Hume's Associations
Ruth Weintraub
Hume Studies Volume XXVIII, Number 2 (November, 2002) 231-246.

HUME STUDIES
Volume 28, Number 2, November 2002, pp. 231–246

Hume's Associations

RUTH WEINTRAUB

I

Hume's three principles of association, we are told by way of an introduction, are to account for the way in which "simple ideas . . . fall regularly into complex ones" (T 1.1.4.1; SBN 10).[1] It seems as if there is here a single task—one question to be answered. But the ensuing discussion, I shall show, reveals that Hume is, in fact, addressing two distinct questions. And the (single) answer he gives is pretty poor in the case of one, and quite passable in that of the other.

II

The first issue Hume cites in *Treatise* 1.1.4 is the formation of complex ideas out of simple ones. We already know—this is the burden of Hume's "first principle . . . in the science of human nature" (T 1.1.1.12; SBN 7)—how simple ideas are acquired: they are all "deriv'd from simple impressions, which are correspondent to them, and which they exactly represent" (T 1.1.17; SBN 4; italics omitted). And now, it seems, Hume intends to complete his (empiricist) account of our concepts; to describe the way in which we augment our initial store, given to us in experience.

Further evidence that this is Hume's (sensible) intention is to be found in his invocation of the conceptual similarity between different languages. It suggests, he reasonably thinks, that there is such a universal regularity to be

Ruth Weintraub is a member of the Department of Philosophy, Tel Aviv University, Ramat Aviv, Tel Aviv, 69978, Israel.
e-mail: weintrar@ccsg.tau.ac.il

unearthed. *Any* set of simple ideas could (logically) be combined so as to form a complex one. We could, for instance, join together the ideas "round" and "loud," "triangular" and "brown," and so on. But instead, we find "languages so nearly correspond[ing] to each other; nature in a manner pointing out to every one those simple ideas, which are most proper to be united into a complex one" (T 1.1.4.1; SBN 10–11). When ideas are "united together", they are assigned a special word, a *basic* term. So, for instance, the word "apple" denotes "the particular colour, taste and smell" (T 1.1.1.2; SBN 2), which *are* "proper to be united," whereas no basic term applies to things which are round and blue.

Our confidence about this reading is strengthened even further when Hume says—having propounded the principles—that "[a]mongst the effects of this union or association of ideas there are none more remarkable, than those complex ideas . . . which generally arise from some principle of union among our simple ideas. . . . Relations, Modes, and Substances" (T 1.1.4.7; SBN 13), announces his intention to "examine" them (T 1.1.4.7; SBN 13), and then, by way of an "examination," says that the "idea of a substance . . . is nothing but a collection of simple ideas, that are united by the imagination . . . closely and inseparably connected by the relations of contiguity and causation" (T 1.1.6.2; SBN 16). Having formulated the principles, Hume now shows how they actually operate to engender complex ideas out of simple ones.

III

Have we correctly identified Hume's aims? Only partially. He isn't only, or even primarily, interested in the formation of complex ideas. He alludes in this section to another task: accounting for the flights of imagination we have with ideas *we already possess*. That he also has this latter question in mind is clear. His three principles are supposed to show how the "connexion in the fancy . . . makes *one* idea . . . *recal* another" (T 1.1.4.2; SBN 11; my italics). If Hume's concern here were the formation of (new) ideas, it would be *several* ideas giving rise to yet another. And he wouldn't describe the case as one of recall; an idea that can be recalled is an idea one already has. Rather, Hume is here interested in the way one idea brings to one's conscious mind an idea previously formed and now lying dormant, so to speak. For instance, the thought of smoke reminds us of fire, but not of oranges. And these are *all* ideas (concepts) we possess even when our conscious mind is occupied elsewhere.

In his discussion of the emotions, Hume only mentions the second role of association, governing the way the mind moves from one thought to another. "However changeable our thoughts may be, they are not entirely

without rule and method in their changes. The rule, by which they proceed, is to pass from one object to what is resembling, contiguous to, or produc'd by it" (T 2.1.4.2; SBN 283). But we shouldn't conclude on the basis of this passage that this is the only role of association. Here, Hume is attempting to describe the causes of one kind of impressions—emotions. And he does this by invoking an analogue to the association of ideas—"a like association of impressions" (T 2.1.4.3; SBN 283). Emotions arise in the mind, he thinks, in accordance with just one principle—resemblance. "Grief and disappointment give rise to anger, anger to envy, envy to malice, and malice to grief again." And because he is focusing on the "revolution of the emotions," the relevant analogue is the way our ideas "revolve," and not the way they are formed.

The dual role of the principles manifests itself in the *Enquiries*, as well. Here, too, Hume is concerned, on the one hand, with the way "different thoughts . . . introduce each other" (EHU 3.1; SBN 23).[2] And when one thought "introduces" another, they are both formulated in terms of concepts one already *has*. But here, too, he cites the similarity between languages as "a certain proof that the simple ideas, comprehended in the compound ones, were bound together by some universal principle, which had an equal influence on all mankind" (EHU 3.1; SBN 23). This similarity, of course, is pertinent evidence about speakers' concepts, and is irrelevant to "the . . . tract or chain of ideas . . . which succeeded each other" (EHU 3.1; SBN 23). And the fact that Hume is here focusing on the association of *simple* ideas also shows that he is concerned with the formation of (new) ideas. Simple ideas have no privileged role when it comes to the way a "conversation . . . [is] connected . . . in all its transitions" (EHU 3.1; SBN 24). But they are quite fundamental when it comes to concept-formation. True, complex ideas *can* be conjoined so as to form further complex ideas. But (some) simple ideas must be so conjoined if the process is to get going at all, if *any* new ideas are to be formed by association.[3]

"Thoughts," to be sure, can differ importantly. We can "think" non-propositionally, as when Paris comes to my mind. We can entertain propositions (consider whether or not they are true before adopting a stance), and we can believe them. Still, these are all mental operations we perform with concepts we already have, and in the present context the differences between them will prove to be inconsequential.

IV

To my knowledge, only two commentators, Norman Kemp Smith and R. W. Church, discern Hume's two tasks.[4] Most of the others do not address the issue at all,[5] and those that do overlook the conceptual question. According to David

Pears, Hume aims to show "that the three natural relations . . . determine our *lines of thought*."[6] Terence Penelhum says Hume's associationist theory is designed to "explain how the mind arrives at its opinions," and A. H. Basson suggests it is to "explain how thinking, and even imagining, follows a more or less orderly sequence."[7] Jonathan Bennett thinks "it states the conditions under which statements of the following form are true: 'If x has an F perception at t, then he tends to have a G perception then or shortly thereafter.'"[8]

Perhaps these commentators are misled by Hume's idiosyncratic terminology. Contemporary usage follows Locke (*Essay* II xxxiii 6) in restricting the term "association" to "the way Ideas [follow] one another . . . in [the] understanding."[9] Thus William James, in a chapter entitled "Association," characterizes the task "which philosophers have set themselves [as] that of ascertaining principles of connection between the thoughts which thus appear to sprout one out of the other."[10]

Hume doesn't explicitly distinguish between the two tasks when discussing the laws of association. Perhaps he thinks there is one answer appropriate to both questions. This is certainly an attractive prospect for one who has resolved to "render all [his] principles as universal as possible . . . explaining all effects from the simplest and *fewest* causes" (T, Introduction 8; SBN xvii; my italics). But has he succeeded in giving a univocal answer to the two questions? Hume's association laws, I will argue, provide a much better account of the "constant revolution of our ideas" (T 1.1.4.2; SBN 11) than they do of the formation of complex ideas.

V

The associationist "uniting principle" doesn't purport to provide an exceptionless, "inseparable connexion" between ideas. It must, instead, be regarded as "a gentle force which commonly prevails." Furthermore, we mustn't think that "without it the mind cannot join two ideas" (T 1.1.4.1; SBN 10). Hume is alluding to two sorts of exception. In the first sort of case, ideas which are suitably related aren't associated in the mind. The second involves associated ideas which are *not* related by the association principles.

Hume wants to "render all our principles as universal as possible . . . by explaining *all* effects" (T, Introduction 8; SBN xvii). In our case, the phenomenon to be explained is the presence and the absence of (complex) ideas. Given this (laudable) aim, both kinds of exception count against his theory. To accommodate them, we must construe the theory probabilistically. This means that its explanations will be partial.[11] By contrast, Newtonian mechanics, the theory which Hume's is supposed to emulate, is deterministic.

Both kinds of exception, I will argue in the next two sections, are far too common when it comes to concept formation. In this section, I will show that associationism works quite well in the "revolution of our ideas."

As to belief, Hume thinks it "arises only from causation" (T 1.3.9.2; SBN 107), but this is not so. He has to invoke constancy and coherence in order to account for our belief in the continuing existence of objects even while we are not perceiving them (T 1.4.2). One might think that both can be reduced to causality, since constancy is a special case of coherence,[12] and Hume says coherence is "a kind of reasoning from causation" (T 1.4.2.19; SBN 195). But Hume himself subsequently revokes this claim. The "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 by past experience . . . but they are at the bottom considerably different from each other" (T 1.4.2.21; SBN 197).

When we reason causally, "[w]e remember to have had frequent instances of the existence of one species of objects; and also remember, that the individuals of another species of objects have *always* attended them. . . . We call to mind their constant conjunction in *all* past instances" (T 1.3.6.1; SBN 87, my italics).

In contrast, the belief in the continuing existence of objects "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 198).

> [W]henever 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 betwixt 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 . . . but that these objects still continue their usual connexion, notwithstanding their apparent interruption, and that the irregular appearances are joined by something, of which we are insensible?" (T 1.4.2.21; SBN 197–8)

Thus, we "have found, that the perception of the sun or ocean . . . returns upon us after an absence or annihilation . . . [so] we disguise . . . the interruption . . . by supposing that these interrupted perceptions are connected by a real existence, of which we are insensible" (T 1.4.2.24; SBN 199).

Must we conclude that belief cannot be accounted for in terms of the three "natural" relations? The answer is no. Admittedly, coherence isn't reducible to causality, but it is a (complicated) kind of similarity.[13] And here, as in ordinary causal inference, association works with a vengeance. "Nature has not left this to [our] choice . . . 'tis in 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).

Contiguity and similarity are inert when it comes to future expectations, as are contiguity and causality in the case of belief in the continuing existence of objects. So it might seem as if the "uniting principle" operates too gently here. But in fact it doesn't. We know that causality *always* engenders future expectations. "[U]pon the appearance of one of the objects, the mind is *determin'd* by custom to consider its usual attendant, and to consider it in a stronger light upon account of its relation to the first object" (T 1.3.14.1; SBN 156; italics in original). So, too, similarity (of a specifiable, complicated sort) *invariably* induces belief in the continuing existence of objects. So there is, in fact, nothing here to jeopardize Hume's aim to explain the phenomena, although his theory will be somewhat complicated, different association principles working in different sorts of cases.

Consider, next, "flights of thought." It might seem as if the "uniting force" is here too gentle. Doesn't Hume admit that resemblance doesn't always produce "a connexion or association of ideas" (T 1.1.5.3; SBN 14)? Yes, he does, but the explanation he provides also shows that this doesn't impair the theory's predictive power. "When a quality becomes very general, and is common to a great many individuals, it leads not the mind directly to any one of them; but by presenting at once too great a choice, does thereby prevent the imagination from fixing on any single object" (T 1.1.5.3; SBN 14). Similarity doesn't always engender association, but we can characterise the conditions under which it will. The resultant theory is perfectly predictive, albeit complicated.

What about the other sort of exception? Are there "flights of thought" for which associationism cannot account? Well, the list of "principles" isn't complete. Hume himself says (EHU 3.3, note 4; SBN 24; see also EHU 3.16, note 6, not included in SBN) that "Contrariety is also a connexion among Ideas," but he thinks it isn't an independent principle, being a "mixture of *Causation* and *Resemblance.*" "Where two objects are contrary," he suggests, "the one destroys the other; that is, the cause of its annihilation, and the idea of the annihilation of an object, implies the idea of its former existence." But it is contrary *ideas* (not objects) that are connected in thought: thinking

of black leads one to think of white, for instance. And black objects do not tend to destroy white ones.

This, of course, is not a serious objection, but rather, a suggestion. The remedy is simple. Why not add contriety, quite a "forceful" principle, to the list of relations, thereby enabling associationism to explain additional phenomena?

VI

We now come to the formation of complex ideas, which Hume classifies into "Relations, Modes, and Substances" (T 1.1.4.7; SBN 13). I will discuss them in the light of a clarificatory remark.

Ideas of all three types are *general*. And it might seem as if that already provides us with the (associationist) rule we are seeking. "When we have found a resemblance among several objects, that often occur to us," Hume says, "we apply the same name to all of them" (T 1.1.7.7; SBN 20). But Hume's claim is not true. There is, for instance, no general term in English for every shade of blue, although instances of any given shade are more similar to one another than are instances of "blue," a general term which we *do* have. Additional examples, also pertaining to simple ideas, are provided by other colors.

The same is true of complex general ideas. *Ceteris paribus*, the more constituents two ideas have in common, the greater the similarity between them, and, correlatively, between the objects which they represent. Round tables, for instance, are more similar to one another than are tables. Yet, we have a basic term (a special word) for the latter and not for the former.

By itself, we must conclude, similarity doesn't engender a sufficiently strong "uniting principle." That is why Hume supplements it. Our ideas of substances, he says, are united by causality and contiguity (T 1.1.6.2; SBN 16), which I will consider in turn.

Prima facie, it is not clear what causal connection there is between the qualities of gold—"yellow colour, weight, malleableness, fusibility" (T 1.1.6.2; SBN 16). But perhaps Hume has in mind Locke's underlying "Essence . . . the very being of any thing, whereon [its] discoverable Qualities depend" (*Essay* III iii 15). The perceptible qualities aren't causally related to one another, but are all effects of a common cause. True, "the Essences of Things," Locke suggests, are "wholly unknown," and Hume probably thinks we aren't entitled to suppose that they exist. But that doesn't impugn his explanation of the formation of substance terms, which only requires that we *do* so suppose. If the supposition is irrational, then substance terms are engendered as a result of a "doxastic pathology."[14] But irrationality is quite typical, according to Hume. Just as "we are apt to imagine something unknown and mysterious, connecting the parts,"

thus "giv[ing] rise to . . . a fiction" (T 1.4.6.6; SBN 254), a *substratum*, so we may imagine real essences, Locke's "Constitution of Things."[15]

Contiguity, however, is problematic. We do not always respond to it in the way Hume suggests. True, "yellow colour, weight, malleableness, fusibility" (T 1.1.6.1; SBN 16) do exist contiguously in gold, for which we have a name. But we do not have a basic term applicable to black horses, or to round tables. And, again, examples could be multiplied to support the conclusion that collecting ideas under a basic label is the exception, rather than the rule, even when we restrict ourselves to contiguous qualities. So here, the associationist "principle" is seen to be "gentle," and this is a flaw, Hume's seductive terminology notwithstanding.

The explanation of all these failures is easily forthcoming, and in its wake a suggestion as to how similarity and contiguity can be supplemented so as to engender a (nearly) exceptionless rule. Having terms for different shades of blue would serve no obvious purpose, theoretical or practical. A crude classification, which is easier to learn and apply, is quite adequate. So we need to qualify Hume's account of general terms (including substances). When it is useful, he should say, we invent a general term applicable to similar objects and, in particular, to "the collection of . . . qualities . . . which . . . are . . . suppos'd to be . . . connected by the relations of contiguity and causation" (T 1.1.6.1; SBN 16).

Here is a remaining qualm to be allayed. The case of substances is not, or at least not typically, one in which the imagination *unites* ideas previously formed. Rather, we encounter the qualities as contiguous when we have the appropriate impression (of a particular golden substance, say), and form the idea as a result. "[W]hen any impression has been present with the mind, it again makes its appearance there as an idea" (T 1.1.3.1; SBN 8). Still, contiguity is here a "uniting principle," and can be invoked to explain the (universal) occurrence of the concept.

What about ideas of modes? Since they are general, the instances of each are all similar to one another. But the other two associationist relations are inapplicable. "The simple ideas of which modes are formed, [may] represent qualities, which are not united by contiguity and causation" (T 1.1.6.3; SBN 17). The examples Hume cites (beauty and dance) only serve to confuse, but the explanation can be found in Locke's definition of *mixed* modes, which are "Combinations of simple *Ideas*, as are not looked upon to be the characteristical Marks of any real Beings that have a steady existence, but scattered and independent Ideas, put together by the Mind" (*Essay* II xxii 1).

Thus, the idea of hypocrisy or sacrilege, Locke illustrates, may exist "before the Combinations . . . [of things the simple ideas] stood for, ever existed"

(II xxii 2). Indeed, they needn't *ever* exist, as Hume's "winged horses, fiery dragons, and monstrous giants . . . [encountered in] . . . poems and romances" (T 1.1.4.4; SBN 10) show.

Here we have exceptions of the second type (section V)—ideas we have which are not related by the association principles. In this case, the explanation is even poorer than that given for ideas of substances. There is here nothing to supplement similarity (between instances). So functional considerations carry even more of the explanatory burden. As Locke suggests, we join together ideas "into distinct, and, as it were, settled Modes . . . and affix names to them . . . as [we] have frequent use of in [our] way of Living and Conversation, leaving others which [we] have but seldom an occasion to mention, loose and without names, that tie them together" (*Essay* II xxii 5).

VII

Hume promises to "examine" relations in the light of his association principles, but when he actually considers them (T 1.1.5), he notes those (the "natural" ones) that *engender* association, and doesn't say *anything* about the way any of the relations are themselves formed. In this section I contend (on Hume's behalf) with a general difficulty that arises when one tries to provide an account of the envisaged kind for relations. In the next section I will point to a more recalcitrant problem posed by the causal relation.

"Those complex ideas, which . . . generally arise from some principle of union among our simple ideas," Hume says, "may be divided into Relations, Modes, and Substances" (T 1.1.4.7; SBN 13). The wording strongly suggests that he classifies *all* relations (in addition to substances and modes) as complex. He doesn't explain why, but for that we can turn to Locke (*Essay* II xii 1). The idea of a relation, he says, involves "bringing two Ideas . . . together, and setting them by one another, so as to take a view of them at once." If the ideas of both relata are present, the idea thereby engendered cannot be simple, since simplicity requires "no separation, no distance between them" (II ii 1). This explanation accords well with the (admittedly contentious) interpretation of Humean simplicity in phenomenological, rather than conceptual, terms. Simple ideas, on this reading, are *minima sensibilia*, rather than unanalysable concepts.[16]

Here is the difficulty. The associative principles do not just characterize the way our minds work; they are *applied* by the mind. "The idea of a substance . . . is . . . a collection of simple ideas, that are united by the imagination . . . the particular qualities, which form a substance . . . are . . . *suppos'd to be* . . . connected by the relations of contiguity and causation" (T 1.1.6.2; SBN

16, italics mine). Even in animals association operates by the recognition of the appropriate relation. "The effects of resemblance are not so remarkable; but . . . that relation makes a considerable ingredient in causation, of which all animals show so evident a *judgment*" (T 2.1.2.7; SBN 326; my italics). So we must be capable of judging whether ideas satisfy the relations. But we are here concerned with the principles as governing concept-formation (rather than trains of thought). And this engenders the suspicion that Hume's account will involve a vicious circularity. If our ability to form the idea of any relation requires our possession of at least one other (an associating one), how is the associating relation itself formed? It could be formed by invoking yet another associating relation, and so on. But there are only three of these, so this process must end with a relational idea whose formation will require that it already be possessed.[17]

This difficulty can be overcome. There are two ways of construing the associating principles. Hume's formulation quoted above suggests an "internalist" reading, according to which the mind must *judge* the associating relation to obtain if it is to form the idea through association. But elsewhere, he can be construed as adopting, instead, an "externalist" reading, according to which ideas will be joined if they are suitably related, whether or not the mind so judges them.[18] "The rule, by which [ideas] proceed, is to pass from one object to what *is* resembling, contiguous to, or produc'd by it" (T 2.1.4.2; SBN 283; italics mine).

The "externalist" reading of the principles eliminates the vicious circularity, enabling the "natural" relations themselves to be formed in accordance with the laws of association, even before the mind possesses any of them.

This suggestion is not *ad hoc*. We have, in fact, encountered a reason for thinking the "externalist" reading more apt in the case of the formation of ideas of substances. I pointed out (section VI) that an idea of a substance is (typically) formed by encountering an instance, by having an impression, and not by *uniting* ideas. So to acquire it, the imagination doesn't have to be capable of recognizing that the "natural relation" of contiguity holds between its constituents.

It might be objected here that the "externalist" reading of the association laws is illicit, since ideas can have no hidden aspects, not even relational ones.[19] Hume thinks "it is [in]conceivable that our senses shou'd be more capable of deceiving us in the situation *and relations*, than in the nature of our impressions . . . *all actions* and sensations of the mind are known to us by consciousness . . . [and] must necessarily appear in every particular what they are, and be what they appear" (T 1.4.2.7; SBN 190, my italics).

How can the transparency of perceptions be reconciled with the externalist conception of association? To characterise us as omniscient and infallible about our perceptions is to say something about our *judgments*. That is why Hume defends the claim by saying that to suppose that "any thing shou'd to *feeling* appear different . . . [would mean] that even where we are most intimately conscious, we might be *mistaken*" (T 1.4.2.7; SBN 190; emphasis on "mistaken" my own). So we are only required to be correct about those properties (monadic and relational) of perceptions if we possess the concepts denoting them. Once we have acquired the (general) idea of redness, say, we will infallibly recognize that a visual patch is red. But that will only happen after we have "found a resemblance among *several* objects, [and begin] . . . to apply the same name to all of them" (T 1.1.7.7; SBN 20; italics mine). The same is true of relational properties. For instance, transparency only requires that we recognize similarity between perceptions after we have experienced several similar pairs. So we can perfectly well come to have two similar ideas, which we then conjoin to form a complex one in accordance with the association law, *before* we have the idea of similarity, and are capable of judging them to be similar. Even the smallest acquisition circle is seen to be benign.[20]

VIII

There is, then, no difficulty in principle. But, I will argue, even "externalistically" construed, associationism fails to account for at least one relation, the causal one. Consider, first, its applicability to relations in general. What, for instance, are the (naturally related) ideas which jointly constitute distance? The two relata are clearly unrelated by contiguity, and they need be neither similar, nor causally related, to one another.

Well, perhaps they needn't be. Perhaps the complexity Hume attributes to all relations isn't of the relevant kind. As far as the associationist account of concept formation is concerned, Hume will do well to accept the suggestion of his modern critics, and identify simplicity with indefinability.[21] Plausibly, the idea of distance will then be simple, thus absolving Hume from the need to specify its (associationist) constituents.

This suggestion leaves some work to be done on Hume's behalf. Perhaps some relations will turn out to be simple, but causality will be complex. Hume himself analyses it into three components: spatio-temporal contiguity, temporal priority of the cause, and constant conjunction.[22] If the idea is complex, it must itself be the outcome of association. How is this claim to be understood?

Hume's three associating relations are, to be sure, *involved* in the idea of causation. Objects *similar* to the cause are constantly conjoined with objects similar to the effect, and cause and effect are spatio-temporally *contiguous*. But if mere "involvement" were sufficient, many relational ideas would have been formed that aren't. We do not, for instance, have a term applicable to pairs of objects the first of which is similar to a tree. Nor do we dignify with a label pairs of objects the second of which is contiguous to Buckingham Palace. Counterexamples of the same ilk can be multiplied, and to be accommodated, associationism must be construed very loosely, rendering very inadequate its explanation of the idea of causality (section V). If only five percent of those who smoke contract cancer, Jones's smoking doesn't adequately explain why he contracted it.

What we seek, then, is a more deterministic rule, a more "forceful" principle. We can improve things a bit. General terms, we know, apply to similar objects. Being relational, the term "are causally related" applies to similar *pairs*. But this is not enough. We assign labels to a relatively small number of possible relations, leaving nameless "is both fatter and shorter than," "is distant from and smaller than," and many others.

Can we improve things even further by emulating the (associationist) strategy Hume adopts in the case of substances? Here, the constituents of the complex idea are related to one another by a natural relation (contiguity). So, analogously, we must show the idea of causality to be a combination of (simpler) ideas related by the natural relations.

Thus construed, the associationist claim requires some clarification, since it is quite convoluted. Causality is constituted by three ideas, which may be related by three associating relations. In fact, the associating relations must be taken to hold between *objects*. Ideas can be similar to one another, but they aren't spatially located, and cannot, therefore, be spatially contiguous to one another. Neither are they causally related.

In our case, furthermore, the three constituent ideas are relational, so the associationist link will obtain, if at all, between *pairs of pairs* of objects (or events), whereas the three natural relations paradigmatically obtain between *pairs* of objects. So we need to adapt them to fit this (non-standard) case. To this end, we will view a pair, (a,b), as similar (causally related) to another, (c,d), if either a is similar (causally related) to c and b is similar (causally related) to d, or a is similar (causally related) to d and b is similar (causally related) to c. The distance between the pairs (a,b) and (c,d), which we must define so as to enable the third relation (contiguity) to apply to pairs of pairs, can be defined as the sum of the distances between the respective components.[23]

With these clarificatory remarks in mind, it is now quite easy to see that none of the three associative relations holds between causality's constituents. For instance, many pairs of non-simultaneous events are not similar to pairs of contiguous ones or to ones the like of which are regularly conjoined. At least, they are no more similar than are pairs of similar objects to pairs of distant ones. And yet we do not associate these latter two ideas; we do not, that is, form the (relational) concept "similar and distant."

As far as associationism is concerned, there is no relevant difference between the two cases. Pairs of causally related objects are similar to one another, but so are pairs of objects which are regularly-shaped and distant from one another.

Again, to accommodate the absence of "similar and distant" and many other relations of its ilk, we must construe associationism as very indeterministic, rendering inadequate its explanation of the idea of causality. But Hume himself provides an alternative explanation, albeit implicitly: the important function it serves. "'Tis only causation, which produces such a connexion, as to give us assurance from the existence or action of one object, that 'twas follow'd or preceded by any other existence or action" (T 1.3.2.2.; SBN 73–4).

IX

Maybe Hume realizes—if only dimly—that he has provided a much better response to the second question he has posed. When summarizing his project, in the Abstract (T, Abstract 35; SBN 662), the first question has disappeared. He no longer restricts the application of the principles of association to *simple* ideas. He characterizes them as the "secret tie or union among particular ideas, which . . . makes the one, upon its appearance, introduce the other"; no mention is made of the formation of new concepts (ideas). He gives examples pertaining to trains of thought ("free association"): "*Resemblance*; a picture naturally makes us think of the man it was drawn for. *Contiguity*; when *St. Denis* is mentioned, the idea of *Paris* naturally occurs. *Causation*; when we think of the son, we are apt to carry our attention to the father" (T, Abstract 35; SBN 662). And he ends by reminding us of the crucial role association plays in belief-formation. We only have to "consider, that so far as regards the mind, [the associative principles] are the only links that bind the parts of the universe together, or connect us with any person or object exterior to ourselves. For it is by means of thought only that any thing operates upon our passions."

NOTES

I am very grateful to the editors and the referees for their painstaking and insightful comments.

1 Quotations from the *Treatise* are based on David Hume, *A Treatise of Human Nature*, ed. David Fate Norton and Mary J. Norton (Oxford: Oxford University Press, 2000), hereafter T. Passages will be cited in the text by book, part, section, and paragraph number. I also provide page references to the second edition of the *Treatise* prepared by L. A. Selby-Bigge and P. H. Nidditch (SBN) (Oxford: Clarendon Press, 1978).

2 Quotations from *An Enquiry concerning Human Understanding* are based on the edition prepared by Tom L. Beauchamp (New York: Oxford University Press, 1999), hereafter EHU. I also provide page references to the third edition of the *Enquiries concerning Human Understanding and concerning the Principles of Morals* prepared by L. A. Selby-Bigge and P. H. Nidditch (Oxford: Clarendon Press, 1975), hereafter SBN.

3 David Hartley, too, discusses the two questions. He concentrates on "trains of thought," but does consider, albeit briefly, the way "Simple Ideas will run into complex ones, by means of Association" (*Observations on Man, His Frame, His Duty, and his Expectations*, 2 vols. [Hildesheim: Georg Olms, 1967], 1: 73–9). He also alludes (78) to the differences and similarities between different languages "in their complex . . . Ideas."

4 See Kemp Smith, *The Philosophy of David Hume* (London: Macmillan, 1949), chapter 12; and Ralph W. Church, *Hume's Theory of the Understanding* (Ithaca: Cornell University Press, 1935), 31.

5 Barry Stroud, *Hume* (London: Routledge, 1977) and Don Garrett, *Cognition and Commitment in Hume's Philosophy* (New York: Oxford University Press, 1997), for instance.

6 David Francis Pears, *Hume's System* (Oxford: Clarendon Press, 1990), 69; my italics.

7 Terence Penelhum, *Hume* (London: Macmillan, 1975), 33; A.H. Basson, *Hume* (Harmondsworth: Penguin, 1958), 50.

8 Jonathan Francis Bennett, *Locke, Berkeley, Hume: Central Themes* (Oxford: Clarendon Press, 1971), 291. Bennett is less explicit about Hume's task, but there are two grammatical clues that suggest he also thinks Hume is concerned with successive thoughts, rather than with the formation of concepts. First, he talks about one type of perception *tending* to follow another, and this plurality is only appropriate in the context of successive thoughts. Trains of thought can recur (the thought of smoke tends to follow that of fire), but a concept is only formed once. Second, he characterizes the case as one in which *a single* perception engenders another. And a complex idea is formed out of *several*.

9 All quotations from Locke are from *An Essay concerning Human Understanding*, ed. P. H. Nidditch (Oxford: Clarendon Press, 1975), and are cited by book, chapter, and section.

10 William James, *The Principles of Psychology*, 2 vols. (London: Macmillan, 1901), 1: 551.

11 See Carl G. Hempel, *Aspects of Scientific Explanation* (New York: Free Press, 1965), 415–18.

12 A collection of (possibly interrupted) sequences of (possibly altering) perceptions manifests coherence if they all display the same pattern (see H. H. Price, *Hume's Theory of the External World* [Oxford: Clarendon Press, 1940]). If the pattern is one of similarity between the perceptions, each individual sequence and the collection manifest constancy.

13 Unlike the three associative principles, it does not obtain between two individual perceptions, but rather, between sets of sequences of perceptions.

14 Daniel E. Flage, *David Hume's Theory of Mind* (London: Routledge, 1990), 10.

15 Of course, unlike Hume and Locke, we know about the molecular structure of gold. And even if it isn't gold's "real essence," it is causally responsible for its perceptible qualities. So Hume's invocation of causality in his explanation of *our* substance terms isn't "pathological." But it is very plausible.

16 See Garrett, *Cognition and Commitment,* 61.

17 The argument clearly doesn't depend on the fact that there are *three* associating relations; any finite number will engender the same difficulty. And even an infinity of them will not help. Here, we are threatened by an infinite regress. If the mind starts out with no ideas of relations, it will never get going, even if it is capable of acquiring infinitely many. Of course, this possibility is less pertinent, since the "capacity of the mind [is] not infinite" (T 1.1.7.2; SBN 18).

18 The terms seem apt, since one is here reminded of the epistemological distinction between externalist and internalist conceptions of knowledge (justification). Externalists suppose that when someone knows (is justified in believing) p, this is in virtue of facts (reliable acquisition, truth-tracking, etc.) which need not be known by him.

19 On this, see John Passmore, *Hume's Intentions* (Cambridge: Cambridge University Press, 1952), 114.

20 I am not defending relational transparency, only showing how it can be reconciled—once accepted—with externalist association. Even Hume ought to find its sweeping formulation—its application to relational aspects of perceptions—extremely implausible. In order to recognize causal relations between two perceptions one must know that a regularity obtains. And this requires information, albeit perceptual, about other perceptions, some of which one hasn't yet had. And even when the only information required pertains to two perceptions one has had, error will be possible since memory is fallible (T 1.1.3.2–3; SBN 9). In fact,

Hume is more circumspect when he initially broaches the issue (T 1.4.2.5; SBN 189): "when we doubt, whether [our sensations] present themselves as distinct objects, or as mere impressions, the difficulty is not concerning their nature, but concerning their relations and situation."

21 See Bennett, *Locke, Berkeley, Hume*, 225, and D. G. C. MacNabb, *David Hume* (London: Hutchinson, 1951), 30. This is what Locke says: "The names of simple ideas are not capable of any definition; the names of all complex ideas are" (III vi 4). But he also says that in every idea of a relation both relata are present "so as to take a view of them at once" (II xii 1). And this renders *every* relation complex, as Locke himself notes, whereas plausibly, they are not all definable. The definition of a term requires "the shewing [of its] . . . meaning . . . by several other not synonymous Terms" (III iv 5).

22 Hume is inconsistent. When he comes to consider the mind-body problem (1.4.5), he takes constant conjunction to be sufficient for causality. "[A]ll objects, which are found to be constantly conjoin'd, are upon that account only to be regarded as causes and effects" (T 1.4.5.32; SBN 249). It is clear why spatial contiguity is omitted: it seems to preclude psychophysical interactions, the possibility of which Hume is keen to defend. But for some reason he also relinquishes the requirement that the cause be temporally contiguous to the effect and prior to it. The definition of the *Enquiry*, more sensibly, leaves out spatial contiguity, but includes, in addition to constant conjunction, both temporal contiguity and priority (EHU 7.29; SBN 76), thereby rendering the idea complex.

23 This is plausible if we are concerned with *ordered* pairs. Otherwise, we must define the distance between (a,b) and (c,d) as the smaller of the two sums, distance(a,c)+distance(b,d) and distance(a,d)+distance(b,c).