Three Questions about *Treatise* 1.4.2
Georges Dicker
Hume Studies Volume 33, Number 1, (2007) 115–153.

HUME STUDIES
Volume 33, Number 1, April 2007, pp. 115–153

Three Questions about *Treatise* 1.4.2

GEORGES DICKER

Abstract: Why does Hume think that the "distinct existence" of sensible objects implies their "continu'd existence"? Does Hume have any reason for thinking that objects have an intermittent existence, other than that they lack a "distinct" existence? Why does Hume think that the inference from the "coherence" of our impressions to the continued existence of objects is "at bottom" considerably different from causal reasoning? The answers proposed are, respectively, that perceptually delimited objects would for Hume be causally dependent on being perceived; that Hume's collapse of the object/perception distinction leads him to the view that objects have as "gappy" an existence as our perceptions of them, and that cases of coherence falsify the generalizations that would need to hold for inferences from coherence to qualify as causal reasoning.

Treatise 1.4.2, "Of scepticism with regard to the senses,"[1] is a notoriously difficult section of Hume's masterpiece. In this paper, I shall not discuss the section as a whole, but I shall try to answer three puzzling questions that arise from it:

(1) Why does Hume think that the "continu'd existence" of sensible objects and their "existence distinct from the mind" stand or fall together?[2]

(2) Does Hume have any reason for thinking that sensible objects have an intermittent, discontinuous or "gappy" existence, *other* than that they lack a "distinct" or independent existence?

Georges Dicker is Professor and Chair in the Department of Philosophy, The College at Brockport, State University of New York, Brockport, NY 14420.
E-mail: gdicker@brockport.edu.

(3) Why does Hume think that the inference from the "coherence" of our impressions to the continued existence of sensible objects is "at the bottom" considerably different from "our reasonings concerning causes and effects?" (T 1.4.2.21; SBN 197)

Question (2) is fundamental, for the "gappiness" of sensible objects is what is supposed to be disguised by powerful mechanisms of the imagination that allow us to yield to a propensity to assign a diachronic identity to resembling but interrupted impressions by masking the gaps between them, and so to believe that the very objects we perceive by sense are bodies that continue to exist while we do not perceive them. Question (3) is also fundamental, for the dissimilarity that Hume finds between the inference from "coherence" and causal reasoning is supposed to drive a wedge between the only kind of reasoning that he says can assure us of any matter of fact, and the basis of our belief in body that most closely resembles that kind of reasoning. Question (1) is less central than the other two, because the structurally important claim in Hume's discussion of the belief in body is that "continu'd existence" implies "existence distinct from the mind," and that claim seems obviously true. The converse claim that "existence distinct from the mind" implies "continu'd existence" is the puzzling half of the equivalence claimed by Hume, but that claim is not structurally important to his overall position. Thus the reason for raising question (1) is simply curiosity as to why, near the very beginning of his discussion, Hume confidently makes what seems to be at best a highly dubious claim. The order in which I take up the three questions simply reflects the order in which Hume's exposition gives rise to them. Except for the discussion of two possible objections in section 2 that depend on elementary points noted in section 1, the three sections of this paper are quite independent and can be read in any order. Thus section 1, which is the most narrowly focused and technical one, may be read last without compromising one's understanding of sections 2 and 3.

1. "Continu'd" and "Distinct" Existence

In the second paragraph of 1.4.2, Hume says that the ordinary belief in the existence of body can be broken down into two beliefs, namely that

(CE) sensible objects *continue* to exist while they are not being perceived,

and

(DE) sensible objects exist *distinct* from (independently of) being perceived.

Hume immediately adds that if CE is true, then DE is true, and that if DE is true, then CE is true. As he puts it:

> These two questions concerning the continu'd and distinct existence of body are intimately connected together. For if the objects of our senses continue to exist, when they are not perceiv'd, their existence is of course independent of and distinct from the perception; and *vice-versa*, if their existence be independent of the perception and distinct from it, they must continue to exist, even tho' they be not perceiv'd. (T 1.4.2.2; SBN 188)

Although the first of these conditional claims is true, the second one may seem to be quite obviously false: why should the "distinct" existence of objects imply their continued existence? Suppose we define *perceptually delimited objects* as ones that exist when and only when they are perceived, so that such an object begins to exist at the instant that it begins to be perceived and ceases to exist at the instant it stops being perceived. Then the obvious objection to raise against Hume is that if there were such objects—and why couldn't there be?—they would not have to *depend* on being perceived for their existence: it could be just a coincidence that they existed only when being perceived.[3]

Jonathan Bennett, the only writer I know of who attempts to defend Hume on this point, writes that,

> something like [the entailment of CE by DE] can be defended. It is arguable that one's only hope of showing that there are no continuous objects would be by showing that there cannot be any—i.e. that the notion of a continuous object is logically defective. But independent objects are, precisely, ones which can be continuous; and so—the argument would run—if there are independent objects then there isn't the remotest chance of showing that there are no continuous objects. This might justify Hume in saying that continuity and independence stand or fall together.[4]

The argument Bennett suggests seems to be this:

(1) If we can show that there are no continuous objects, then we can show that there cannot be any continuous objects. ($p \supset q$)

(2) If there are independent objects, then there can be continuous objects. ($r \supset s$)

$\therefore$ (3) If there are independent objects, then we cannot show that there are no continuous objects. ($r \supset \sim p$)

If we supply the missing premise that

(4) If there can be continuous objects, then we cannot show that there cannot be any continuous objects ($s \supset \sim q$),

then the argument is valid. But even if we grant that it is also sound, it does not prove what Hume wants, for the conclusion plainly does not say that DE implies CE. To prove that one can't show that there are no continuous objects is not to prove that there are continuous objects. To draw the conclusion Hume wants, one might try to modify the argument as follows:

(1) If there are no continuous objects, then there cannot be any continuous objects.

(2) If there are independent objects, then there can be continuous objects.

∴ (3) If there are independent objects, then there are continuous objects.

This argument is clearly valid, but premise (1) is questionable: Why could it not be a brute, contingent fact that all the objects that happen to exist are perceptually delimited objects, similar in duration to after-images or hallucinatory entities?

So why does Hume think that DE implies CE? The hypothesis I propose, baldly stated, is that if sensible objects existed only *when* being perceived, then there would be a constant conjunction between their existence and their being perceived. Thus sensible objects would be causally dependent on being perceived, in Hume's sense of causal dependence.[5] So given Hume's views about causality, DE does imply CE, just as he says.[6]

This hypothesis presumes that what Hume means by the "distinct" existence of sensible objects includes their being *causally* independent of being perceived, and this presumption is borne out by the text. For Hume says that the distinctness of sensible objects comprises "the *independence* of their existence and operation" (T 1.4.2.2; SBN 188), and the notion of independence here is presumably causal. Even more decisively, he says that there are certain "experiments," such as pressing one eye sideways with a finger and seeing double, or viewing objects from various distances, or when suffering from "sickness and distempers," that show that "all our perceptions are dependent on our organs, and the disposition of our nerves and animal spirits." The kind of dependence involved here is clearly causal dependence: Hume's idea is that what we perceive depends *causally* on the conditions of observation and the condition of our sense organs. He concludes from this causal dependence that "our sensible perceptions are not possest of any distinct or independent existence" (T 1.4.2.45; SBN 210–1). Now for reasons that I shall discuss in the next section, throughout *Treatise* 1.4.2 Hume uses "perceptions" and "sensible objects" interchangeably (except when he explicitly distinguishes them in expounding the "philosophical system," of which he disapproves), so this conclusion amounts to saying that sensible objects do not enjoy a "distinct" existence.

To establish my hypothesis I need to show that, given Hume's definition of causation, the perception of a perceptually delimited object (hereafter usually

referred to as a "p.d.o") turns out to be a cause of its existence. Consider then a schematic formulation of the first, "constant-conjunction" definition of "cause" that Hume gives in the *Enquiry*[7] (EHU 7.29; SBN 76):

> E_1 causes E_2 = *df*
>
> (1) E_1 is followed by E_2,
>
> (2) events similar to E_1 are followed by events similar to E_2.

Now if perceptions are causes of sensible objects' existence, then the causation is presumably simultaneous rather than successive. Hume soft-pedals the argument against simultaneous causation that he gives in the *Treatise*, telling the reader that

> [i]f this argument appear satisfactory, 'tis well. If not, I beg the reader to allow me the . . . liberty . . . of supposing it such. For he shall find, that the affair is of no great importance. (T 1.3.2.8; SBN 76)[8]

So let us allow for cases where cause and effect are simultaneous, by replacing "is followed by" with "is accompanied by." For the sake of simplicity, let us also replace the notion of similarity with that of sameness in kind, as Hume himself sometimes does.[9] This yields the following definition:

> D1: E1 causes E2 = *df*
>
> (1) E1 is accompanied by E2,
>
> (2) all events of kind K1 are accompanied by events of kind K2,
>
> (3) E1 is of kind K1 and E2 is of kind K2.

This definition supports saying that a cause is a *sufficient* condition for its effect.[10] However, this cannot be the reason why perceiving a p.d.o. is a cause of its existence. For "x is perceived," on the central and ordinary understanding of "perceives," is *logically* sufficient for (entails) "x exists."[11] Therefore, if the mere sufficiency of "p.d.o. x is perceived" for "p.d.o. x exists" meant that the perception of a p.d.o. caused its existence, it would follow that *any* object that is perceived, whether it is a p.d.o. or not, is caused to exist by being perceived—which is absurd.

This point is likely to provoke the objection that if "if a p.d.o. is perceived, then it exists" is true for purely logical reasons, then the relation involved *cannot* be a causal one, at least by Hume's lights. I would reply that while Hume argues against the blanket rationalist assimilation of causal relations to logical relations, so far as I know he nowhere says that a cause can *never* entail its effect.[12] To be sure, "if x is perceived, then x exists," is a logical truth. But to claim that in the special case

where x is a p.d.o., this conditional also expresses a causal relation is not to claim that all logically true conditionals express causal relations, nor does it threaten such Humean doctrines as that reasoning from the existence of the observed to the existence of the unobserved, or from the past to the future, can never be justified by appealing to logical truths alone. Hume could say without going against the general contours of his position, that in certain special cases, notably cases of the perception and the existence of p.d.o.'s, the occurrence of the cause entails the occurrence of the effect.

But this reply may not satisfy the objector, who might press the point this way: (1) wouldn't the cause-effect relationship between the perception and the existence of a p.d.o. be one where a genuine (not projected) necessary connection obtained? But surely (*pace* the New Humeans) Hume does argue that there are no genuine necessary connections between events, or at least that it makes no sense to affirm such connections. Further (2), even if Hume never explicitly says that no cause and effect relationship amounts to entailment, doesn't that prospect seem to be a poor fit with much of what he does say?[13]

This possible rebuttal raises many issues, but I will make just two points. First, question (1) assumes that if any case of causation amounts to entailment, then it must embody "necessary connection" in the sense that Hume rejects as not satisfying his copy-principle in *Treatise* 1.3.14 and *Enquiry* 7. But that assumption is not self-evident: Hume does appear to think that such a necessary connection would ground a deductive inference from cause to effect—in *Enquiry* 7 he talks about it as a "quality, that binds the effect to the cause and renders the one an infallible consequence of the other" (EHU 7.10; SBN 65; cf. EHU 7.10; SBN 65)—but he does not, conversely, say that an entailment from cause to effect would depend on a necessary connection in the sense that he rejects. Of course, if "p entails q" always means that "there is a necessary connection between p and q," then the objector's assumption holds; but then Hume cannot be said to reject necessary connection since he does not reject logic. So, for the objector to make her point stick, she would need to explain the sense of "necessary connection" in which to say that "p entails q" implies, but is not just a different way of saying, that "there is a necessary connection between p and q." Second, the reference in question (2) to "much of what Hume does say" should serve to remind us that in his discussion of necessary connection, Hume surveys two kinds of cases: (a) cases where cause and effect are (changes in) physical objects ("billiard-ball" cases, so to speak), (b) cases where exercising one's will causes either a physical movement or a mental event ("volitional cases," to coin a term). But those are very different from the causal relation that would obtain between the perception of a p.d.o. and its existence. Such cases would be akin to those in which one has a mental image of X, or even a thought of X, and where X has no objective correlate in the physical world—where X is a purely intentional object. In such cases, it is not at all implausible to say that

the imaging or the thinking both *cause* and *entail* the purely mental existence of X, and it is hard to imagine Hume objecting to such a usage in the context of his discussion of (CE) and (DE).

Still, so far I have given no reason to think that on Hume's definition of cause, a p.d.o.'s existence *is* causally dependent on its being perceived. I have only argued that the logical sufficiency of a p.d.o.'s being perceived for its existence is neither a reason for nor an insuperable obstacle to there being such a causal relation. It seems, then, that the only way to show that a p.d.o.'s existence would be causally dependent on its being perceived is to show that what is special about p.d.o.'s—namely that their being perceived is a *necessary* condition of their existence—implies that their existence is casually dependent on their being perceived.

At first, however, this may seem to be a hopeless task. For in the first place, a necessary condition of an event is not necessarily a cause of that event. A match's being struck (given that the match is dry, there is oxygen present, etc.) is a sufficient condition of its igniting, from which it follows that its igniting is a necessary condition of its being struck, but of course its igniting is not a cause of its being struck. Or, to take a case that requires no *ceteris paribus* clause, a man's beheading is a sufficient condition of his dying, from which it follows that his dying is a necessary condition of his beheading, but his dying is not a cause of his beheading. In the second place, we have just seen that Hume's definition of causation, as usually construed, supports saying that a cause is a sufficient condition for its effect, not a necessary condition for it.

But things are not as hopeless as they appear. The example of the match only shows that a necessary condition of an event is not *thereby* a cause of that event. It does not follow that a necessary condition can *never* be a cause of its effect. Striking a match is in ordinary circumstances both a necessary condition of its igniting and a cause of its igniting. Furthermore, Hume's definition of causation does recognize a sense in which a cause is a necessary condition for its effect, for in the *Enquiry* Hume famously remarks that one "object" causes another when "*if the first object had not been, the second never had existed*" (EHU 7.29; SBN 76). This conditional remark implies that a cause is (not only a sufficient condition) for its effect, but also a necessary condition.

Still, matters are also not as simple as they may appear. For the first thing to note about Hume's conditional is that, in its unqualified form, it is simply false. For it ignores both the possibility of causal overdetermination and the possibility of alternative causes. In the *Treatise*, Hume himself recognizes at least the latter possibility, for he says that "several different objects [can] produce the same effect, [though] it must be by means of the same quality which we discover to be common amongst them" (T 1.3.15.6–7; SBN 173–4). Leaving to one side Hume's questionable and aprioristic claim that alternative possible causes of a given event must always have some common feature, this implies, contrary to Hume's unqualified

claim in the *Enquiry*, that a given event could have occurred in the absence of its actual cause, if something else had caused it.

This concession, however, allows that there is still an element of truth in Hume's *Enquiry* remark; namely, that in the absence of any alternative cause (including an overdetermining cause), a given effect could not have occurred unless its actual cause had occurred. This point can be incorporated into D1, without circularity and without making causation (as it exists apart from observers) something more than constant conjunction, by expanding clause (2) as follows:

> (2A) All events of kind K1 are accompanied by events of kind K2, and all events of kind K2 that are not accompanied by events of kind K1 are accompanied by events of kind K3 or K4 or . . . Kn, where K3, K4, . . . Kn are such that all events of kind K3 are accompanied by events of kind K2, and all events of kind K4 are accompanied by events of kind K2, . . . and all events of kind Kn are accompanied by events of kind K2.[14]

Thus, for example, to say that striking a match causes it to ignite is to say that all strikings of matches (assuming that the match is dry, oxygen is present, the ambient temperature is not too low, etc.) are accompanied by ignitings of matches, and that all ignitings of matches that are not accompanied by strikings of matches are accompanied by the matches' being exposed to superheated air, or brought into contact with another lit match, or thrown into a fire, and so on, and all cases of matches being exposed to superheated air, or brought into contact with another lit match, or thrown into a fire, and so on are accompanied by the matches' igniting.

I will now show that this expanded Humean definition of "cause" leads to the conclusion that DE implies CE, thereby confirming my hypothesis that the reason why Hume holds that continued existence and distinct existence stand or fall together is that p.d.o's would be causally dependent on being perceived (so that only continuous objects, i.e. non-p.d.o.'s, would enjoy an existence causally independent of being perceived). As previously mentioned, if we use "perceive" in the central sense in which "x is perceived" entails "x exists," then we may say, for purely logical reasons, that

(a) All cases of an object's being perceived are accompanied by cases of its existing.

But *for perceptually delimited* objects, we may also say that

(b) All cases of an object's existing are accompanied by cases of its being perceived.

Claim (b) is contingently true of perceptually delimited objects, for although the proposition that "if something is a perceptually delimited object, then it exists

only when it is perceived" is a necessary truth, for each particular perceptually delimited object x, it is a contingent truth that x exists only when it is perceived: being perceived is not an essential property of x.[15] Such objects are oddly perishable inasmuch as they contingently possess the unusual property of existing when and only when they are perceived. It would be otiose to add to (b) a clause saying that "all cases of an object's existing that are not accompanied by cases of its being perceived are accompanied by cases of kind K3 or K4 or . . . Kn, where K3, K4, . . . Kn are such that all events of kind K3 are accompanied by cases of the object's existing, and all events of kind K4 are accompanied by cases of the object's existing . . . and all events of kind Kn are accompanied by cases of the object's existing," since in the case of a perceptually delimited object there are as a matter of contingent fact no cases of the object's existing that are not accompanied by cases of its being perceived. Perceptually delimited objects are of course bizarre, but they seem to be logically possible, which is precisely why Hume's claim that DE implies CE needs a defense. But such objects meet conditions (a) and (b), and so can on Hume's expanded definition be said to be caused to exist by being perceived, in which case Hume is justified in saying that an object with a "distinct" or "independent" existence cannot be a perceptually delimited object—that DE implies CE.

I shall now consider three possible objections to my argument for saying that the expanded definition of "cause" implies that DE implies CE. First, it may be objected that possibly if x is a perceptually delimited object there is always some event of kind K*, other than x's being perceived, that happens contingently to go together with x's being perceived, and that this K*-event is the true cause of x's existence.[16] I would reply as follows: What does it mean to say that the K*-event that always contingently goes together with x's being perceived is the true cause of x's existence? It must mean that even when x is not perceived, the occurrence of a K*-event is always accompanied by the existence of x, since a cause is always at least a sufficient condition for its effect. Letting "K*"abbreviate "a K*-event occurs at time t," "~P" abbreviate "x is not perceived at t," and "E" abbreviate "x exists at t," we can represent this as "$(K^* . \sim P) \supset E$." So, if we assume that a K*-event occurs at t and that x is not perceived at t—that $(K^* . \sim P)$—then it follows that x is perceived at t—that E—so that we have $(K^* . \sim P . E)$. But this conflicts with the claim that x's being perceived at t is necessary for x's existence at t $(E \supset P)$, since $[(E \supset P) \supset \sim(K^* . \sim P . E)]$ is a tautology. Therefore, to suppose that a K*-event that contingently goes together with x's being perceived is the true cause of x's existence is to contradict the assumption that x is a perceptually delimited object, since such an object's being perceived at any time t is a necessary condition of its existence at t.

A variant of the possible objection just considered is this: possibly if x is a perceptually delimited object there is always some event of kind K', other than x's being perceived, that "tracks" x's being perceived, in that it always co-occurs with x's being perceived, and so is constantly conjoined with x's existence if x's being

perceived is. The objection would then be that this K'-event has as good a claim to be the cause of x's existence as does x's being perceived. My reply would be that on this scenario the K'-event and x's being perceived would for Hume each be a part-cause of x's existence, so that the causal dependency of x's existence on its being perceived would be preserved. Furthermore, Hume could surely point out that there is absolutely no evidence that such a "tracking event" occurs, whereas both x's being perceived and its existence enter into our experience.

Finally, it might be objected that my hypothesis violates the asymmetry of the causal relation. For, as we have seen, not only is it true (for any object) that

(a) All cases of an object's being perceived are accompanied by cases of its existing,

but it is also true (for perceptually delimited objects) that

(b) All cases of an object's existing are accompanied by cases of its being perceived.

But (a) implies that any object's being perceived is a sufficient condition for its existing, and (b) implies that a (perceptually delimited) object's existing is a necessary condition for its being perceived, and thus (b) and (a) jointly imply that a perceptually delimited object's being perceived is both necessary and sufficient for its existence, which makes the relationship between the perceiving and the existing symmetrical, in which case neither can be a cause of the other. One cannot preserve causal asymmetry here by saying that the cause is temporally prior to the effect, because cause and effect are simultaneous. I answer that there is still an asymmetry that is sufficient to preserve the asymmetry of the causal relation. For while (a) is a logical truth, so that "if x is perceived, then x exists" is a logical truth, (b) is contingent—it is a contingent fact about the objects (b) ranges over that they are perceptually delimited, so that "if x exists, then x is perceived" is contingent. Thus the entailed biconditional, "x is perceived if and only if x exists," masks an important asymmetry, as comes out from the fact that while its "only if" part is always true, its "if" part is false unless "x" ranges only over perceptually delimited objects.[17]

2. The Intermittent Existence of Sensible Objects

The discussion of my second question—does Hume have any reason for thinking that sensible objects have an intermittent, discontinuous or "gappy" existence, *other* than that they lack a "distinct" or independent existence?—requires some careful stage-setting. According to what Hume calls "the vulgar system" (the version of the belief in body held by the common person, and by all of us most of the time), the following three propositions are all true:

(1) Sensible objects are bodies.

(2) Sensible objects have a continuous existence.

(3) Bodies have a continuous existence.

These propositions are of course perfectly consistent, but Hume thinks that (2) is false. Throughout T 1.4.2, Hume takes it that the "vulgar" falsely believe that sensible objects have an uninterrupted or continuous existence—that they are deluded in their belief that (2) is true. To explain how the delusion arises, he offers his complicated four-part "system," which may be summarized as follows. The first part's operative component is Hume's definition of (diachronic) identity, according to which a thing retains its identity through time if and only if *(a)* its existence is uninterrupted and *(b)* the thing does not change during that time.[18] The second part makes four distinct points: *(i)* a set of impressions exhibiting what Hume calls "constancy" meets condition *(b)* because its earlier members exactly resemble its later members; *(ii)* a psychological principle causes us to think, whenever X exactly resembles Y, then X is identical with Y; *(iii)* this principle drives us toward the belief that the earlier impressions are identical with the later ones, but *(iv)* the discontinuity (interruption, gap) between the earlier and later impressions means that they do not meet condition *(a)*, and so drives us toward the opposite belief, thereby generating a mental unease or tension in face of the threatened contradiction. The third part of the system holds that we avoid this contradiction by "feigning" the continued existence of sensible objects during the gaps between our interrupted but exactly resembling impressions. This feigning, which is carried out by the imagination, masks those gaps, and thereby frees us to think of sensible objects as also meeting condition *(a)* and so as possessing identity over time. The fourth part of the system holds that since the feigning consists in a lively idea related to present memories that are "equivalent to impressions," it meets Hume's official definition of belief as "a lively idea related to or associated with a present impression" (T 1.3.7.5; SBN 96), and thus amounts to a *belief* in the continuous existence of the objects of the senses; thus in the fourth part the "feigning" of the third part gets promoted to the status of a belief.

Directly after expounding this four-part system, Hume says: "all of [these parts] form a *consistent* [my emphasis] system, which is perfectly convincing [as an explanation of why the vulgar believe in body]" (T 1.4.2.43; SBN 210). A critic of Hume might object that his system is not really consistent because it implies that sensible objects are both continuous and intermittent. But this possible objection, while quite natural, would be incorrect, for in the end Hume's system denies the intermittency and affirms the continuity. It is true that point *(iv)* of the second part of the system implies that the vulgar are at least dimly aware of the "gappiness" of sensible objects. But this awareness does not rise to the level of a

belief; it is akin to a person's being dimly aware that his or her spouse is unfaithful but refusing to believe it. If the activity of the imagination that Hume describes in the third part of his system did not occur, then the vulgar *would* believe that perceptions/sensible objects have an intermittent existence (just as if the betrayed spouse were not blinded by love or attachment, he or she would believe the infidelity). But since this activity of the imagination is for Hume a built-in psychological principle that always operates and that thus kicks in as soon as we are presented with "gappy" but resembling impressions, there is no time at which the vulgar believe that perceptions/sensible objects have only an intermittent existence, and hence no time at which they believe that they have *both* an intermittent and a continuing existence.

Although Hume maintains that the vulgar system is consistent, he also thinks that it is "really false" (T 1.4.2.43; SBN 209). For "a very little reflection and philosophy is sufficient to make us perceive" that the objects of the senses do not have a distinct or independent existence, and therefore do not have a continuous existence either. Thus, immediately after telling us that his system is "consistent [and] perfectly convincing," Hume attacks proposition (2) of the system—that sensible objects have a continuous existence—by means of the following *Modus Tollens* argument (T 1.4.2.44; SBN 210–1 and T 1.4.2.50; SBN 214)[19]:

(1) If sensible objects continue to exist while not being perceived, then they exist independently of being perceived.

(2) Sensible objects do not exist independently of being perceived.

∴ Therefore, sensible objects do not continue to exist while not being perceived.

To support this argument's second premise, Hume cites the "experiments, which convince us, that our perceptions are not possest of any independent existence," such as pressing one eye with a finger and seeing everything double (T 1.4.2.45; SBN 210). Except for the Humean twist, exhibited in the first premise, of linking independence with continuity, this is a standard philosophical argument, whose second premise turns on the causal facts of perception and on the phenomenological indistinguishability of illusory and hallucinatory perception from "veridical" perception. Thus, for example, Hume appeals to the point that the veridical and the non-veridical perceptions had in a case of double vision "are both of the same nature" (i.e. are qualitatively or phenomenologically indistinguishable) to prove that they are both equally "dependent on our sense organs, and the disposition of our nerves and animal spirits" (T 1.4.2.45; SBN 211).[20]

If we accept the *Modus Tollens* argument and continue to hold propositions (1) and (3) of the vulgar system, however, we fall into the contradiction of accepting:

(1) The objects of perception are bodies.

(not 2) The objects of the senses have a discontinuous existence.

(3) Bodies have a continuous existence.

But Hume holds that people who accept the argument also find a way to avoid the contradiction. They avoid it by devising the "philosophical system," or the theory of "the double existence of perceptions and objects," which denies (1) and affirms the following propositions:

(1a) The objects of the senses are our own perceptions or impressions.

(not 2) The objects of the senses have a discontinuous existence.

(3) Bodies have a continuous existence.

Thus, the realization that the objects of the senses have neither an independent nor a continuous existence does not lead people to give up the belief in body. Instead, they invent the "philosophical system," which distinguishes between perceptions and objects and posits continuous bodies as the causes of their discontinuous perceptions. The contradiction is avoided by ascribing the discontinuity to perceptions and the continuity to bodies.

Hume then proceeds to lambaste the philosophical system as being even worse off than the vulgar system: it has no rational basis; it is entirely parasitic on the vulgar system, and to boot it even contradicts that system. I need not go over this part of T 1.4.2. Rather, what is important for my purposes is this. It would be implausible to suppose that the *Modus Tollens* argument is the *only* argument at play in T 1.4.2 for thinking that sensible objects have a gappy existence. To see why, notice first that it is clear from Hume's exposition of his four-part system (specifically from point *(iv)* of the second part and from the third part) that for Hume the vulgar are dimly or fleetingly *aware* of the "gappy" character of sensible objects. It would be most implausible to suppose that for Hume, the tension portrayed in point *(iv)* of the second part of his system, wherein we are led by the constancy of our impressions together with the principle that exactly resembling things are identical to attribute identity to interrupted perceptions, but are also exposed to gaps between those perceptions that belie that identity (and thus threaten us with contradiction), occurs completely below the level of consciousness. Certainly Hume's language in describing this tension implies that we are aware of it, as in the following passage among others:

> Nothing is more certain from experience, than that any contradiction either to the sentiments or passions gives a sensible uneasiness. . . . Now there being here an opposition betwixt the notion of the identity of

> resembling perceptions, and the interruption of their appearance, the mind must be uneasy in that situation, and will naturally seek relief from the uneasiness. Since the uneasiness arises from the opposition of two contrary principles, it must look for relief by sacrificing the one to the other. But as the smooth passage of our thought along our resembling perceptions makes us ascribe to them an identity, we can never without reluctance yield up that opinion. We must, therefore, turn to the other side, and suppose that our perceptions are no longer interrupted, but preserve a continued as well as an invariable existence, and are by that means entirely the same. But here the interruptions in the appearance of these perceptions are so long and frequent, that it is impossible to overlook them. (T 1.4.2.37; SBN 205–6)

Here Hume's talk of "uneasiness," of the impossibility of overlooking the gaps, of seeking relief, of turning to the other side, and so on, surely implies that the conflict he is describing is not wholly unconscious (and it is also worth reminding ourselves both that Hume lived before Freud's ideas brought the notion of unconscious mental forces and mechanisms into currency, and that Hume's own way of discovering how the mind works is to use introspection).

What, then, is supposed to make the vulgar aware of the gappiness of sensible objects? Not, I maintain, the *Modus Tollens* argument (nor any other variation on the so-called "argument from illusion"). For in the first place, the idea that the vulgar would find the "experiments" that Hume invokes in support of its second premise sufficient to show that all sensible objects have a dependent existence is both implausible in itself and implausibly attributed to Hume. The vulgar might well accept the facts about double vision and perspective that Hume cites, but only people who "compare experiments, and reason a little upon them" generalize from those facts, *via* some principle propounded by philosophers (such as the qualitative indistinguishability of veridical and non-veridical perception that Hume mentions), to the conclusion that *all* sensible objects are dependent on the mind and have a gappy existence. The vulgar would agree that hallucinations and illusions are mind-dependent and intermittent, but they certainly do not extend this view to sensible objects in general: only philosophy is supposed to force us to such a conclusion. Second, if the *Modus Tollens* argument were the only thing that made the vulgar aware of the gappiness of sensible objects, then the very same argument that motivates the "feigning" of the vulgar system would be the one that demonstrates the falsity of that feigning to anyone who understands the argument—an awkward result, to say the least. Finally, Hume does not give the *Modus Tollens* argument until late in the section, after he has fully expounded the "gap-filling" role played by the imagination in producing the ordinary belief, and he then presents it very briefly. This too is evidence that by Hume's lights this

argument does not bear the whole weight of showing that sensible objects have a gappy existence. This vital point prompts the question to which this section is addressed: does Hume give any reason, other than the *Modus Tollens* argument, for the view that sensible objects lack a continuous existence? I shall argue for the threefold thesis that Hume does give another, novel reason for this view (one that he himself accepts); that this reason is, appearances to the contrary notwithstanding, consistent with his considered analysis of the ordinary belief in body; but that in the end this reason is not compelling.

Hume's novel and most basic reason for holding that the objects of sense have a "gappy" or discontinuous existence is that our *perceptions* are obviously discontinuous, "broken," or "interrupted." Consider for example the perceptions you have when looking at the furniture in your study. Those perceptions are plainly discontinuous: they cease to exist and are replaced by very different perceptions every time you glance away from the furniture or leave your study, and they cease to exist without being replaced by other perceptions when you go into a dreamless sleep. This simple and obvious point, Hume thinks, by itself proves incontrovertibly the falsity of the belief in the "continu'd" existence of the objects of the senses—he sees it as a self-standing and decisive argument for the "gappiness" of sensible objects.

To grasp Hume's thinking, it is crucial to understand that when he says that our perceptions are interrupted or discontinuous, he is not saying merely that our perce*ivings*, or acts of perception, or perceptual episodes, are discontinuous, which is of course true. Rather, he is also claiming that the *objects of* our perceptions—the things that we perceive—are discontinuous. For Hume does not distinguish between perceptual episodes and the objects perceived in them; his use of the term "perceptions" to stand indifferently for both perceptual episodes and their objects is not just linguistic carelessness, but reflects a genuine collapsing of the distinction between them. The only form in which Hume recognizes a distinction between perception and its objects is that of the philosophical theory of the "double existence of perceptions and objects" advocated by Descartes, Locke, and others—a theory that Hume rejects. Except within the context of this theory, Hume sees no place for the distinction between perception and its objects.

Hume's rejection of this distinction calls for an explanation, if only because the distinction is so elementary. Even ordinary, unsophisticated common sense would distinguish between perceiving something, or the perception of something, and *what* is perceived, for example, between seeing an apple, and the apple that we see. Why then does Hume reject this elementary distinction?

One possible answer lies in Hume's acceptance of the philosophical view that we perceive only our own impressions.[21] For one's impressions have exactly the same temporal characteristics, including notably the same duration, as perceptions, taken as perceptual episodes or acts of perceiving. So the thesis that we perceive

only impressions implies that the objects of perception last no longer than the perceptions themselves. To put the same point in a different way, for Hume an impression includes its intentional object—it is always an impression *of* something—and this intentional object has exactly the same duration as the conscious episode that constitutes the impression.[22] But in that case, the distinction between perceptions and objects collapses, at least for Hume. For from Hume's empiricist point of view, the *only* thing that could have differentiated between perceptions and their objects is a temporal difference between them, because any "act" of perception distinct from the object perceived would not be something of which we could have any impression: it would be, so to speak, diaphanous or "transparent," so that Hume's empiricism would banish it as a meaningless notion. To put it another way, when we have an impression, we are not presented with any item other than its intentional object; figuratively speaking, this object swallows up or absorbs any putative introspectible act of awareness, and no such act enters into our experience. But by Hume's empiricist lights, that means that we have no idea or conception of any such act. Thus, it may seem that Hume's acceptance of the philosophical view that we perceive only our own impressions is what explains his otherwise puzzling denial of the elementary distinction between perceptions and objects.

This explanation, however, puts the cart before the horse. For as I have said, Hume regards the discontinuity of our perceptions, together with the collapse of the distinction between perceptions and its objects, as a self-standing proof that the objects of perception are discontinuous. But if the reason for holding that there is no distinction between perceptions and objects is that sensible objects are impressions, then that novel argument cannot be a self-standing one. For the doctrine that we perceive only impressions is logically independent of the proposition that there is no distinction between perceptions and objects (though, as we have just seen, it leads to the collapse of that distinction when combined with Hume's radical empiricism), and it does not follow from the proposition that our perceptions are discontinuous. So, if that doctrine is an indispensable part of the case for the view that sensible objects are discontinuous, then an argument that turns only on those two propositions cannot be a self-standing argument for that view. Furthermore, if the view that there is no perception/object distinction rests on the doctrine that sensible objects are impressions, then Hume's novel argument for holding that sensible objects are discontinuous also becomes perfectly otiose. For *of course* our sense *impressions* are discontinuous; so an explanation of why Hume holds that sensible objects are discontinuous that appeals to the view that we perceive only our impressions renders his novel argument completely unnecessary: one need not offer any argument at all to prove that sensible objects are discontinuous, if one assumes from the start that those objects are only one's impressions. Finally, the doctrine that we perceive only our own impressions

cannot provide an explanation of the vulgar's awareness of the gappiness of sensible objects, because the concept of an impression is inextricably tied to philosophical arguments of which they are supposed to be ignorant. Hence, in order for Hume's rejection of the perception/object distinction, conjoined with the premise that perceptions are discontinuous, to serve as a self-standing and non-otiose argument for his claim that sensible objects are discontinuous, and one that can at least by his own lights account for the vulgar's uneasiness about the reidentification of bodies over time, the premises of that argument must not depend on the doctrine that we perceive only our impressions. So we need to find a reason for Hume's rejection of the perception/object distinction that does not rest on that doctrine.

I think that such a reason can be found, by pressing the point that there is no impression of any introspectible "act of perceiving" that could distinguish it from its object. For what then does distinguish perceptions from objects? It still seems that the only thing that could do so would be their temporal characteristics: objects can, so to speak, outlast the perceptions of them, and so must be distinct from those perceptions. The importance of this point is recognized by Kant in his "Analogies of Experience," where he explicitly distinguishes between the time-relations of perceptual episodes and the time-relations of their objects, saying that perceptual episodes may be successive even when their objects are co-existent; for example that while the perceptions of the front of a house may occur before perceptions of the back, the front and back of the house that the observer successively sees co-exist. Hume recognizes the point in his own way, since he says that the chief component in our belief in body is precisely that bodies continue to exist unperceived. But unlike Kant, Hume does not argue that assigning a different set of time-relations to objects of perception from those of the perceptions themselves is a condition of the very possibility of experience, and is therefore epistemologically warranted.[23] Rather, Hume sees the time-relations of perceptual episodes—what Kant calls the order of apprehension and his commentators call the subjective time-order—as the only one that is necessary for experience: what Kant considers to be the objective time-order enters into Hume's thought only as the fictional product of the imagination working in accordance with merely contingent principles. So, these time-relations cannot, for Hume, be appealed to as an epistemically warranted way of distinguishing between perceptions and objects: objects do not *knowably* have different time-relations than perceptions. Within the range of what can be known, there are only the time-relations of the perceptions themselves, and since there is accordingly no other set of time-relations to appeal to, and yet no way to distinguish between perceptions and objects other than their time-relations, the distinction between perceptions and objects collapses.

I shall now consider two possible objections to this explanation of why Hume thinks that sensible objects have an intermittent existence, both to the effect that

it is incompatible with other things that Hume says in T 1.4.2 and elsewhere. The first such objection is that my explanation conflicts with Hume's initial account of the ordinary belief in body. For as we saw in section 1, at the very beginning of T 1.4.2 Hume explicitly says that one component of the ordinary belief in body is DE—the belief that sensible objects have a "distinct" existence; he thus seems to embed the distinction between the perception of x and the existence of x within his own analysis of the ordinary belief. But I have just argued that Hume's most basic reason for holding that sensible objects have an intermittent existence, one that he also attributes to the vulgar, turns on *collapsing* the distinction between perceptions and their objects. Is Hume then committed to saying, contrary to his claim that the vulgar system is "consistent," that the ordinary belief in body is self-contradictory—that it entails that sensible objects both do and do not enjoy an existence independently of being perceived?

It might seem that this objection can be answered by appealing to an important feature of Hume's position that I have so far not mentioned, namely his notion of an unowned perception.[24] According to Hume, the core of the ordinary belief in body is that the very same objects one perceives by sense—viz., "perceptions"—continue to exist when one no longer perceives them. But for Hume, this does not mean that they then exist as something other than perceptions. Rather, it only means that they have become detached from the particular bundle of perceptions or Humean "self" to which they formerly belonged—that they have become unowned perceptions. As Hume puts it:

> What we call a *mind*, is nothing but a heap or collection of different perceptions, united together by certain relations, and suppos'd, tho' falsely, to be endow'd with a perfect simplicity and identity. Now as every perception is distinguishable from another, and may be consider'd as separately existent; it evidently follows, that there is no absurdity in separating any particular perception from the mind; that is, in breaking off all its relations, with that connected mass of perceptions, which constitute a thinking being. . . . If the name of *perception* renders not this separation from a mind absurd and contradictory, the name of *object*, standing for the very same thing, can never render their conjunction impossible. External objects are seen, and felt, and become present to the mind; that is, they acquire . . . a relation to a connected heap of perceptions. . . . The same continu'd and uninterrupted Being may, therefore, be sometimes present to the mind, and sometimes absent from it, without any real or essential change in the Being itself. An interrupted appearance to the senses implies not necessarily an interruption in the existence. The supposition of the continu'd existence of sensible objects or perceptions involves no contradiction. (T 1.4.2.39–40; SBN 207)

I read this passage as implying that for Hume DE does not mean that a sensible object can exist distinct from a perception of it, in the sense that it can exist wholly unperceived or unsensed. Rather, DE means only that a sensible object can exist distinct from anything that Hume would call a mind or a person—that it can be, so to speak, a "free-floating" perception, one that exists apart from any bundle of perceptions.[25] On this reading, Humean unowned perceptions should not be confused with Russellian unsensed *sensibilia*.[26] They exist apart from any bundle of perceptions, but they do not thereby cease to be consciously sensed; they are, so to speak, suffused with consciousness. This is of course a very odd notion—indeed one that some philosophers would find incoherent, since it implies that a sensible object can exist perceived without being perceived by any mind or person—but it is what Hume espouses in the above passage.

But even waiving the objection that the notion of an unowned perception is incoherent, this notion cannot provide a satisfactory answer to the objection that Hume himself builds the perception/object distinction into his analysis of the ordinary belief in body, for it runs afoul of what I have suggested is Hume's most basic reason for thinking that sensible objects have an intermittent existence. For if sensible objects *can* continue to exist as unowned perceptions, then what assures Hume that they *do not* in fact do so—thereby possessing a continuous existence after all?[27] Obviously, he could no longer say that objects exist intermittently on the grounds that they can't outlast perceptions of them, since unowned perceptions need not be intermittent. Indeed, there is an even stronger point to be made here. Of course if it is logically possible that there are unowned perceptions, then it is also logically possible that they have an intermittent existence. But Hume's only reason for introducing unowned perceptions, their very *raison d'être*, is to serve as continuants that exist when no one has them—when they are not attached to any bundle of perceptions. Only if they so exist can the vulgar system be true; the "feigning" that gets promoted to the status of a belief in the final part of his "system" *is* precisely the belief that there are unowned perceptions. It would be completely pointless and self-defeating for Hume to suppose that unowned perceptions have an intermittent existence (or that they last for any less time than the bodies with which they are equated); in order for unowned perceptions to play the role within the vulgar system that Hume assigns to them, he must postulate that they *do* exist continuously (according to that system). As for the *Modus Tollens* argument that is supposed to demonstrate, independently of any other consideration, that sensible objects have a gappy existence, it poses no problem for the believer in unowned perceptions; for she will say that its second premise is simply false since sensible objects, *qua* unowned perceptions, *do* have an existence distinct and independent of being perceived by a mind.

But whether Hume thinks that the vulgar are committed to saying that unowned perceptions merely can or that they do exist continuously, he cannot

appeal to unowned perceptions to answer the objection that the object/perception distinction is built into his analysis of the ordinary belief in body. For such an appeal would ruin his novel argument for the intermittency of sensible objects: if unowned perceptions even can exist continuously, then the premise that perceptions have an intermittent existence is questionable; if they do exist continuously, then that premise is false. So, he needs to give an answer to the objection that does not appeal to unowned perceptions.

Before offering such an answer, I want to register the second possible objection to my analysis of his position, because the answer I shall give to one objection will serve for both. This second objection is that my explanation of why Hume thinks that sensible objects have an intermittent existence conflicts with my explanation of why he holds that DE implies CE. For the former turns on the point that for Hume there is no ontological distinction between x and a perception of x, while the latter turns on the point that if sensible objects existed only when being perceived, then there would be a causal relation between the perception of a sensible object and its existence. But if there is no ontological distinction between x and a perception of x, then Hume cannot consistently hold that there is a causal relation between a perception of x and x; for he firmly holds that cause and effect must be distinct events.[28] It may seem, then, that I ought to give up either my explanation of why Hume says that DE implies CE (since it requires that there be an ontological distinction between x and the perception of x), or my explanation of why Hume thinks sensible objects have an intermittent existence (since it turns on collapsing that distinction).

I will give essentially the same answer to both of the foregoing possible objections. Those objections assume that in his treatment of the relationship between CE and DE at the very beginning of T 1.4.2, Hume is taking for granted his view that there is no ontological distinction between x and a perception of x. I suggest, however, that this assumption is incorrect. I suggest that when Hume expounds the relationship between CE and DE at the outset of T 1.4.2, he is assuming that the views about causality that he has been defending throughout *Treatise* 1.3 are true; those views are "built into" his discussion of this point as necessary background. On the other hand, at this early stage of the discussion of sense-perception, he is not yet assuming his own view about the relation between a perception and its object; he is allowing for the possibility that there is a distinction between perception and *what* is perceived, at least in the sense that he has not yet entertained the question of whether objects and perceptions are distinct. This is confirmed by the fact that only later in the section does he announce that he will "call indifferently *object* or *perception* . . . what any common man means by a hat, or shoe, or stone" (T 1.4.2.31; SBN 202). At this later point, he does attribute the collapse of the perception/object distinction to the ordinary person, but that is because now he *is* reading (however mistakenly) this part of his own metaphysics into the ordinary

person's view. The ordinary view is, as it were, a moving target in Hume's discussion, and this target does not reach a resting place until at least the passage I have just quoted. It is true that he there adds, "I shall be sure to give warning, when I return to a more philosophical way of speaking and thinking" (T 1.4.2.31; SBN 202), but this must not to be taken to mean that he regards this "more philosophical way" as superior, because it will turn out to be nothing but the Cartesian/Lockean view of the "double existence of perceptions and objects" that he rejects.

I am not saying that the people Hume calls "the vulgar" *really* hold that there is no distinction between perceptions and objects. Although of course such people were not (and are not now) acquainted with G. E. Moore's "Refutation of Idealism," they would presumably have applauded his argument that since a perception of red and a perception of blue differ in color but have something in common in virtue of which both are perceptions, there has to be a distinction between a perception and its object. (Moore talks of sensations rather than of perceptions, but his point carries over to perceptions). Nevertheless, Hume simply *attributes* to the vulgar his own view that there is no distinction between perceptions and objects. Perhaps the reason he so easily does so is that he thinks the vulgar would be just as hard-pressed as he is to find introspectively a distinction between perceptions and objects: for the vulgar no less than the philosopher, any putative act of perception gets "swallowed up" by the object perceived. Be that as it may, if Hume thought that the vulgar made a distinction between perceptions and objects, then he could not suppose that they ever experience the uneasiness that leads them to "feign" the existence of unowned perceptions, since they could hold *ab initio* that objects have a continuous existence and only perceptions are gappy.

My reply to the two possible objections just considered serves to illustrate one reason why *Treatise* 1.4.2 is so difficult. This is that when Hume describes what he presents as ordinary or "vulgar" views, he builds certain elements of his own metaphysical views into his descriptions, thus leaving the reader with the task of disentangling what really are ordinary views from Humean accretions to those views. Thus, to give another illustration, Hume correctly holds that the "vulgar" believe that the very objects they perceive by sense continue to exist when they no longer perceive them. But he thinks that the vulgar do not, in cases of non-hallucinatory and non-illusory perception, distinguish between bodies and what are *really* impressions. So, he thinks, their belief in the continued existence of bodies is really a belief in the existence of unowned perceptions. He thinks that this belief is coherent but false—that perceptions *could* but *do not* exist unowned. So far as I can see, he never gives a reason why the belief in unowned perceptions is false; at best his arguments show that we cannot *know* that there are unowned perceptions. In any case, Hume's ascription of this belief to common sense is a stark illustration of his penchant for reading his own metaphysical views into what he presents as the ordinary views of humankind.

I have argued that neither the occurrence of the passage early in *Treatise* 1.4.2 where Hume says that the ordinary belief in body implies a belief in the "distinct" existence of sensible objects, nor Hume's view that cause and effect are always "distinct," should prevent us from recognizing that, according to the considered view of the ordinary belief that Hume develops as the section progresses, the perception/object distinction gets collapsed. It does not follow, however, that Hume's novel reason for holding that sensible objects have a discontinuous existence—the intermittency of our perceptions combined with the collapse of the perception/object distinction—is compelling. I shall conclude this section by arguing that it is not compelling, and thus by making an internal criticism of what I take to be Hume's most original and most basic reason for that view.

As my earlier reference to Hume's notion of unowned perceptions suggests, there are three relevant possibilities to consider. The first possibility is that there is no perception/object distinction and that there are unowned perceptions. On that option, Hume cannot correctly assert that perceptions have an intermittent existence, because unowned perceptions are precisely ones that he supposes to remain uninterrupted or continuous even when they are detached from any mind that could have them. So on this option, Hume's novel argument against the continuity of sensible objects breaks down, since its key premise that perceptions have an intermittent existence is simply false. The second option is that there is no perception/object distinction and that there are no unowned perceptions. On that option, the key premise of Hume's argument is true and the "vulgar system" is false, just as Hume says. So it may seem as though this option would give Hume everything that he needs. But that is not the case, for once Hume allows that unowned perceptions are at least possible, he has no way to show that it *is* false that they exist. At best, he may hold (and would hold) that there is no good reason to believe that they exist, but of course this does not show that they do not exist. It does not even show that it is reasonable to believe that they do not exist, since the principle that if there is no good reason to believe p, then it is reasonable to believe not p is surely incorrect (rather, it is then reasonable to suspend judgment about p—to "withhold p," as epistemologists say). So even if this second option happens to be the true one, Hume has no warrant for accepting it, and thus no warrant for accepting the key premise of his novel argument. The third option is that there is a perception/object distinction after all. On that view, the intermittent existence of our perceptions that serves as the starting point of Hume's whole argument is preserved, but the argument breaks down because there is no longer any reason why objects cannot outlast our "gappy" perceptions of them, since they are distinct from those perceptions. I see no way for Hume to escape from this trilemma. I conclude that although he has a striking and original reason for saying that sensible objects have an intermittent existence, ultimately that reason is not compelling.

3. The Role of Coherence

One of the two features of our impressions that Hume says explain why we overlook their intermittent existence is their coherence (the other feature is their constancy). In introducing this notion, Hume says "'tis observable, that even in these changes [impressions] preserve a *coherence*, and have a regular dependence on each other; which is the foundation of a kind of reasoning from causation, and produces the opinion of [bodies'] continu'd existence"[29] (T 1.4.2.19; SBN 195). Two paragraphs later, however, he says:

> But tho' this conclusion from the coherence of appearances may seem to be of the same nature with our reasonings concerning causes and effects; as being deriv'd from custom, and regulated by past experience; we shall find upon examination, that they are at the bottom considerably different from each other, and that this inference arises from the understanding, and from custom in an indirect and oblique manner. (T 1.4.2.21; SBN 197)

Hume is saying that the inference from coherence to continuity, when carefully considered, turns out to be very different from causal reasoning as he understands it. Our question is: why does Hume think so?

Let's start by considering Hume's initial characterization of coherence:

> Bodies often change their positions and qualities, and after a little absence or interruption may become hardly knowable. But here 'tis observable, that even in these changes they preserve a *coherence*, and have a regular dependence on each other; which is the foundation of a kind of reasoning from causation, and produces the opinion of their continu'd existence. When I return to my chamber after an hour's absence, I find not my fire in the same situation, in which I left it: But then I am accustom'd in other instances to see a like alteration produc'd in a like time, whether I am present or absent, near or remote. This coherence, therefore, in their changes is one of the characteristics of external objects, as well as their constancy. (T 1.4.2.19; SBN 195)

In this passage, Hume's intention is to describe the kind of uniformity in our *impressions* that he calls "coherence." But as many commentators have pointed out, he fails to confine himself to impressions, and carelessly attributes coherence to "bodies" and "external objects" themselves.[30]

Mindful of this point, let us try to characterize coherence without assuming the existence of physical things. We may define coherence this way: to say

that a series of impressions *I* exhibits coherence is to say that *I* is composed of a discontinuous series of impressions at least some of whose members occur in the same temporal relations as the resembling members of continuous but altering series of impressions, and those continuous series closely resemble each other.[31] Here is an example, based on Hume's illustration. Suppose I have often had the experience that I would call continuously viewing a slowly diminishing fire in my fireplace, so that I have been presented with many continuous but altering series of impressions and those series closely resembled each other. Then, when I have an experience that I would call discontinuously viewing such a fire—that is, of seeing the fire, then leaving the area for a certain period of time, then returning and seeing the fire again—the relations between the elements of that experience are the same as the relations between the "matching" elements of the many continuous experiences: for example, the impressions of a fire had at the end are impressions of a smaller fire than the impressions of a fire had at the beginning, not of a larger one or an equally large one. Such coherence among our impressions, Hume thinks, contributes to the belief in the continued existence of bodies; in this instance, to the belief that when I have impressions as of a large fire in my fireplace, followed by no impressions of fire, followed by impressions as of a small fire in my fireplace, a slowly diminishing fire exists unperceived by me in between.

As we saw, Hume initially says that this belief is then based on a "kind of reasoning from causation," but a little later he says, "tho' this conclusion from the coherence of appearances may seem to be of the same nature with our reasonings concerning causes and effects . . . we shall find upon examination, that they are at the bottom considerably different from each other." He goes on to explain the difference this way:

> For 'twill readily be allow'd, that since nothing is ever really present to the mind, besides its own perceptions, 'tis not only impossible, that any habit shou'd ever be acquir'd otherwise than by the regular succession of these perceptions, but also that any habit shou'd ever exceed that degree of regularity. Any degree, therefore, of regularity in our perceptions, can never be a foundation for us to infer a greater degree of regularity in some objects, which are not perceiv'd; since this supposes a contradiction, *viz*. a habit acquir'd by what was never present to the mind. But 'tis evident, that whenever we infer the continu'd existence of the objects of sense from their coherence, and the frequency of their union, 'tis in order to bestow on the objects a greater regularity than what is observ'd in our mere perceptions. We remark a connexion between two kinds of objects in their past appearance to the senses, but are not able to observe this connexion to be perfectly constant, since the turning

> about of our head, or the shutting of our eyes is able to break it. What then do we suppose in this case, but that these objects still continue their usual connexion, notwithstanding their apparent interruption, and that the irregular appearances are join'd by something, of which we are insensible? But as all reasoning concerning matters of fact arises only from custom, and custom can only be the effect of repeated perceptions, the extending of custom and reasoning beyond the perceptions can never be the direct and natural effect of the constant repetition and connexion, but must arise from the co-operation of some other principles. (T 1.4.2.21; SBN 197–8)

In the end, then, the inference from coherence must be supplemented by what H. H. Price called Hume's "inertia principle," according to which the imagination, stimulated by the coherence of our impressions, adds to them a degree of regularity greater than we ever observe, just as, in Hume's memorable image, the inertia of a galley contributes to its forward motion even between the strokes of the oars (T 1.4.2.22; SBN 198).

Hume adds that even with the addition of the inertia principle, coherence "is too weak to support alone so vast an edifice, as is that of the continu'd existence of all external bodies; and . . . we must join the *constancy* of their appearance to the *coherence*, in order to give a satisfactory account of that opinion" (T 1.4.2.23; SBN 198–9). This remark, together with the facts that Hume immediately launches into the lengthy account of his four-part "system" showing how constancy contributes to the belief in continued existence (summarized above in section 2), and never returns to coherence except for a brief mention of it in his closing remarks, has led some commentators to adopt what Louis Loeb calls the "dissatisfaction hypothesis," according to which Hume regards coherence as insufficient to explain any beliefs in bodies.[32] By contrast, Loeb argues that Hume's reference to "the continu'd existence of *all* external bodies," shows that he is merely saying that coherence plus the inertia principle (what Loeb calls "custom-and-galley") explains *some but not all* of our beliefs in bodies, "simply because not all objects exhibit coherence; indeed, most objects exhibit constancy rather than coherence."[33] Although I find Loeb quite persuasive on this point, I shall take no position on the tenability of the dissatisfaction hypothesis in this paper. My only purpose is to explain why Hume holds that the inference from coherence to continuity is "at the bottom considerably different" from the kind of custom-based causal reasoning that he holds to be the sole basis of any knowledge of matters of fact not based on present perception or on memory. However, near the end I shall briefly take up the question, brilliantly discussed by H. H. Price and addressed by Loeb as well, of whether constancy is only a from of coherence.[34]

To understand Hume's reasoning, let us contrast two types of cases:

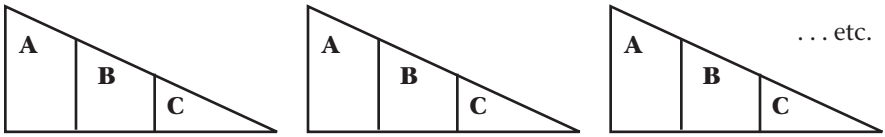
> Type-I cases: I watch a slowly diminishing fire in my fireplace. I neither shut my eyes nor turn my head away from the fire, but watch the fire continuously until it burns itself out.
>
> Type-II cases: I watch a slowly diminishing fire in my fireplace. However, at one or more times while the fire is burning, I shut my eyes, turn my head away from the fire, or leave the room.

Assuming that I have experienced several type-I cases, my visual impressions in a type-II case exhibit coherence: at least some impressions of a fire occur in the same temporal relations as the resembling members of the impressions I obtained in the type-I cases. Suppose that on the basis of this coherence, I infer that in a type-II case, I am observing a fire that continues to burn while my eyes are shut, my head is turned away, or I am absent from the room. Our question is this: why does Hume think I am then making an inference that is "at bottom considerably different from" our "reasonings concerning causes and effects?"

To see why, let us first imagine that a series of type-I cases occurs in my experience—that is, that I have the experience of continuously watching a diminishing fire often enough to establish a constant conjunction, at least within my own experience up to the present, between visual impressions like those I have at the first moment (= time-interval) of watching the fire and visual impressions like those I have at the second moment, and between visual impressions like those I have at the second moment and visual impressions like those I have at the third moment, and so on. Notice, then, that in a new case where I have impressions like those I have repeatedly had at the first moment of watching the fire, I can infer, according to Hume's theory of causal-inductive inference, that I will next have impressions like those I have repeatedly had at the second moment; likewise, in a new case where I have impressions like those I have repeatedly had at the second moment of watching the fire, I can infer that I will next have impressions like those I have repeatedly had at the third moment; and so forth.

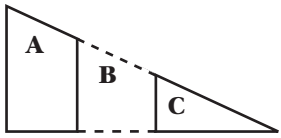
Now imagine that a type-II case occurs in my experience: I watch a fire in my fireplace for the first moment; then shut my eyes, turn my head away, or leave the room for the second moment; then watch the fire again for the third moment; then shut my eyes, turn my head away, or leave the room for the fourth moment; and so on. Then the coherence of my impressions causes me to infer that even during the second moment and the fourth moment, something just like the visual impressions I had during the second and fourth moments of the type-I cases existed, albeit unperceived by me. But clearly enough, this inference is not licensed by the custom-based reasoning from constant conjunction that Hume discusses. To see why this is so, let us represent the series of type-I cases that I have experienced diagrammatically, as follows:

Type-I cases



Given that I have observed a sufficiently long series of such cases, if in a new case I have impressions as of stage A of a fire, then, by Hume's theory of causal inference, I may infer that I will have impressions of stage B. This is because my past experience licenses me to rely on the generalization that whenever I have stage-A impressions, they are followed by stage-B impressions. But now suppose I observe a type-II case, and yet infer the occurrence of the "missing" stage-B impressions:

Type-II case



In inferring stage-B impressions from the stage-A impressions in case II, I am still relying on the generalization that whenever I have stage-A impressions, they are followed by stage-B impressions. But, as case II shows, I have not observed that generalization to hold in all cases, for case II is itself a counterinstance to the generalization. This, I suggest, is what Hume means by saying that in inferring stage-B impressions from stage-A impressions in case II, I am imputing to things a greater degree of regularity than I have observed in them.

It might be objected that the reasoning I have attributed to Hume is mistaken, because if a sufficient number of type-I cases has already occurred in my experience, then in any new case where I experience the impressions I had at moment M of such cases, I can infer the existence of what I perceived at moment M + 1. So if, say, five minutes into type-I cases I had impressions of a large fire and a minute later of a smaller fire, then in any other similar case where I have impressions of a large fire I can infer that a minute later a smaller fire will exist, whether I perceive it or not. To deny this would to be to fly in the face of the point that, as Loeb puts it, "any occasion for causal inference is an exception to an observed constant conjunction; there is no observed constant conjunction, if we include the occasion in question."[35]

But this objection fails, because the situation just described is not a case of coherence at all. For in this situation *no type-II case has occurred as yet*; such a case will only have occurred after I have had the impressions of a large fire, followed by no impressions of a fire, followed by impressions of a smaller fire. But once such a case has occurred, it *ipso facto* constitutes a counterexample to the experienced

regularity found in the type-I cases alone. Thus, to suppose that something like what I experienced at moment M + 1 of the type-I cases exists at moment M + 1 of the type-II cases is to attribute a greater degree of regularity to things than I perceive, not merely in the sense that I have *not yet* perceived the degree of regularity that I impute to them, but in the sense that I have perceived that they *do not* have that degree of regularity. Loeb is right to note that any occasion for causal inference is one where there is as yet no observed constant conjunction, but this is different from saying that any such occasion is one where there is an *observed absence* of constant conjunction, as happens in type-II cases.[36] It is true that type-II cases will also include certain impressions, associated with turning my head away, shutting my eyes, or leaving the room, that mark them off from type-I cases. But this does not salvage the objection. For the occurrence of these other impressions cannot re-establish the constant conjunction between impressions like those had at moment M and those had at moment M + 1 of the type-I cases that is broken by the occurrence of the type-II case.

It may also be objected that, by focusing only on type-II cases, I have not addressed variants of them that also exhibit coherence.[37] Thus, for example, suppose that after experiencing a series of type-I cases, I have the following experience. I observe the first several stages of a fire in my fireplace, then go into a deep sleep. By the time I awaken, all traces of the fire have disappeared, but I infer that the last several stages occurred, unobserved by me, while I was asleep. Alternatively, after waking up from a long sleep, I observe only the later stages of a fire in my fireplace, and infer that the earlier stages occurred while I slept. These variants on type-II cases are subject to the same difficulty: by the time each case has occurred, I have encountered a counterexample to the generalization that was inductively supported by the series of type-I cases.

However, it may now be objected that Hume discusses cases of coherence that are more complicated than the case of the fire, such as the case of the door, the porter, and the letter from a distant friend (T 1.4.2.20; SBN 196–7). I think that these cases are amenable to a similar treatment. In the door case, I have auditory impressions as of a door turning on its hinges but no visual impressions of a door, and I infer that there is a visible door that I do not see.[38] What would be the basis of this inference, if it were a case of custom-based causal reasoning? It would have to be that whenever I have had such auditory impressions, I have also had visual impressions of a door moving. Of course that is rather unrealistic: we often hear doors squeaking without seeing them. But on Hume's theory of causal reasoning, only a constant conjunction between those auditory and those visual impressions could license my inference. Further, the inference that there is a door would then have to turn on the generalization that whenever I have auditory impressions as of a door turning on its hinges, I have visual impressions as of a door turning on its hinges. But again, the very case in question, where I "hear the door" but

don't "see the door," is a counterexample to the generalization. And again, the counterexample cannot be dismissed on the ground that the visual impressions have as yet to occur, because what is inferred is the *simultaneous* existence of the (visible) door.

In the case of the porter, I have visual impressions of the porter in my chamber, and I infer the existence of stairs, since "I have always found, that a human body was possest of a quality, which I call gravity, and which hinders it from mounting in the air, as this porter must have done to arrive at my chamber, unless the stairs I remember be not annihilated by my absence" (T 1.4.2.20; SBN 196). Expunging the question-begging references to physical objects such as "a human body" and "the stairs," Hume is saying something like this. Whenever I have impressions of a person being on the upper story of a house, I previously had impressions of the person's climbing stairs. This licenses the generalization, by Hume's theory of causal reasoning, that whenever I have impressions of the former kind, I previously had impressions of the latter kind, and my inference to the existence of the unseen stairs depends on that generalization. But again, the very case in question, where I have impressions of the porter's being on the upper story of my house, but had no impressions of his ascending stairs, is a counterexample to the generalization on which my inference depends. And again, the counterexample cannot be dismissed on the grounds that I should wait for the impressions of the porter's ascending stairs to occur, because what is in question is the existence of the stairs *before* the time of the (present) impressions of his being in the upper story of the house.

The case of the letter is a bit more complex. From the handwriting, the contents of the letter, and the signature (the "subscription," I presume), I infer that the letter was sent from overseas by a friend. Let's grant for the sake of the argument that this is a case of inference from coherence, though we should note that in this context Hume's references to a letter, handwriting, and signature (as opposed to impressions of these) are question-begging. Hume then says: "'Tis evident, that I can never account for this phaenomenon, conformable to my experience, without spreading out in my mind the whole sea and continent between us, and supposing the existence of posts and ferries, according to my memory and observation" (T 1.4.2.20; SBN 196). If this statement is taken as part of an explanation of how the inference from coherence to the existence of the sea, continent, posts and ferries might be construed as a case of causal reasoning, then that reasoning must turn on generalizations of roughly the following sort: whenever I have had impressions as of an object having traveled from a distant place, they were preceded by impressions as of that object's being transported across land and/or sea from that place. But again, the very case in question is a counterexample to the generalization on which the inference would have to depend, and again, the counterexample cannot be dismissed on the grounds that the relevant impressions have not yet had

a chance to occur, since what is in question is the past (and present) existence of land, sea, and so on.

Interestingly enough, my analysis of the difference that Hume sees between causal reasoning and inference from coherence can be extended to the role of *constancy* in producing the belief in body, at least given the amended account of constancy proposed by H. H. Price in his classic *Hume's Theory of the External World*. There Price argues powerfully that Hume should have treated constancy as a form of coherence. The defect in Hume's account of constancy, Price suggests, is that he thinks that constancy is a relation of resemblance between individual impressions, whereas only coherence is a relation of resemblance between a discontinuous group of impressions and many *series* of continuous impressions.[39] As we've seen, coherence can be defined this way:

> A series of impressions *I* exhibits coherence = *df I* is composed of a discontinuous series of impressions whose members occur in the same temporal relations as the resembling members of continuous but altering series of impressions, and those continuous series closely resemble each other.

Price's point is that by contrast, Hume thinks that constancy can be defined in terms of a single series of impressions, as follows:

> A series of impressions *I* exhibits constancy = *df I* is a discontinuous series of impressions all of whose members closely resemble each other

Diagrammatically, Hume thinks that we have constancy as soon as we have a series of impressions of the form:

A(gap)A(gap)A(gap)A(gap)A

where the "gaps" are variegated impressions different from the resembling A's that compose the series *I*, whereas coherence requires that the series of impressions *I*:

ABCD(gap)HIJK

has been preceded by many series of the form:

ABCDEFGHIJK.

Thus, as Harold Noonan says, "the series of perceptions . . . which I receive from the fire in my study before and after my trip outside is . . . a coherent series, not intrinsically, but because of its relation to . . . other series."[40]

Price argues, however, that a series of impressions that exhibits constancy must also, contra Hume, possess this feature, not intrinsically, but rather because of its relation to other series of impressions. His argument is that if constancy were

merely a relation of resemblance between individual impressions, then Hume's complex theory about how constancy produces the belief in body would lead us to ascribe continuous existence in cases where we obviously do no such thing. He shows this with some amusing examples:

> Suppose that at 1:30 p.m. I see Jones eating cold beef, and at 7:30 p.m. I see Jones eating cold beef, not having observed him at all in the interval. Ought I not [on Hume's principles] to conclude that he has been eating cold beef continuously all through the intervening six hours? Or again, at 8 a.m. as I go out of town I hear the sound of a siren, and at 6 p.m. as I return I hear a very similar sound. Why do I not conclude that the siren has been blowing all through the day? If close similarity between two individual impressions is all that is required, surely I *must* draw these conclusions? But it is certain that I do not.[41]

The reason I do not ascribe continuity in these cases, Price goes on to point out, is that

> On many previous occasions I have seen Jones—or other very similar beings—*between* lunch-time and dinner-time, and have noticed that he was doing quite other things, not eating cold beef all the while. . . . And likewise with the siren: on previous occasions I have been in town all day, and have found that the intervening hours were occupied not by one continuous siren-blast, but by a variegated pandemonium of noises.[42]

Price's view, then, is that a series of impressions that exhibits constancy must possess this feature because of its relation to other series of impressions. Thus, for example, the series of impressions that I receive when I look alternately at the unchanging furniture on one side of my living room and at a changing television image on the other side exhibits constancy, not merely because the impressions I have when I look at the furniture are the same each time I look, but because they resemble the ones that I have on many occasions received when I looked continuously at the furniture, and did not turn around to look at the television screen. Thus, as I understand Price, he is saying that Hume ought to have defined constancy along lines similar to the above definition of coherence, as follows:

> A series of impressions *I* exhibits constancy = *df I* is composed of a discontinuous series of closely resembling impressions whose members closely resemble the members of continuous and non-altering series of impressions, and those continuous and non-altering series closely resemble each other.[43]

Price puts this point by saying that constancy ought to be defined as "monotonous" coherence. [44]

But now if constancy is nothing but monotonous coherence, then it might seem that constancy could contribute to the belief in body in a completely different way than what Price calls the "nightmare story" of Hume's four-part system, with its "tortuous refinements of confusion and self-deceit."[45] For the inference from constancy to continuity might then be treated as a case of custom-based causal reasoning. The idea would be that in many cases I have observed series of impressions of the form AAAAA, so that when I later observe a series of the form A(gap)A(gap)A(gap)A(gap)A(gap), I infer from the past constant conjunction of A's with A's that during the gaps, A' s existed unperceived by me.

But in light of my previous discussion of the inference from coherence, this suggestion can easily be seen not to work. For the inference is vulnerable to exactly the same difficulty as the ones involving the diminishing fire, the door, the porter, and the letter: by the time the case of constancy has occurred, the generalization on which the inference from constancy to continuity would have to be based has been falsified. Thus the inference from constancy fares no better than the one from coherence.

Before concluding, it is worth considering a possible objection to Hume's refusal to assimilate reasoning from coherence (or from constancy, as amended by Price) to causal reasoning. In his discussions of "the probability of causes" Hume indicates that we form beliefs on the basis of conjunctions that are frequent, but not constant or exceptionless (T 1.3.12.6; SBN 132–3; EHU 6.4; SBN 58). Those beliefs then possess a degree of probability proportional to the frequency of the conjunctions; they fall into the category Hume calls "probabilities" rather than "proofs." Should he not then have admitted that reasoning from coherence and constancy yields at least the conclusion that sensible objects *probably* continue to exist while we do not perceive them? One response is that Hume would not regard any account that yields the conclusion that our beliefs in the existence of physical objects are only probable as a satisfactory explanation of the ordinary belief in body. After all, he tells us at the very beginning of T 1.4.2 that "'Tis vain to ask, *Whether there be body or not?* That is a point, which we must take for granted in all our reasonings" (T 1.4.2.1; SBN 187)—hardly the words of a man who thinks that beliefs in the existence of bodies might be only probably true. The positivists' and some of the pragmatists' idea that all empirical beliefs that go beyond the "given" are merely probable is a twentieth-century notion that would have been foreign to Hume. But there is a deeper point to be made. The very fact that Hume seeks to account for the belief in body in terms of constancy and coherence shows that he realizes that our beliefs in body are based on "gappy" patterns of experience that exhibit *much less* regularity than would be sufficient to license even probable inferences to the continued existence of sensible objects. To allude again to Hume's

examples, how often do we have the experience as of uninterruptedly watching a fire burn down to ashes, or as of both hearing a door squeak and seeing it close, or as of seeing a messenger ascend the stories of a building to deliver a message to us, or as of seeing a letter traverse sea and land before it comes into our hands? Much more often, we have only fragments of such series of experiences, interrupted by a miscellany of other experiences. It does not seem, then, that inferences from the coherence and constancy of our impressions can yield even probable beliefs about the existence of bodies.

The underlying problem with the attempt to assimilate either the inference from coherence or an inference from constancy (as strengthened by Price) to causal reasoning is that if we confine ourselves to impressions of sense, we do not find sufficient regularity in their occurrence to establish the generalizations, whether exceptionless or merely "statistical," on which causal reasoning as Hume understands it depends. This point is fairly obvious even when one thinks of the past-to-future reasoning that is most easily subsumed under Hume's model of causal inference, for there are few if any cases where tokens of two types of mere *impressions* of sense have been so regularly conjoined that we can reliably infer (even with probability) the future or imminent occurrence of a token of one type from a token of the other. But it is even more obvious in cases of coherence and constancy where, so to speak, all the facts are in and the needed generalizations have already been falsified or disconfirmed by those facts. The moral to be drawn, I suggest, is the quasi-Kantian one that we can neither explain nor predict the course of our experience unless we already accept the theory that its meanderings reflect an order of things that are distinct from the experiences themselves.[46]

NOTES

An embryonic version of this paper was presented at the 32nd Hume Society Conference in Toronto in July 2005. I am indebted to the Commentator, Eric Steinberg, for very useful comments. A version of section 2 was presented at the 153rd Meeting of the Creighton Club at Hobart and William Smith Colleges in November 2007. I am indebted to the commentator, Stefanie Rocknak, and to Andrew Chignell and Earl Conee for helpful comments on that occasion. I am deeply grateful for extremely helpful, detailed comments from Eli Hirsch, Peter Loptson, Peter Millican, and five anonymous referees for *Hume Studies*.

1 References to the *Treatise* are to, respectively, David Hume, *A Treatise of Human Nature* (abbreviated as "T" and cited by Book, part, section, and paragraph), ed. David Fate Norton and Mary J. Norton (Oxford: Oxford University Press, 2000), and to the 2nd edition of the *Treatise* (abbreviated as "SBN" and cited by page number), ed. L. A. Selby-Bigge and P. H. Nidditch (Oxford: The Clarendon Press, 1978).

2 Hume uses the term "objects of the senses" rather than the term, "sensible objects." For brevity's sake, I shall use the latter term throughout this paper.

3 This objection to Hume is made by the following writers among others: H. H. Price in *Hume's Theory of the External World* (Oxford: Oxford University Press, 1940), 18; Barry Stroud, *Hume* (London: Routledge and Kegan Paul, 1977), 259n2; Harold W. Noonan, *Hume on Knowledge* (London: Routledge, 1999), 163; Louis Loeb, *Stability and Justification in Hume's* Treatise (Oxford: Oxford University Press, 2002), 192n21. On the other hand, Norton and Norton's annotative gloss on Hume's second conditional in their edition of the *Treatise* suggests that it only means "if objects are separate from the mind, then their continued existence is not dependent upon the mind's perception of them" (472). I find this implausible. For as Hume's "*vice-versa*" shows, he takes the second conditional to be the *converse* of the first. The first conditional clearly says that if sensible objects continue to exist unperceived, then their existence is independent of and distinct from perception. The converse of that is that if sensible objects' existence is independent of and distinct from perception, then they (*actually*) continue to exist unperceived; not merely, *pace* Norton and Norton, that if sensible objects' existence is independent of and distinct from perception, then they are *able* to continue to exist unperceived. Furthermore, in *Treatise* 1.4.2, Hume is not discussing the belief that sensible objects merely have the *capacity* to continue existing unperceived; his interest is in the belief that they *do* continue to exist unperceived.

4 Jonathan Bennett, *Locke, Berkeley, Hume: Central Themes* (Oxford: Oxford University Press, 1977), 315. In his more recent *Learning from Six Philosophers*, vol. 2 (Oxford: I Oxford University Press, 2001), Bennett says only that "Hume could make a case for [the entailment of CE by DE]" (285). He does not explain or elaborate.

5 It might be objected that this argument takes lack of distinctness to imply causal dependence, but that for Hume distinctness is a necessary condition for a causal relation. As my next paragraph suggests, I would answer that Hume operates with different senses of "distinctness." When he says that causes and effects must be distinct existences, he means that they must be *metaphysically* independent. Thus if A causes B, then B is metaphysically "distinct" from A, but B does not enjoy an existence that is causally "distinct" from A. When Hume says that sensible objects do not enjoy an existence "distinct from the mind and perception," he means that they are not *causally* independent of being perceived.

6 As I noticed after writing this paper, my hypothesis was anticipated by Barry Stroud. Stroud writes: "Hume thinks that these two beliefs are 'so intimately connected together' that 'the decision of the one question decides the other' (p. 188). But although the continued existence of objects unperceived does imply that their existence is independent of and distinct from being perceived, it is not obvious that what Hume says is correct about the implication in the other direction. He says 'if their existence be independent of the perception and distinct from it, they must continue to exist, even tho' they be not perceiv'd' (p. 188). But it seems that the things we perceive might, quite coincidentally, last as long as the intervals during which we perceive them (see Price [*Hume's Theory of the External World*], p. 18). *Perhaps Hume could invoke his theory of causality to argue that any such 'coincidence', if we knew of it, would lead us to believe in a causal connection and hence to deny 'distinctness.'*." Barry Stroud, *Hume* (Routledge and Kegan Paul: London, 1977), 259n2; my emphasis]

7 References to the first *Enquiry* are to, respectively, David Hume, *An Enquiry Concerning Human Understanding* (abbreviated as "EHU" and cited by section and paragraph), ed. Tom L. Beauchamp (Oxford: The Clarendon Press, 2000), and to the 3rd edition of David Hume, *Enquiries Concerning Human Understanding and Concerning the Principles of Morals* (abbreviated as "SBN" and cited by page number), ed. L. A. Selby-Bigge and P. H. Nidditch (Oxford: The Clarendon Press, 1975).

8 In any case, the idea that a cause must precede its effect seems to do violence to the facts. One classic counterexample is that of placing one's foot in the sand, thereby causing a footprint in the sand. The placement of the foot and the formation of the footprint are simultaneous, not successive. Kant's example of placing a ball on a cushion is similar. For a trenchant criticism of the argument Hume offers against simultaneity of cause and effect, see Stroud, *Hume*, 253–4n2.

9 Two places where Hume puts his definition in terms of sameness in kind rather than similarity are in the *Abstract* of the *Treatise*, T Abstract *Abs*. 9 (SBN 649) ("balls of the same kind") and at EHU 7.27 (SBN 74) ("But when one particular species of event always . . . "). See also T 1.3.6.2 (SBN 87) and T 1.3.7.14 (SBN 93).

10 I say "supports saying" rather than "entails" because the logic of the situation is a bit more complex than it may seem. As Peter Millican pointed out in comments on this paper, strictly speaking all that follows from (1), (2), and (3) is that some event of kind K2 occurs, not that the specific event E2 occurs. So it would not be correct to say that D1 entails that E1 is a sufficient condition for E2. To obtain that result, one would have to add the proposition that *if an event of kind K2 occurs and E1 is accompanied by that event, then that event is identical with E2*. The justification for the added proposition would be that given the relevant spatio-temporal interpretation of "—is accompanied by—," only one event can "accompany" E1 at any one time, so that given that (1) means that E1 is accompanied by E2 at a given time, the K2 event whose occurrence follows from (1), (2), and (3) must be E2.

11 The entailment of "x exists" by "x is perceived" or "S perceives x" is of course recognized by those contemporary philosophers who follow Gilbert Ryle in treating "perceives" as a "success term." Hume's use of the term "perceives" and its cognate term "perception" makes it abundantly clear that he would also subscribe to this entailment. Yet it would be both wrong and anachronistic to attribute to Hume the view that "perceives" is a success term in the contemporary sense. For there is a major difference between Hume and the contemporary philosophers: for Hume, the item that is perceived can be (indeed is) a sense impression; whereas for the contemporary philosophers "success" carries the implication that the item perceived is a physical object (otherwise, they would say that one only *seems* to perceive). By contrast, so far as I know Hume never talks of merely seeming to perceive an object, as opposed to (really) perceiving it, though he does occasionally talk about things' seeming to be otherwise than they really are (e.g. EHU 12.9; SBN 152).

12 The closest that Hume comes to such a sweeping generalization is in the *Abstract* of the *Treatise*, where he argues that "no inference from cause to effect amounts to a demonstration" (T Abstract *Abs.* 11; SBN 650). But there he is explicitly talking about *inference*, and it is doubtful that he has in mind anything like the special sort of causal relation that would obtain between the perception and the existence of a p.d.o., where certainly no inference is involved (and about which I say more in the after-next

paragraph of the text). Further, demonstration is an epistemological concept that includes but is not the same as entailment, and which would have no application to the case of perceptions and p.d.o.'s.

13 These points were pressed by an anonymous referee for *Hume Studies*, whose words I reproduce almost *verbatim* here.

14 I am indebted to Eli Hirsch for help with this formulation. Equivalently, it can be put this way: (2A) All events of kind K1 are accompanied by events of kind K2, and all events of kind K2 that are not accompanied by events of kind K1 are accompanied by events of kind K3 or K4 or . . . Kn, and all events of kind K3 are accompanied by events of kind K2, and all events of kind K4 are accompanied by events of kind K2, . . . and all events of kind Kn are accompanied by events of kind K2.

15 I am indebted to Eli Hirsch for this formulation of my point.

16 Eli Hirsch called this possible objection to my attention.

17 It might be wondered whether the amended definition preserves the asymmetry of causation in run-of-the-mill cases of simultaneous causation, where no logical connection holds between cause and effect and where perceptually delimited objects are not involved. I think it does. Let E1 = the striking of a match and let E2 = the igniting of a match, and suppose we agree that E1 causes E2 and that these events are simultaneous. Then the definition gives us that:

(1) E1 is accompanied by E2,

(2) All events of kind K1 are accompanied by events of kind K2,

(3) E1 is of kind K1 and E2 of kind K2,

(4) All events of kind K2 that are not accompanied by events of kind K1 are accompanied by events of kind K3 or K4 or . . . Kn, where K3, K4, . . . Kn are such that all events of kind K3 are accompanied by events of kind K2, and all events of kind K4 are accompanied by events of kind K2, . . . and all events of kind Kn are accompanied by events of kind K2.

Now (2) and (4) are not "symmetrical": (4) is not just the converse of (2). Moreover, it will not do to respond that one must add:

(5) No event of kind K3 or K4 or . . . Kn occurs

thereby again threatening the asymmetry of causation. For then (1)–(5) would give conditions for "E1 causes E2 and E1 is the *only* cause of E2" rather than for just "E1 causes E2."

18 The first part also includes a difficult discussion of the relation between unity, multiplicity, and identity, but it is not necessary to analyze that discussion for my purposes. An analysis of it is offered in Donald L. Baxter, "Identity, Continued Existence, and the External World," in *The Blackwell Guide to Hume's* Treatise, ed. Saul Traiger (Oxford: Blackwell, 2006), 114–32.

19 It might be objected that when I attribute to Hume the view that the vulgar system is "consistent but false," I am running together two different things: (i) the four-part explanatory account of the belief in (2), and (ii) the belief in (2) itself. The

objection would then go on to suggest that perhaps Hume is insisting only that his four-part explanation of the belief in (2) is consistent, while allowing that "the vulgar system" of which (2) is a part is inconsistent. In response, I would make two points. First, it is obvious that the vulgar system—if it is taken to consist of (1), (2), and (3)—is not inconsistent. Therefore, if there is no inconsistency in the four-part explanation, then there is no inconsistency in either the system nor in its explanatory machinery, and thus no inconsistency, period, in the ordinary belief in body as analyzed by Hume. Second, I think this possible objection assigns too much significance to the distinction between the four-part explanation of the belief in (2) and the belief in (2) itself. Of course these are not the same thing. But the four-part account is supposed to be the correct explanation of why we believe (2); so, if it were inconsistent, then we would by Hume's lights have no consistent explanation of the belief in (2), and it would not be unnatural to describe this result by saying that the vulgar system was "inconsistent," in an extended sense of the term. When Hume says that his "system" is consistent, I think he also means that it is not inconsistent even in this extended sense.

20 I believe that the argument from double vision, Hume's *Modus Tollens* argument, and all other variants of the so-called "argument from illusion" are unsound, but their soundness or unsoundness is not relevant to my purposes in the present paper. I criticize the argument from double vision and some other variants of the "argument from illusion" in Georges Dicker, *Hume's Epistemology and Metaphysics: An Introduction* (London and New York: Routledge, 1998), 181–2, and I have discussed such arguments in more depth in Georges Dicker, *Perceptual Knowledge: An Analytical and Historical Study* (Dordrecht, Boston and London: D. Reidel, 1980).

21 This answer is the one I proposed in *Hume's Epistemology and Metaphysics*, 167. For the reason I am about to give, I no longer think that this answer is satisfactory.

22 I take an intentional object to be any object of thought or perception. It may be a physical object, as when I think about or look at a piano, or it may be something unreal, as when I think about a unicorn. For Hume, the intentional object in all cases of sense perception is an impression. It has whatever kind of reality impressions have. It is not real in the sense of being a body (though the vulgar falsely think that it is real in that sense), because it does not have the continuous existence that pertains to bodies (and that the vulgar falsely attribute to it). That Hume collapses this object with the impression considered as a perceptual act or perceptual episode is a further aspect of his position, with which I am especially concerned in this paper.

23 Of course, Kant does not argue for the thesis that assigning a different set of time-relations to objects of perception from those of the perceptions themselves is a condition of the possibility of experience in the Analogies of Experience, where the distinction between the subjective time-order and the objective time-order is assumed from the start and serves as a premise of the arguments. Rather, the need to assign a different set of time-relations to perceptions and to their objects is supposed to be established earlier, in the Transcendental Deduction. I analyze the relation between the task of the Deduction and the task of the Analogies in Georges Dicker, *Kant's Theory of Knowledge: An Analytical Introduction* (New York: Oxford University Press, 2004).

24 The term "unowned perceptions" was, to the best of my knowledge, coined by Jonathan Bennett in his *Locke, Berkeley, Hume*, 345.

25 Does this mean that when Hume introduces his notion of an unowned perception, he shifts away from his preliminary definition of distinct existence as "an existence distinct from mind and perception"? (T 1.4.2.2; SBN 187–8) Possibly, for an unowned perception is distinct from a mind, but, *being* a perception, it is (trivially) not "distinct from perception." On the other hand, it is possible that "distinct from perception" at T 1.4.2.2 means "distinct from being perceived by a mind," in which case there is no shift.

26 This reading differs from H. H. Price, *Hume's Theory of the External World* (Oxford: Clarendon Press, 1940), where unowned perceptions are throughout equated with unsensed *sensibilia*.

27 This crucial point was called to my attention by Peter Millican.

28 An anonymous referee for *Hume Studies* pressed this point.

29 Here I interpolate "impressions" for Hume's pronoun "they," which refers back to "bodies" but, for a reason to be noted in the text, can legitimately refer only to impressions.

30 See for example Price, *Hume's Theory of the External World*, 34; Stroud, *Hume*, 100; and Bennett, *Locke, Berkeley, Hume*, 323.

31 It would be more elegant to end this definition with the words, "altering series of impressions that closely resemble each other." I use the more cumbersome construction, "altering series of impressions, and those continuous series closely resemble each other," to make it obvious that the resemblance in question is not between individual impressions in the series, but between the series taken as wholes.

32 Louis Loeb, *Stability and Justification in Hume's* Treatise (Oxford: Oxford University Press, 2002), 187–93. Loeb mentions H. H. Price, Jonathan Bennett, and Barry Stroud, among others, as proponents of this view.

33 Loeb, *Stability and Justification in Hume's* Treatise, 191.

34 Price, *Hume's Theory of the External World*, chap. 3, especially 59–71; Loeb, *Stability and Justification in Hume's* Treatise, 179–80, 187–207. Price and Loeb both argue that constancy is really a form of coherence.

35 Loeb, *Stability and Justification in Hume's* Treatise, 189.

36 I owe this observation about Loeb's remark to Eli Hirsch.

37 Eric Steinberg called my attention to these kinds of cases.

38 This case is not easy to describe. Notice that it won't do to say "I infer that there is a door that I do not perceive," because it may plausibly be retorted that I *hear* the door, and that hearing it is a way of perceiving it. It would also be at least misleading to say simply, "I infer that there is a door," because to hear a door moving is not the same as to infer that it is moving. I have tried to do justice to Hume's point by talking of inferring that there is a visible door that I do not see.

39 Price, *Hume's Theory of the External World*, 59–60.

40 Harold W. Noonan, *Hume on Knowledge* (London and New York: Routledge, 1999), 174.

41 Price, *Hume's Theory of the External World*, 67.

42 Ibid., 67–8.

43 The explanation I gave in note 31 above for the inelegant wording of the definition of coherence applies *mutatis mutandis* to this definition of constancy.

44 Price, *Hume's Theory of the External World*, 48, 60.

45 Ibid., 45.

46 For a robust defense of this point, see Jonathan Bennett, *Learning from Six Philosophers*, vol. 2 (Oxford: Oxford University Press, 2001), 137–8. Price seems to be getting at the same point when he writes: "It is easy to see why this process of imaginative supplementation cannot be a case of ordinary causal reasoning, though it may resemble it 'as being derived from custom and regulated by past experience.' It is something which ensures the truth of the very causal rules upon which such reasoning depends. It is not itself causal reasoning, because it is something more fundamental, without which causal reasoning would not stand; for without it all the major premises used in such reasoning would be utterly precarious, and any drowsy nod would refute them." Price, *Hume's Theory of the External World*, 53.