DISCUSSION

CENSORED VISION

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When we see in the normal way, the scene before the eyes causes matching visual experience. And it does so as part of an extensive pattern of counterfactual dependence: over a wide range of different alternative scenes and correspondingly different alternative experiences, other scenes would likewise have caused matching visual experience. The same is true if we see in certain abnormal ways, for instance by means of a prosthetic device. But abnormal cases are possible in which the scene before the eyes might cause matching visual experience by triggering some one-off or random causal mechanism, insensitive to the details of the scene, which just happens to produce the right experience. In such a case, matching depends on the scene being just right. Other scenes would not have likewise caused matching experience. These are cases of hallucination, not seeing, despite the fact that the hallucination happens to be veridical in its content.

If we considered only cases of these two kinds, we might well agree with David Lewis’s proposal that

if the scene before the eyes causes matching visual experience as part of a suitable pattern of counterfactual dependence, then the subject sees; if the scene before the eyes causes matching visual experience without a suitable pattern of counterfactual dependence, then the subject does not see.¹

But there is a third sort of case to be considered. The scene may cause matching experience by a good mechanism: one that is not one-off and not random, one that is properly sensitive at every step of its operation, one that would — if left to itself — produce matching experience over a suitably wide range of alternatives. This mechanism, however, may be subject to external interference in such a way that there is no suitable pattern of counterfactual dependence of experience on scene. In the extreme case, we may have no dependence at all. Lewis himself considers just such a case.

The Censor. My natural or prosthetic eye is in perfect condition and functioning normally, and by means of it the scene before my eyes causes matching visual experience. But if the scene were any different my visual experience would be just the same. For there is a censor standing by, ready

to see to it that I have precisely that visual experience and no other, whatever the scene may be . . . So long as the scene is such as to cause the right experience, the censor does nothing. But if the scene were any different, the censor would intervene and cause the same experience by other means. (Op. cit., p. 248.)

Lewis calls the case 'hard' and 'misleading', but he stubbornly insists that it is a case of veridical hallucination. He is wrong. It is a clear case of seeing — of seeing without a suitable pattern, or any pattern, of counterfactual dependence. Therefore it is a counterexample against his proposal. Or so say I, and so say the great majority of those whose intuitions I have consulted.

(The case has several versions. The censor might be entirely outside the subject; or it might be some mechanism in the subject's own brain, so long as it is separate from the mechanism by which the scene causes experience in the actual case. The censor might be a purposive being; it might be an artifact that serves the purpose of its maker; or it might be a mechanism that acts as a censor entirely by accident. I think (and Lewis agrees — personal communication) that these differences do not matter.)

Lewis's proposal must be corrected to reverse its false verdict against the possibility of censored vision. But a fresh start would be uncalled for. For the most part, we should keep both Lewis's verdicts and his reasons for them. Fortunately, the makings of a conservative correction are not far to seek. We can find the main ingredient in Lewis's own treatment of causal preemption and also in Christopher Peacocke's distinction between jump and stepwise recoverability of information.\(^2\) In brief: let us look to dependences involving the intermediate stages of the causal process that actually goes on.

We may diagram this actual causal process as follows. There is a causal chain that runs from the scene \(S_0\) via an intermediate stage \(I_0\) to the visual experience \(E_0\). (Of course there are many other intermediate stages, which we need not bother to display.) There is also an alternative causal chain from \(C\), the censor's initial readiness, to the same experience \(E_0\). But this chain does not go to completion; the part shown as a broken line does not occur. The chain is cut off by the arrival of a causal signal \(M_0\) that branches off the chain from \(S_0\) to \(I_0\) and \(E\). Call \(M_0\) the *monitoring signal*, and call the point at which it branches off the *monitoring point* (MP). The monitoring point might be part way along the chain (as shown); or it might be at the beginning, the scene itself.

\[\text{C} \rightarrow \text{M}_0 \rightarrow \text{E}_0\]
\[\text{S}_0 \rightarrow \text{I}_0 \rightarrow \text{E}_0\]

MP

If the scene had been different, matters would have gone differently. We may diagram the causal process that would then have taken place as follows.

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The causal chain from C to \( E_0 \) would have gone to completion, since the different monitoring signal \( M_1 \) would not have been such as to render the censor idle. The causal chain from the different scene \( S_i \) via the different intermediate stage \( I_i \) to the different matching experience \( E_i \), on the other hand, would not have gone to completion. It would have been cut off at the intervention point (IP) by a causal signal from the censor. Thus \( E_{i} \), the experience at the end of this cut-off chain, would not have occurred. \( E_{0} \), produced by the censor, would have taken its place. However the intermediate stage \( I_i \), which precedes the intervention point, would have occurred.

Now let us return to the actual case. And from the standpoint of actuality, let us ask: what would have happened if \( I_i \) had occurred in place of \( I_0 \)? The answer might seem to be: if so, then the scene would have been \( S_i \) and we would have had the causal process just considered, ending in \( E_0 \). But that answer is wrong. It involves counterfactual backtracking, a form of hypothetical reasoning which, as Lewis has argued, is not proper in causal contexts. The right answer is as follows. Until a point very shortly before the occurrence of \( I_1 \) — call this the divergence point (DP) — there would have been no difference at all from the actual course of events. The scene would have been \( S_0 \), as in actuality. The monitoring signal would have been \( M_0 \), as in actuality (assuming that the monitoring point precedes the divergence point). Nevertheless, \( I_1 \) would somehow have occurred in place of \( I_0 \). If that requires the counterfactual situation to break laws that actually prevail, so be it. After \( I_1 \), events would have taken their lawful course — any further breaking of the actual laws would be gratuitous — and that lawful course would have ended in the experience \( E_1 \). The censor would not have intervened, having been rendered idle, as in actuality, by the monitoring signal \( M_0 \). Also the chain from C to \( E_0 \) would not have gone to completion, and the experience \( E_0 \) at the end of this cut-off chain would not have occurred. Diagramatically:

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To summarise. In actuality the scene was $S_0$, the intermediate stage was $I_0$, and the experience was $E_0$. If the scene had been $S_1$, the experience would still have been $E_0$. But if the scene had been $S_1$, the intermediate stage would have been $I_1$; and if the intermediate stage had been $I_1$, the experience would have been $E_1$. (The case illustrates the intransitivity of counterfactuals.) The same goes for other alternative scenes, over a suitably wide and varied range.

In the case of the censor, we have no suitable pattern of counterfactual dependence of visual experience on the scene before the eyes. But we do have a suitable pattern of *stepwise counterfactual dependence*, as we may call it. Visual experience depends counterfactually on what happens at the intermediate stage, and that in turn depends counterfactually on the scene before the eyes. Taken together, these two patterns of dependence serve to link scenes with matching experience, and they do so over a suitably wide range of alternative scenes and alternative experiences. Stepwise dependence is not dependence *simpliciter*, but it will do as a substitute. The case of the censor is a case of seeing because there is stepwise dependence. Lewis's other cases of veridical hallucination are indeed not cases of seeing, because in those cases there is neither dependence nor stepwise dependence. In place of Lewis's proposal we have this correction:

if the scene before the eyes causes matching visual experience as part of a suitable pattern of counterfactual dependence, or as part of a suitable pattern of stepwise counterfactual dependence, then the subject sees; if the scene before the eyes causes matching visual experience without a pattern of either sort, then the subject does not see.

In the case considered, we needed only two steps, involving only one intermediate stage. But more complicated cases of censored vision and stepwise dependence are possible, and these too should count as cases of seeing. Suppose there are two censors monitoring the causal chain at different points, both rendered idle by the monitoring signals they receive, as follows.

![Diagram]

In this case, visual experience does not depend on the scene before the eyes; experience does not even depend on what happens at the first intermediate stage; and what happens at the second intermediate stage does not depend on the scene. But experience does depend on what happens at the second intermediate stage, which depends in turn on what happens at the first, which depends in turn on the scene. We have a pattern of stepwise dependence in three steps. Other cases could require more steps, conceivably any finite number.
(What if there are infinitely many censors, monitoring the chain at infinitely many points? Then visual experience might not depend on what happens at any intermediate stage, since any intermediate stage might be followed by further potential censorship. If such a case is a case of seeing, the corrected proposal fails. But is it? The case is too different from anything that could really happen, too liable to mislead us by false analogies between the finite and the infinite, and any intuitions we may have about it are not to be trusted. Let it fall where it may.)

Stepwise dependence is an existentially quantified condition. We need not say how to select the appropriate intermediate stage (or stages); we require only that there is some selection that will do the job. Indeed, there should be a good deal of latitude. Anything will do, provided that it comes before the intervention point and its divergence point comes after the monitoring point. We should expect an adequate interval between the monitoring point and the intervention point, given the stipulation that the censor was something separate from the mechanism by which the scene actually causes experience. (What if there is instantaneous action at a distance, or causation over empty time gaps? Again, the cases are too different from what could really happen; let us doubt any intuitions we may have and let them fall where they may.) Thus it matters that the censor was taken to be external. And that seems right intuitively. Integrate the censor into the operative mechanism, and neither intuition nor our corrected proposal will any longer give a clear verdict that the subject sees.

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