation that the stimulation of our senses gives us a vast flood of information which we can never hope to spell out completely in detail. In a way, speaking of "A perceiving x" obscures this and it would be better to use a specific example like "A perceives the tree," since seeing a tree clearly involves taking something to have a trunk, branches, leaves, and so on.

Thus we can learn two things from what Armstrong says about nonpropositional perception: first, that the information acquired in nonpropositional perception is less specific than that acquired in propositional perception, and second, that the information acquired in nonpropositional perception is more complex than that acquired in propositional perception. In the last paragraph I brought out the complexity involved in, for example, seeing a tree by saying that seeing a tree involves taking something to have a trunk, branches, leaves, and so on. Strictly speaking this is not completely true, and perhaps the easiest way to discover the respect in which it is true and the respect in which it is not true is by taking a look at Chisholm's definition of nonpropositional perception.

2. Roderick Chisholm's Definition of Nonpropositional Perception

In Chapter One of Perceiving, Chisholm defines "the most important propositional use of 'perceive'" (Per, p. 142) as follows:

"There is something that S perceives to be f" means:
(a) there is an x which is f
(b) x appears in some way to S
(c) S takes x to be f
(d) S has adequate evidence for the proposition that x is f (Per, p. 3).

In section three of Chapter Ten, on the other hand, Chisholm defines "the simplest of the nonpropositional senses of 'perceive'" as follows:

"S perceives x means: x appears in some way to S (Per, p. 149).

However, on the following page Chisholm adds a qualification to his definition of nonpropositional perception. He writes: "Perhaps we would not want to say that a man sees an object x
unless, in addition to sensing in the required way, the man also took the object \( x \) to be something. To make our definitions adequate to this felt requirement, we have only to add the qualification: ‘and \( S \) takes \( x \) to have some characteristic.’ In a later passage Chisholm seems to reverse himself on this point for he writes: ‘We have already noted that the propositional locution 'S perceives \( x \) to be \( f \)' entails 'S assumes—or accepts the proposition—that \( x \) is \( f \)'. But the nonpropositional use of these words does not entail any such statements about accepting or assuming’ (Per, p. 165). Nevertheless, the following passage, which occurs shortly afterwards, seems to indicate that what Chisholm meant to deny was that we take \( x \) to be \( f \) in propositional perception, and not that we take \( x \) to be something: ‘I suggested in Section 3 above, that a nonpropositional locution such as 'Jones saw a thief', in its ordinary interpretation, may imply that Jones took—and thus believed—the thing to be something or other. But it does not imply that he took it to be a thief.’

Despite this last passage I have some question about how seriously Chisholm took the qualification he added to his definition of nonpropositional perception. One thing that puzzles me is the fact that in Section 3 of Chapter Ten Chisholm also says that "S perceives \( x \)" "may thus be thought of as one way of expressing the converse of 'x appears in some way to \( S \)'." Since Chisholm's being appeared to is roughly equivalent to sensation as I have defined it, it seems that Chisholm is inclined to define nonpropositional perception in two quite different ways: on the one hand he seems tempted to treat it propositionally, but on the other he seems tempted to assimilate it to sensation. With regard to the second alternative, notice that if nonpropositional perception is assimilated to sensation then the fact that it would not involve an assentive attitude presents no problem for my thesis because my thesis applies only to perception. I think it is clear, however, that the first alternative is the only acceptable one, because nonpropositional perception is cognitive and hence cannot be assimilated to sensation, which is not. It seems to me, therefore, that the qualification in question must be added to Chisholm's simplest definition of nonpropositional perception. If it is added, then we have the following definition of propositional and nonpropositional perception according to Chisholm:

**Propositional**

(a) there is an \( x \) which is \( f \);
(b) \( x \) appears in some way to \( S \);
(c) \( S \) takes \( x \) to be \( f \);

**Nonpropositional**

(b') \( x \) appears in some way to \( S \);
(c') \( S \) takes \( x \) to have some characteristic.
(d) S has adequate evidence for the propositional that x is f.

Even with the addition of condition (c') to the definition of nonpropositional perception there is still a marked difference between the definitions of the two kinds of perception. I shall now argue that the difference between the two definitions can be minimized still further on the ground that a modified version of (a) and (d) should be added to the definition of nonpropositional perception.

Let us begin with (a). I have already argued at the end of Part I of the essay that condition (a) should not be included in the definition of propositional perception on the ground that we want to define propositional perception in such a way that it can be erroneous. I noted at that time, however, that we could weaken condition (a) so that it reads, "There is an x which has some characteristic." This weaker condition should be added to Chisholm's definition of nonpropositional perception.

With regard to condition (d), it is clear that if we were discussing the unqualified definition of nonpropositional perception then no version of (d) should be added, because the mere fact that x appears in some way to S does not provide S with adequate evidence for any proposition. But we are considering the qualified definition of nonpropositional perception, and it not only includes the condition "x appears in some way to S" but also the condition "S takes x to have some characteristic." And since sensible taking is a mark of adequate evidence, it would seem to follow that S does have adequate evidence for the proposition that x has some characteristic. Accordingly we can add a modified version of (d) to the definition of nonpropositional perception. I suggest the following:

\[(d') S \text{ has adequate evidence for the proposition that } x \text{ has some characteristic.}\]

It seems, then, that a complete definition of nonpropositional perception should look something like this for Chisholm:

"S perceives x" means:
(a') There is an x which has some characteristic;
(b') x appears in some way to S;
(c') S takes x to have some characteristic;
(d') S has adequate evidence for the proposition that
x has some characteristic.61

I shall now propose my own definition of nonpropositional perception, drawing from both Chisholm and Armstrong's definitions.

3. A Definition of Nonpropositional Perception

While discussing Armstrong's view in the last section, we discovered that nonpropositional perception is not only less specific than propositional perception, it is also more complex. Indeed, it seems plausible to say that the reason nonpropositional perception is not specific is precisely the fact that it is so complex. The fact that nonpropositional perception is complex means that our definition of it should make reference to a whole set of properties. On the other hand, we learned from Chisholm that we cannot specifically say what these properties are since it does not follow from the fact that I perceive an object that I take it to have this or that specific property, although it does follow that there are some properties which I do take it to have.62 Accordingly, I suggest that "S perceives x" if and only if:

(i) There is some object which has some properties;
(ii) S senses some characteristics;
(iii) S adopts an assentive attitude to the proposition, "x's existing, now";
(iv) S adopts an assentive attitude to the proposition, "x has certain properties, now."

A few explanations about this definition may be in order. First, I allow for error in nonpropositional perceiving by saying "There is some object which has some properties" rather than "There is an x which has some properties." Second, I speak of "properties" in conditions (i) and (iv) and "characteristics" in condition (ii) in recognition of Armstrong's claim that nonpropositional perceiving is more complex than


propositional perceiving. Third, I add condition (iii) because even if nonpropositional perceiving does not have a strong existence-implication, it does have a weak existence-implication. Finally, I do not say what specific properties S takes x to have in condition (iv) in recognition of Chisholm's claim that it does not follow from the fact that I perceive x that I take it to have this or that specific property.

Conclusion

The objective I undertook in this essay was to show that there is an assenitive attitude in perception. Because perception is both propositional and nonpropositional, I pursued this objective in two stages: in the first and second parts of the essay I argued that propositional perception involves an assenitive attitude, and in the third part I argued that the same is true of nonpropositional perception.

With regard to the first part of the objective, I showed in Part I of the essay that propositional perceiving is an act, intentional, cognitive, and can go amiss. Then in Part II I argued that perceiving must be committive to go amiss, and since assent is a committive, cognitive, intentional act, I concluded that propositional perceiving is assenitive. With regard to the second part of the objective, I argued in Part III of the essay that nonpropositional perception is also a cognitive, intentional act that can go amiss, and hence must involve an assenitive attitude too. On this basis I concluded that perception, whether grammatically propositional or not, involves an assenitive attitude.

I believe, therefore, that I have achieved the objective I undertook in this work and hence that I have established that there is an assenitive attitude in perception. However, in the course of my argument I made several significant assumptions. Since my conclusion is conditionalized by these assumptions let me put my conclusion in perspective by mentioning the assumptions that I made. I believe that I made two important assumptions. Perhaps the most important of these is that where there is knowledge there is the possibility of error. This allowed me to show that grammatically nonpropositional knowledge is logically propositional. Another important assumption I made is that sentences with o-verbs can be recast without loss or gain of meaning into sentences with p-verbs. This assumption allowed me to show that nonpropositional perceiving is intentional.

I have restricted myself to the external senses in this essay, and in addition I have only discussed one external sense, namely vision. Moreover, I have mainly been concerned
with the vision of things. However, we not only see things, we also see events, qualities, relations, states, and facts. I would like to suggest that the conclusion I have reached about seeing things also applies to other objects of vision, to the other sense modalities, and even to inner sense. The reason the conclusion seems generalizable in this fashion is that the characteristics of perception that led us to think that perception involves an assentive attitude when we see things also seem present when we see objects other than things, when we use perceptual modalities other than vision, and when we use inner sense.

Although it is important for epistemological purposes to recognize that perception involves an assentive attitude to a proposition, analyzing perception this way fails to do justice to the phenomenological richness of perception. Occasionally we may acquire a single piece of knowledge, but in the vast majority of cases the knowledge we acquire is extremely complex and detailed. Not only is perception richer at any given moment than my analysis has suggested, but it is also a continuous flow. Furthermore, there is a complex feedback mechanism at work in perception such that what one takes oneself to be perceiving influences the way one senses. It must be recognized, therefore, that the account of perception I have proposed is a highly abstract one, focusing as it does on one aspect of the perceptual field, at one particular moment, at one stage in the perceptual process.\textsuperscript{63}

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