

## **Perception: perspectival content and perceptual achievement**

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### **1 Perception and the deviant causal chain case**

According to a classical causal account of perception, to perceive that object *x* is *F* is to fulfill the following conditions: (i) one has an experience as of *x*'s being *F*, (ii) *x* is *F*, and (iii) one's experience of *x*'s being *F* depends causally on *x*'s being *F*. This is the core of Grice's causal theory of perception, and it is initially quite plausible (Grice 1961).<sup>1</sup>

However, this account leads into the *problem of deviant causal chains*. For, it seems as though one's experience could fulfill all of the three conditions and still, intuitively, fail to be a genuine perception. One may not only have a veridical hallucination, as Lewis pointed out (Lewis 1980), it may even be the case that one's experience depends causally on *x*'s being *F*. An example of this is provided by the case of the manipulative neurosurgeon. This neurosurgeon manipulates the subject's brain in such a way that she is having an experience as of a clock being on the shelf. There is in fact such a clock on the shelf, so the experience is veridical. And in addition, the neurosurgeon makes it look to the subject as if there is a clock on the shelf *because* there is a clock on the shelf. Thus, the subject's experience depends causally on the object. Intuitively, however, we do not have a case of a genuine perception that there is a clock on the shelf. Thus, the case of deviant causal chains is a counterexample to the causal theory of perception.<sup>2</sup>

What seems to go wrong is that we do not have the *right kind* of causal dependence, as Grice suggested (Grice 1961: 143-4). Once a specification of the right kind of causal dependence is added, the causal theory will be fully adequate. This way of trying to solve the problem of the deviant causal chains constitutes the first approach, and it can be found in the writings of Grice (1961) and Strawson (1974). We might call this entire approach the 'causal conditions approach'.

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<sup>1</sup>In addition, Grice's causal theory of perception includes an epistemological part concerning the justification of statements about perceiving which will be ignored in the following discussion.

<sup>2</sup>This case is essentially the same as Strawson's example of a 'capricious philosophical experimenter' (cp. Strawson 1974: 73).

But what does it mean to have the 'right' kind of causal dependence? The viability of this way of amending the causal theory depends entirely on whether we succeed in spelling out the 'right' kind in a convincing way. To see into what kinds of problem this leads, let us have a quick look at Grice's and Strawson's proposals, without going to much into details.

Grice's solution is an appeal to a way or mode of causal contribution which is fixed by an open-ended list of examples of genuine perception (cp. Grice 1961: 143-4). Strawson attempts to specify the right kind by imposing certain specific perceptual accessibility conditions, such as the non-obtaining of masking or obstruction of the object (cp. Strawson 1974: 79). However, *prima facie* both proposals seem to lead into serious difficulties. With Strawson, it is unclear whether the proposal is sufficient for solving the problem, since it might be possible to have a case in which the relevant accessibility conditions are fulfilled, the object is within the reach of the relevant sensory organ and is neither obstructed nor masked, and still the causal process is running along some deviant causal line. It is difficult to judge whether this is possible, since Strawson does not say very much about what exactly is included in his accessibility conditions, but *prima facie* his account does not exclude the case. Grice's account is rather weak, since the right kind is fixed merely by an open-ended list of examples which seems to lead either into a mere family resemblance without any interesting shared commonality, or otherwise into a proposal that has the character of a mere preliminary, since it does try to bring out an interesting shared commonality but does not tell us what it consists in. In addition, Grice's proposal is perhaps too 'chauvinistic' in that it excludes other, abnormal or unnatural causal routes.<sup>3</sup>

At this point we might reasonably ask ourselves whether there is some alternative way available. And there are indeed at least two further approaches. The second approach is the approach that has been proposed by Alva Noë (2003), an approach that relies on the idea that the case of the deviant causal chain has been under-described and can be made to disappear if we fill in a (more) complete description. In such a way, it is claimed by Noë, the causal theory is saved from the alleged counterexample. The reason for this is basically that a (more) complete description of our perceptual states will bring to light a certain kind of perceptual content, or dimension of perceptual content, that plays an important role for fixing the perceptual object. In Noë's view, this kind of content is the so called '*perspectival content*', which is the kind of content that our perceptions have when round things appear elliptical from the point of view of the perceiver, for example. Once we take perspectival content into

account, the alleged counterexample disappears. Or so claims Noë, and we might call his proposal the 'perspectival content approach'. I will present Noë's solution in the next section in more detail, and in the section after that I will present my criticism of it.

Finally, there is a third approach that I will present in the remainder of this paper, the '*achievement approach*' as we might call it. This approach is meant to provide a more complete picture of perception (just as Noë's account wants to do). Perspectival contents are accepted, but in themselves they do not provide the material for solving the problem. The element which is felt to be missing in the usual picture of perception is the achievement contribution by the subject's cognitive capacities. Perception is a cognitive achievement, according to the achievement approach (hence the name). In order to perceive that  $x$  is  $F$ , the subject has to exercise some of her cognitive perceptual capacities, and to *thus* make it the case that her perceptual states depend causally on the object and its properties. Without such a contribution of her own, she will be merely a 'lucky victim of manipulation', as it were. This is what is missing in the case of the deviant causal chains: the subject does no work for the holding of the causal dependence between her states and the environment, all the work is done by the manipulative neurosurgeon. So the case of deviant causal chains helps to bring out an important factor in perception and, more generally even, in many cases of cognition. Once the achievement component is acknowledged, our picture of perception is completed and we have reached a full understanding of perception.

## **2 Noë's analysis of the deviant causal chain case**

Recently, Alva Noë has given an interesting analysis of cases like this one (Noë 2003). According to Noë, what we typically neglect when considering such cases is the *perspectival content* of the experience. The cases are typically under-described, and what is left out is that part of the content which concerns the perspectival properties of the object, such as, for example, the property of looking elliptical, or looking elliptical from here (as a perspectival property of a round object). These properties depend on the subject's relation to the object, and they change as the subject moves in relation to the object. So the perceptual content typically involves two dimensions: a non-perspectival dimension concerning the way things are in themselves (which is called 'factual dimension' by Noë), and a perspectival dimension

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<sup>3</sup>Cp. Noë's worry about such an exclusion (Noë 2003: 94).

concerning how things look from the standpoint of the perceiver.

Now, once we take the perspectival content into account, argues Noë, the problem of the deviant causal chain dissolves. We may suppose that the neurosurgeon makes it the case that the experience is veridical with respect to both the perspectival and the non-perspectival perceptual content. But then there are two possibilities. First, the neurosurgeon manipulates the subject in such a way that the subject's experience depends causally only on the non-perspectival properties of the object but not on the perspectival ones. Second, the neurosurgeon's manipulation makes the subject's experience depend causally on both sorts of properties of the object. In the latter case, but not in the former, the way the object looks from the standpoint of the subject (i.e., the perspectival content) depends causally on the subject's relation to the object and would change in correspondence to the subject's movement relative to the object.<sup>4</sup> According to Noë, we do not have a genuine perception in the first case, and the first case is how we typically understand descriptions of deviant causal chains (even if the description does not explicitly say so). The first case violates the following condition on genuine perception, as Noë puts it:

For an experience to be not merely veridical (*simpliciter*), but genuinely *perceptual* (*simpliciter*, and as we might put it, normal), the right sort of counterfactual supporting dependence must be maintained along *both* dimensions of content.” (Noë 2003: 96, emphasis in original)

This is why we have the intuition that the causal chain is of such a sort that it undermines the experience's counting as a genuine perception. In the second case, however, we deal with a genuine perception, and the fact that the causal chain is deviant, or abnormal, does not matter. The just stated requirement is fulfilled. So the experience is a genuine perception, even though an "unnatural way" of perceiving, according to Noë (Noë 2003: 98). So once we take the perspectival content into account, and make sure that it too depends causally on the subject's perspective on the object, the supposed counterexample against the causal account of perception disappears. As Noë puts it:

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<sup>4</sup>The second case corresponds to Noë's case of an angel who is maintaining the counterfactual dependence come what may (cp. Noë 2003: 97-98). Equally, the case of 'Chris the amazing human hearing aid' is of the same kind as the first case, and the case of the more sophisticated Chris (which supports also the counterfactual dependence of the perspectival content ) is of the second kind (cp. Noë 2003: 98-99).

The problem is that the standard hard cases are under-described. They are presented in such a way that they leave the full content of the experiences unspecified, and so leave the sense that perspectival content is unaccounted for. This is what explains our judgement that cases such as that of the manipulative surgeon are not bona fide cases of perception. Crucially, it never had to do with causation, but with a failure to acknowledge the perspectival content of perceptual experience, and with a failure to recognize that perception is answerable not only to how things are, but to what we do. (Noë 2003: 99)

This is the way how Noë wants to save the causal theory.

An additional advantage of Noë's view can be seen to lie in the following consequence: The proposal opens the way for allowing all sorts of *abnormal* or *unnatural causal routes* to support the counterfactual dependence characteristic of genuine perception. It does not matter how the causal mechanics work, so to speak, what matters is just the existence of some kind of causal mechanics underlying the appropriate counterfactuals. So we avoid the kind of 'matter chauvinism' that we might have fallen prey to if we thought that a specific kind of sensory system with a specific material composition was necessary for genuine perception. In principle, a robot might be capable of perception just as well as a human being; and equally well a human being with some electronic-mechanical sensory-organ replacement. Thus, Noë's proposal avoids the danger that our account

rules out as non-perceptual any cases in which the dependence of experience on how things are is abnormal. But we don't want to rule out all such cases. We can certainly make sense of the possibility of wildly abnormal forms of prosthetic or artificial perception. (Noë 2003: 94)

This can be seen as a nice additional feature of Noë's view.

### **3 A critique of Noë's account**

In my view, Noë's analysis is not plausible. Intuitively, it seems to me, causal chains that are deviant with respect to both the non-perspectival and the perspectival content of the experience are not cases of genuine perception. Perhaps it is true that we often, or even

typically, neglect the perspectival part of the content when describing certain scenarios.<sup>5</sup> Noë is definitely right in observing that the perspectival content should be taken into account too. In general, perceptions have both dimensions of content, a non-perspectival and a perspectival content. But if we do so, then the natural way to complete the description of the deviant causal chain case is to say that the surgeon makes *both* the perspectival *and* the non-perspectival dimension of the content depend causally on the object's state and the subject's perspectival relation to the object. Thus, the deviancy is complete and thoroughgoing. But why should this completed deviancy lead up to genuine perception? If anything, complete deviancy provides the really serious challenge to the causal account, it seems to me.

Noë does not provide any argument for his claim that a causal dependence of both perspectival and non-perspectival content on the object's state is sufficient for genuine perception, and it is hard to see how Noë could. Nothing in the nature of perspectival contents is mentioned or hinted at that could be said to make an important, relevant difference. As long as we have not been told what it is about perspectival content that is so special, compared with non-perspectival content, we have no clue why a case of complete and thoroughgoing deviancy is to be counted as a case of genuine perception rather than as a case that falsifies the causal theory. To be sure, perspectival content has to do with movements and actions by the subject, but why should this make a relevant difference? Typically or normally, the subject's perspectival contents change when she moves relative to the perceived object. For example, the shape of the object will appear to undergo certain transitions from round to slightly elliptical to still more elliptical, and so on. What this means is that a case of complete deviancy will thus be a more realistic or more complete simulation of typical or normal perception. From the inside, the situation will appear to be just as in the case of genuine perception, and the subject is precluded from detecting the manipulation by recognizing that some of her perceptual impressions do not follow the typical or normal pattern. But to say this is merely to state the first-person epistemology of the situation, and this has no direct implication for the question whether the case itself is really a case of genuine perception. So no reason for Noë's claim is in sight, and the first inspection of the situation rather leads to the conclusion that, unless we mistake the epistemology of perception for real perception

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<sup>5</sup>I doubt that this is really the case. It seems more plausible to me that we typically understand the case of the neurosurgeon in such a way that the neurosurgeon of course makes round things look elliptical to the subject if that is how they would be perceived from the subject's point of view if the subject had a genuine perception. We do not worry about how this might be accomplished technically, in contrast to what Noë suggests (Noë 2003: 95). After all, it is a thought experiment. But nothing depends on this.

itself, perspectival content is not relevantly different from non-perspectival content.

Perhaps it will seem by now that we are dealing with a clash of intuitions here. Some people find that complete deviancy allows for genuine perception, whereas others do not. In principle, I think, such a clash of intuitions is what happens in the end, and it is unavoidable. But here we have not yet reached the end. For we can ask ourselves whether there is not an alternative account of perception which, contrary to Noë's, can provide a plausible story of what goes wrong in the case of complete deviancy. And I think there is such a story, which I will present now.

#### **4 The cognitive achievement approach**

Perception is a cognitive achievement. As such, it involves the exercise of some cognitive capacity of the subject. Not only do the experiential states of the subject have to be veridical and causally dependent on the states of the object, the subject has to make a contribution that helps to bring this about. There are, as we might say, not only the state conditions, there is also an achievement condition. The subject's state has to fulfill the three conditions mentioned in the causal theory of perception, the state conditions. But this is not enough, as illustrated by the deviant causal chain case. In addition, the subject has to exercise some of her cognitive abilities and thus to make a contribution to bringing about the satisfaction of the state conditions. This is, I think, a very natural way of looking at the (completely) deviant causal chain case. In this case, the neurosurgeon does all the work. He brings about the right experiential states, and he establishes the causal dependencies between the experiential states and the object's states (including the perspectival parts). The subject herself has not made a significant contribution to any of this. She has not achieved it, and she has not deserved any credit for anything she has 'done'. It's all due to the neurosurgeon's work. Therefore, the subject has not genuinely perceived the object.

Of course, it is true that the subject could not bring about the satisfaction of the state conditions all by herself. The environment has to cooperate, as it were. Without suitable conditions obtaining in the environment, the subject would be at a loss when she tried to perceive the object. But normally, our environments are friendly. And then we can bring to bear our cognitive capacities and thus (help to) establish the kind of correlation between our experiences and the object's state that is characteristic of the state conditions of perceiving.

Our perceptual capacities exploit the conditions and causal structure of our environment including the object. Without the causation of light emission, reflection and transmission in our environment we could not see the object. But once all this is given, we still have to make our own cognitive contribution. Our visual system has to perform certain causal processes that, together with the rest of the world, establish the occurrence of experiences with certain contents that are (largely) veridical and depend causally on the state of the object and the perspectival relation between subject and object. Thus we achieve the satisfaction of the state conditions mentioned in the causal account of perception. In contrast, when deviant causal chains are in place, the causal processes that belong to the subject's exercise of her cognitive capacities are left out. The neurosurgeon establishes the satisfaction of the state conditions, and so the subject has not achieved the perception.<sup>6</sup>

The account of perception that I have just sketched provides an alternative to Noë's account. One advantage of my proposal is that it squares well with recent insights about knowledge. Knowledge, it has been argued, is also an achievement by the subject, something she deserves credit for.<sup>7</sup> Plausibly, this achievement involves the performance of certain causal processes by the subject that help to establish the correlation between belief and its object that is characteristic of knowledge. The history of a belief that amounts to knowledge has to contain a significant part that belongs to the subject and her cognitive capacities. Without such a contribution by the subject, the belief would be merely reliably produced. But since it would not be reliably produced *by the subject*, it would not count as knowledge. Or so the rough picture according to a virtue account of knowledge. This consideration provides reason for holding the similar account of perception that I have sketched above, and to reject Noë's account that leaves out the achievement aspect of perception.

Of course, the notion of an achievement is vague or indeterminate in certain respects, and it leads up to various questions. Most importantly, it is vague how much the subject has to achieve by herself (by exercising her cognitive capacities). In the light of the point made above, that the environment typically has to cooperate in order that the subject can establish a causal dependence of her states on the object's states, the subject's contribution is limited. But some significant contribution she has to make. However, how much is 'significant'? Another question that might arise in connection with the notion of a perceptual achievement can be

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<sup>6</sup>If the neurosurgeon is replaced by an evil demon or an angel who directly causes the relevant experiential states in the subject, it is equally clear that the subject has failed to achieve genuine perception.

<sup>7</sup>This is the core idea of the so-called virtue epistemology that has been developed by E. Sosa, L. Zagzebski, and



hinted at by asking whether a robot or a swamp creature could be capable of such an achievement. Could an artificially or accidentally created system achieve genuine perception? Or rather, does the system have to have some design or learning history in order to be capable of a genuine cognitive achievement? These questions, and probably others, might be taken as pointing towards the respects in which our notion of an achievement is vague or indeterminate, or as questions concerning the details of what counts as an achievement. But they do not speak against the achievement account. Quite to the contrary, they seem to bring up just the right sort of vagueness or indeterminacy, namely, the sort that we would expect when it comes to matters of perception, or they seem to bring up the right sort of questions about the details of perception.

In addition, the nice consequence of Noë's account - namely, that 'matter chauvinism' is avoided - can be reproduced by my proposal as well. For there is nothing in the notion of an achievement that requires a system to have a certain material constitution or composition for achieving genuine perception. A system of arbitrary composition could do the job - if only it has the appropriate cognitive capacities. Whether having such cognitive capacities might require a certain material composition is an open question that cannot be answered without empirical research. It might very well be the case that the number of possible material realizers for cognitive capacities such as the ones involved in perception is rather low.<sup>8</sup> But the possibility of there being only very few possible material realizers of cognitive capacities is something everybody has to face, and it is not a problem for my proposal. For my proposal does not place any restriction on the class of possible cognitive systems *from the very beginning*, and leaves the possibility of such restrictions to empirical research.

One might wonder whether the account just given does not fall under the title of the causal conditions approach of Grice and Strawson. For, does not this account say that the causal route has to fulfill a certain condition? - In reply to this I say that, Yes, if 'fulfilling a certain condition' means simply that the causation has to take place in such a way that  $\phi$ , where ' $\phi$ ' states certain facts, then my account belongs to the causal conditions approach. But then I do not mind. What is important is not so much the names that we give to certain proposals but the relevant differences. Both Grice's and Strawson's proposal, to the extent to which they are clear and graspable and to which their consequences are delineated, crucially

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others. For an excellent summary article on virtue epistemology, see J. Greco (2002).)

<sup>8</sup>Of course, we are not to count by any arbitrary detail of the material realizer but rather by the significant common features, the structural features of the material composition, as it were.

postulate additional facts in the environment and the relation between the environment and the subject. This is different from the achievement approach. Here, the crucial point for solving the problem is the fact that a significant part of the causal chain has to hold in virtue of the exercise of certain cognitive capacities by the subject. This is entirely different from postulating additional conditions in the environment, or additional relations holding between the subject and the object. It is different from saying that the object has to be within the range of the relevant sense organ and cannot be masked or obstructed (as Strawson's accessibility conditions say). And it is different from saying that things have to be similar to yesterday when I saw the cat on the mat, and to last week when I heard the car crash, and so on (as Grice seems to say).

We can see this difference perhaps most clearly when we consider cases of untypical and abnormal perception. Grice's and Strawson's approach implies that these are not cases of genuine perception at all. In contrast, the achievement approach has no objection in principle against such untypical and abnormal perceptions. As long as the cognitive subject performs her part of the job, these cases are all fine and well. Fulfillment of the conditions postulated by Grice and Strawson is not relevant as such but only insofar as it allows the subject to make her cognitive achievement and to make this achievement successful in establishing the causal dependence between states of the subject and the object. Strawson's accessibility conditions leave out this contribution of the subject's cognition. They concern only the conditions in the environment that help to make the subject's attempt at perception successful. And Grice's proposal is not informative enough, since it does not say explicitly what it is about certain examples of genuine perception that has to be respected in general. The conditions hinted at by the open-ended list of examples are relevant only insofar as they allow the subject to make her cognitive contribution and help to make it successful. Grice's proposal is thus compatible with the achievement approach - the only problem about it is that it is too little informative. The causal theory of perception was on the right track. It only needed supplementation. Strawson's and Grice's supplementations are not enough. And neither is Noë's.

To conclude. I have tried to argue for the achievement account by drawing the analogy to knowledge. In addition, the proposal is capable of avoiding the charge of matter chauvinism, just as much as Noë's account. Other considerations of theoretical unification and simplicity would have to follow. The best theory is the one that fares best with all relevant cases, and which theory fares best will most probably involve some fair amount of holism. If intuitions about certain cases are not universally shared, this may induce some differences in the final

judgment - but it need not.<sup>9</sup>

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