

Adding a Prong to Hume's Fork

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August 8th, 2019

If we carry our enquiry beyond the appearances of objects to the senses, I am afraid, that most of our conclusions will be full of scepticism and uncertainty. (T 1.2.5.26n12.2App)

1. Introduction

How many prongs does Hume's Fork have? Ask this question of Hume specialists and undergraduates alike, and the most common answer will be that it has two: relations of ideas and matters of fact. Hume seems to present it this way at the start of Section IV of *An Enquiry Concerning Human Understanding*, so his readers are not to blame here. Yet they are wrong.

Relations of ideas can be intuited or demonstrated, are knowable, and are necessary. Matters of fact cannot be intuited or demonstrated, are not knowable, and are contingent. Many philosophers assume that Hume holds that every proposition falls into one and only one of these two categories, and they focus on investigating whether this view is a form of the analytic-synthetic distinction.¹ Other categories, which cut across these two, are seen as Kantian or Kripkean innovations.

But we should take Hume at his word. Members of the first category of propositions have *ideas* as relata. In this paper, I will argue that *A Treatise of Human Nature* makes clear that Hume holds that there are also relations of *impressions* that can be intuited, are knowable, and are necessary. These relations constitute Humean sensory knowledge and they are widespread in vision. All one needs to do is sense and, if the objects of one's senses are of the right sort, one will thereby know. When one sees that two patches of red in one's immediate visual field resemble one another, one thereby knows that they do. Consequently, Hume's Fork has a third prong, even if Hume fails to mention it when he uses his Fork in the first *Enquiry*.

Despite the wealth of attention paid to the various ways in which Hume is an empiricist, there is surprisingly little dedicated to his views on the relationship between sense perception and knowledge. Undoubtedly, this gap in the literature is owed, in part, to a broader issue: Hume's positive views on knowledge are not entirely clear. Commentators have understandably focused on what Hume focuses on.

Yet, in order to argue that Hume's Fork has a third prong, I must first argue for an interpretation of Hume's position on knowledge in general. Given Hume's relatively sparse statements about what he means by 'knowledge' in the strict sense, this is no easy task, and it will occupy much of my attention in what follows. Only after I have established my interpretation of Hume's broader position will I turn to the case of sensory knowledge.

Here is how my argument will proceed. First, in section 2, I will argue that Hume's position is that (i) every instance of knowledge must be an immediately present perception (i.e., an

¹ See, e.g., Ayer 1972, Cohen 1977, Dicker 1991, Dicker 1998, Meeker 2007, and Slavov 2017. For a more comprehensive recent treatment, see Millican 2017.

impression or an idea), (ii) an object of this perception must be a token of a knowledge relation, and (iii) this token knowledge relation must have parts of the instance of knowledge as relata (i.e., the same perception that has it as an object).² I call this the *Constitutive Account* of Humean knowledge. Next, in section 3, I will defend my interpretation against an alternative and several objections. In section 4, with the help of some passages from the *Treatise*, I will apply the Constitutive Account to sense perception in order to argue that Hume holds that we can have sensory knowledge. Given what has come before, this means that, on my interpretation, Hume holds that it is possible that some impressions are instances of knowledge because they have tokens of the knowledge relations as both parts and objects. I conclude in section 5 by reconsidering Hume's use of his Fork in the first *Enquiry*.

2. Humean knowledge: its objects, standards, and nature

The texts where Hume expounds upon his philosophical views on knowledge are few and far between. They amount to a series of glimpses of an underlying picture that Hume never fully reveals. They consist of one small section of the *Treatise* dedicated to the topic (section 1.3.1; "*Of knowledge*"), the subsequent section, which finds Hume briefly discussing sense perception and its connection with knowledge, and a smattering of other passages throughout the rest of his corpus. In the first *Enquiry*, for instance, Hume is largely silent about knowledge. There, Hume uses 'knowledge' in many different colloquial senses, and the few passages related to 'knowledge' in Hume's strict sense must be understood through the fuller picture given by the *Treatise*.³

In arguing for my interpretation of Hume's position on knowledge, my focus will be on T 1.3.1 and the subsequent section. I maintain that these two sections provide sufficient evidence to support the Constitutive Account at the expense of any alternative. In T 1.3.1, Hume's primary concern is with giving an account of "the objects of knowledge and certainty" (T 1.3.1.2). These objects are what candidate instances of knowledge are about—they are the knowable beings. If I know that $1+1=2$, then the object of my knowledge is that $1+1=2$. What Hume writes about these objects reveals what his standards for knowledge are, which are those conditions that candidates for knowledge must satisfy if they are to be instances of knowledge. The standards that Hume uses to demarcate knowledge act as our only bridge to his position on the nature of knowledge, given that he writes nothing explicitly about the latter.

It is a common view that the objects of knowledge are propositions. This is, in fact, Hume's view, but I will not rely on proposition-talk in what follows because my argumentation will require explicit discussion of the idiosyncrasies of Hume's position on the knowable propositions.⁴

² 'Perception' is Hume's generic term for ideas or impressions. (See footnote 7 for more on the nature of perceptions.) As for 'knowledge relation,' I will define and explain what I mean by this term in section 2. Note that, in using the kind-token distinction, I do not mean to imply that Hume is *not* a nominalist. The kind-token distinction must be understood through Hume's account of abstract ideas, which I discuss in section 3.1.

³ For Hume's uses 'knowledge' in colloquial senses in the first *Enquiry*, see, e.g., E 1.8, E 4.4, or E 5.22. For discussion and a similar reading to mine, see Schmitt 2014 (41).

⁴ Although Hume never explicitly analyzes the nature of propositions, it seems that he maintains that propositions are the perceptions that linguistic *that*-clauses express. The subject-predicate structure of *that*-clauses indicates that the relevant perceptions are generally complex, and philosophical relations are the best candidates in Hume's system (the alternatives are modes and substances; see T 1.1.4.7). Numerical identity and existential statements are potential

Hume begins by reminding us of his view that there are "seven different kinds of philosophical relation" (T 1.3.1.1): resemblances, identities (over time), relations in space and time, proportions in quantity or number, qualitative relations, contrarieties, and causal relations.⁵ As we will see, Hume asserts that tokens of four of these kinds are the objects of knowledge.⁶ Hume first introduces philosophical relations in an earlier section. In that section, T 1.1.5 ("*Of relations*"), Hume argues that when we "compare" any two beings in any dimension, there is a perception immediately present to the mind that has a philosophical relation as its object.⁷ Hume's repeated use of the term 'compare' in this context is noteworthy, as when he describes philosophical relations as "any particular subject of comparison" (T 1.1.5.1). Hume indicates elsewhere that the sort of comparison at issue here is a minimal one that does not require us to be introspectively aware of what we compare.⁸ Simply by having two beings present to mind, one thereby compares them in Hume's sense.⁹

In T 1.3.1.1-2, Hume argues that there is a distinction between two classes of these seven kinds of philosophical relations. One class consists of the objects of a kind of perception that Hume calls 'probability', and the members of this class are identities (over time), relations in space and time, and causal relations.¹⁰ When I think of my laptop being on top of my desk, I have in mind a token relation of contiguity in time and place. The other class of relations consists of "the objects of knowledge and certainty" (T 1.3.1.2), and the members of this class are resemblances, proportions in quantity or number, qualitative relations, and contrarieties.¹¹ These are the

exceptions (see T 1.4.2.26 and T 1.3.7.5n20, respectively). In the first *Enquiry*, Hume is the most explicit when he argues "*That the square of the hypotenuse is equal to the square of the two sides*, is a proposition, which expresses a relation between these figures. *That three times five is equal to the half of thirty*, expresses a relation between these numbers" (E 4.1). Since these relations are paradigmatic "relations of ideas," Hume clarifies that "matters of fact" are propositions that are relations expressed by *that*-clauses, as well (E 4.2). For discussion, see Owen 1999 (74n109, 103-104).

⁵ For discussion of the origin of the sevenfold division, see Millican 2017 (14-17).

⁶ So, by 'token of a knowledge relation,' I mean a particular relation that holds between two particular beings (or collections of such) and belongs to one of these four kinds. See footnote 2.

⁷ There is some disagreement about what perceptions are for Hume. I subscribe to what has been called the 'Object View,' which holds that perceptions are the objects of the mind and that they can have intentional objects of their own. See Cottrell 2018 (esp. 2-3) for discussion. For a brief discussion of the metaphysics of perceptions as it relates to the Constitutive Account, see section 3.3.

⁸ For places where Hume uses 'comparison' in this sense, see T 1.1.5.2-7, T 1.2.4.21-31, T 1.3.1.6, T 1.3.2.2, T 1.3.4.3, T 1.3.11.2, T 1.3.14.31, and T 1.1.7.7n5App.

⁹ The reason why the relevant sort of comparison does not require higher-order awareness is that Hume holds that what prior philosophers identified as "judgment" and "reasoning" just is "conception." And to conceive something just is to have a perception of it. See T 1.1.1.7n5App. For discussion, see Echelbarger 1997, Owen 1999 (74n109, 75, 96-97, 103-104), and Millican 2017 (5-6).

¹⁰ Although Hume presents these three as the probability relations, and I will treat them as such in what follows, some of their members seem to qualify as knowledge relations. See footnote 18.

¹¹ Those who agree that these relations are the objects of Humean knowledge include Kingsley Blake Price (1950, 427), David Owen (2003), Kevin Meeker (2007, 228), Frederick Schmitt (2014, 12, 65-66), Graciela De Pierris (2015, 97-110), Don Garrett (2015, 42, 51-52, 92), Donald Ainslie (2015, 21), and Peter Millican (2017, 17-27), among others.

knowledge relations.¹² When I think of three being greater in quantity than two, I have in mind a token proportion in quantity.

On Hume's view, a relation is a knowledge relation if, and only if, the intrinsic properties of its relata are the sole determinants of whether it holds or not.¹³ Given that the probability relations are those relations that are *not* knowledge relations, and given that Hume's justification of this condition reveals the basis for his position on knowledge, this condition undergirds the distinction between the two classes of relations. But what justifies this condition? Here is Hume's answer:

These relations may be divided into two classes; into such as depend entirely on the ideas, which we compare together, and such as may be chang'd without any change in the ideas. 'Tis from the idea of a triangle, that we discover the relation of equality, which its three angles bear to two right ones; and this relation is invariable, as long as our idea remains the same. On the contrary, the relations of *contiguity* and *distance* betwixt two objects may be chang'd merely by an alteration of their place, without any change on the objects themselves or on their ideas; and the place depends on a hundred different accidents, which cannot be foreseen by the mind. 'Tis the same case with *identity* and *causation*. Two objects, tho' perfectly resembling each other, and even appearing in the same place at different times, may be numerically different: And as the power, by which one object produces another, is never discoverable merely from their ideas, 'tis evident *cause and effect* are relations, of which we receive information from experience, and not from any abstract reasoning or reflection. There is no single phænomenon, even the most simple, which can be accounted for from the qualities of the objects, as they appear to us; or which we cou'd foresee without the help of our memory and experience. (T 1.3.1.1)

So long as we have two beings in mind, we can "discover" whether a knowledge relation holds of them or not—no other information needed. Having the intrinsic properties of the relata in mind is sufficient because the relations hold in virtue of them alone. By contrast, we cannot foresee whether probability relations hold "without the help of our memory and experience" of other facts. This is because the intrinsic nature of the relata of probability relations does not determine whether the relations hold or not. We cannot discover *a priori* whether a probability relation holds between them.¹⁴

The reason that Hume justifies the condition undergirding the distinction between the two classes of relations in this way is that he holds that there must *no possibility that a knower is in error about what she knows*. As Hume states a few paragraphs after the one quoted above, we must be able to determine "without any possibility of error" (T 1.3.1.5) whether or not two beings bear a relation to one another, if we are to know whether or not they do. Hume repeatedly indicates that

¹² I owe this term to Miren Boehm (2013, 69). Although Hume presents these four kinds as the knowledge relations, and I will treat them as such in what follows, some of their members seem to qualify as probability relations. See footnote 18.

¹³ Thus the knowledge relations are what are called 'internal relations.' See MacBride 2016 for discussion of recent attempts to make this notion precise. Both De Pierris (2015, 12, 97-110) and Jani Hakkarainen (2012) explicitly apply this term to Hume's knowledge relations. See also Cottrell 2015 (544fn29).

¹⁴ Hume does not use '*a priori*' in this sense in the main *Treatise* sections treating of the philosophical relations (though see T 1.4.5.30), but he does in the first *Enquiry*. See E 4.6, E 4.7, E 4.9, and so on.

this is his underlying view when he uses the term 'infallible' in connection with knowledge and when he uses 'certainty' interchangeably with 'knowledge'.¹⁵ Hume expresses the same view in different terms when he indicates that knowledge is a form of *scientia*, which is a variety of knowledge that Descartes and other predecessors held to be maximally epistemically certain.¹⁶ By all indications, and as Frederick Schmitt argues, Hume's view is that the relevant sort of certainty *just is* "infallibility or the impossibility of error."¹⁷

If a relation's holding depends on its extrinsic properties, then one can have its relata in mind and yet still be wrong about whether it holds or not. One must rely on one's fallible "memory and experience" in thinking that a probability relation holds or does not hold. By contrast, for a relation to qualify as a knowledge relation, it must be able to be "discoverable" from the ideas of the relata alone, in the sense that if one has the intrinsic properties of the relata in mind, then one cannot be mistaken about whether the relata bear the relation to one another. The rest of the world need not cooperate. Thus, the aforementioned condition undergirds the distinction between the knowledge and probability relations because Hume maintains that one has knowledge only if one cannot err about what one knows. In this fashion, Hume's justification of the condition that filters the knowledge relations from the rest reveals his standards for knowledge.¹⁸

The knowledge relations are also the metaphysically necessary relations.¹⁹ Hume identifies the relations that are discoverable *a priori* with the necessary relations because of his endorsement of the Conceivability Principle, which is the claim that "whatever we conceive is possible" (T 1.4.5.10).²⁰ Hume argues that, for any two beings and for any given probability relation, we can conceive *either* that they bear the relation to one another *or* that they do not.²¹ Given the Conceivability Principle, it follows that it is possible for the probability relations to hold or to fail to hold between any two beings.²²

¹⁵ For relevant cases where Hume uses 'infallible' and its cognates, see T 1.3.1.5, T 1.3.3.2, and T 1.4.1.1. For relevant cases where Hume uses 'certain' and its cognates, see, e.g., T 1.3.1.2, T 1.3.1.6, T 1.3.3.2, T 1.3.3.3, T 1.3.6.7, and T 1.3.12.14.

¹⁶ See, e.g., T 1.3.2.1, T 1.3.3.9, and E 12.26-28. For discussion of *scientia*, certainty, and Hume's antecedents, see Owen 1999 (17-23, 36-38, 83-84). See also Jolley 2010, Sorell 2010, Schmitt 2014 (50-81), and De Pierris 2015 (97-98).

¹⁷ Schmitt 2014 (71). See the subsequent pages for further discussion. Note that I disagree with Schmitt's position that infallibility, for Hume, is ultimately to be understood in terms of necessary reliability. See footnote 38.

¹⁸ Note that Hume's justification indicates that there may be some resemblances, proportions in quantity or number, qualitative relations, and contrarities that are objects of probability. For instance, the relative heaviness of two objects mentioned by Hume in T 1.1.5.5 is a relation "of which we receive information from experience" and which is "never discoverable merely from their ideas" (T 1.3.1.1). Likewise, although we know that $3-1=2$, we do not know that this proportion in quantity or number is instantiated by any beings which are not perceptions or their parts (more on this issue later in this section). And while some relations in space and time, identities (over time), and causal relations are objects of probability, some are objects of knowledge. There are two-dimensional spatial relations that hold between the colored points that are immediately visible to me right now that "depend entirely on the ideas, which we compare together" (T 1.3.1.1) and that are "discoverable at first sight, and fall more properly under the province of intuition than demonstration" (T 1.3.1.2). Nothing extrinsic to my complex idea of the visual array before me needs to cooperate for me to know that a patch of red is between two patches of blue. In T 1.3.1, Hume seems to be too cavalier about how clean this distinction between the two classes of relations really is.

¹⁹ See Boehm 2013 (68, 76-79) for discussion.

²⁰ See also T 1.1.7.6 and A 11.

²¹ See, e.g., T 1.3.6.1, T 1.3.9.10, T 1.3.14.13, and E 4.2.

²² This is the link to Hume's negative views on the "necessary connexion" between causes and their effects. See T 1.3.14.15-23, as well as E 4.8-13.

Seeing as Hume holds that one must be certain about whether a relation holds or not if one is to know it, and this certainty is attainable only if one is aware of the intrinsic properties of its relata, it follows that, for Hume, candidates for knowledge must provide certain awareness about what the intrinsic properties of the relata are, and they must do so at the time that one knows the relation. It is not enough for one to be certain that, *were* a given pair of beings to have so-and-so intrinsic properties at some time, then, simply in virtue of these properties, a relation *would* hold or not between the beings at that time. There must be no room for errors of misrepresentation.

The only beings in Hume's system that he holds we cannot misrepresent are those that are "immediately present" to the mind. Any being that is distinct from one's representations of it could be misrepresented, but there is no such gap with immediately present beings. As a consequence, if one is to know a relation, then the intrinsic properties of its relata must be immediately present to the knower at the time that they are known. Since Hume holds that *one's perceptions* are the only beings that can be immediately present, they are the only beings that have intrinsic properties that are immediately present.²³ Hume explicitly relies on the former view when he argues that we are reduced to making inferences about beings that are *not* perceptions on the basis of the probability relation of cause and effect:

The only existences, of which we are certain, are perceptions, which being immediately present to us by consciousness, command our strongest assent, and are the first foundation of all our conclusions. The only conclusion we can draw from the existence of one thing to that of another, is by means of the relation of cause and effect, which shows, that there is a connexion betwixt them, and that the existence of one is dependent on that of the other. The idea of this relation is deriv'd from past experience, by which we find, that two beings are constantly conjoin'd together, and are always present at once to the mind. But as no beings are ever present to the mind but perceptions; it follows that we may observe a conjunction or a relation of cause and effect betwixt different perceptions, but can never observe it betwixt perceptions and objects. (T 1.4.2.47)²⁴

There are several other passages where Hume asserts or makes use of his view that one's perceptions are the only beings that can be immediately present.²⁵ Indeed, Hume makes a similar claim about impressions earlier in the same section:

²³ For extensive discussion of this feature of perceptions and related issues, see Qu 2017. Hsueh Qu argues that Hume holds that "[w]e cannot fail to apprehend the qualitative characters of our current perceptions, and these apprehensions cannot fail to be veridical" (2017, 577). Since Qu holds that "the intrinsic qualities of a perception seem limited to its qualitative character" (2017, 582), it follows that this view, which Qu calls 'Qualitative Transparency,' applies to intrinsic properties. For discussion, see Passmore 1980 (90) and Cottrell 2015 (544).

²⁴ Although the dialectic in T 1.4.2 is complex, the view expressed in T 1.4.2.47 is expressed in Hume's own voice. In the paragraph prior, Hume abandons the temporary identification of 'perception' with 'object' that he had sustained from T 1.4.2.31. Hume says he will once again "distinguish [...] betwixt perceptions and objects" in the way that the "modern philosophers" (like Locke) do. Hume then proceeds to argue in his own voice in T 1.4.2.47 that the hypothesis "that our objects alone preserve a continu'd existence" while our immediately present perceptions *do not* has "*no primary recommendation*" with regard to reason. It is in this argument that Hume relies on the claim that I attribute to him that "the only existences, of which we are certain, are perceptions, which [are] immediately present to us by consciousness."

²⁵ See T 1.3.2.3, T 1.4.2.5, T 1.4.7.3, T 2.2.6.2, E 7.11, and E 7.13.

For since all actions and sensations of the mind are known to us by consciousness, they must necessarily appear in every particular what they are, and be what they appear. Every thing that enters the mind, being in *reality* a perception, 'tis impossible any thing should to *feeling* appear different. This were to suppose, that even where we are most intimately conscious, we might be mistaken. (T 1.4.2.7)

Yet, to be clear, Hume's view does not extend to *all* of the properties of perceptions. It only extends to those properties that perceptions "appear" to have. As Hume asserts in the passage quoted in my epigraph, "[a]s long as we confine our speculations to the *appearances* of objects to our senses, without entering into disquisitions concerning their real nature and operations, we are safe from all difficulties, and can never be embarrass'd by any question" (T 1.2.5.26n12.2App). Since Hume holds that perceptions themselves are what appears to the mind, the properties that perceptions *appear* to have are those properties that perceptions *actually* have, regardless of what else exists.²⁶ These properties are their intrinsic properties. And they are the properties explicitly referenced by Hume at the start of the section "*Of knowledge*" when he refers to "the qualities of the objects, as they appear to us" (T 1.3.1.1) as the ones that are relevant to determining whether two beings bear a knowledge relation or not.

Such a clarification is necessary because there are cases where Hume seems to indicate that there are violations of his view about the infallible access provided by immediate presence. Consider when Hume discusses how we can mistake ideas for impressions in dreams (T 1.1.1.1), when he discusses how we can mistake bundles for unities (T 1.4.6), or when he discusses how we can mistake calm passions for reason (T 2.3.3). Each of these cases is one where the misattributed property at issue is *not* an intrinsic property of the perception or perceptions at issue. For instance, the distinction between ideas and impressions is a distinction between entities that are copied and those that are not. Since what it is to be copied is to bear a cluster of extrinsic relations to other beings, mistaking an idea for an impression is *not* a mistake involving the intrinsic properties of the perceptions at issue.²⁷

The preceding line of reasoning directly supports a core component of my Constitutive Account. On this interpretation, Hume's position is that (i) every instance of knowledge must be an immediately present perception; (ii) an object of this perception must be a token of a knowledge relation; and (iii) this token knowledge relation must have parts of the instance of knowledge as relata (i.e. the same perception that has it as an object). Since Hume holds that only perceptions are immediately present to the mind, he holds that all (knowledge) relations have distinct relata, and he must hold that the intrinsic properties of the relata of knowledge relations must be immediately present to the mind, it follows that he also must hold that any known knowledge relation must have relata that are parts of the knower's immediately present perceptions.²⁸ This is the main part of (iii). Two of the other components of the Constitutive Account have already been covered: namely, (i) and (ii). The rest of (iii) is all that is left; that is, all that remains to be

²⁶ For cases where Hume describes perceptions as 'appearances' (or uses 'appear' or its cognates with respect to them), see, e.g., T 1.1.1.1, T 1.1.3.1, T 1.1.4.2, T 1.2.1.5, T 1.2.2.1, T 1.2.3.4, T 1.2.3.10, and T 1.2.6.8. See especially T 1.1.7.3-4 and T 1.2.5.26n12.2App.

²⁷ For discussion of the impression-idea distinction, see Kemp Smith 1941 (209-212, 229-236), Garrett 1997 (11-40), Landy 2006 (119-120), Landy 2016 (275-280), and Noonan 1999.

²⁸ For relevant discussion, see Inukai 2010 (195-202).

shown is that the immediately present perception that is an instance of knowledge is *the very same perception* that has, as parts, the relata of the knowledge relation that it has as an object. The preceding argumentation does not rule out the possibility that the knower's instance of knowledge is *distinct from but co-occurrent with* what she knows (the object of this instance of knowledge).

Suppose, for purposes of a *reductio*, that Hume were to hold that it is *not* the case that every instance of knowledge *k* must be the very same immediately present perception whose parts are the relata of the token knowledge relation that *k* has as an object. It follows that Hume would hold that it is possible that there is some instance of knowledge that is distinct from its object. Whether such an instance of knowledge is either another perception or something else entirely, Hume would hold that it would be conceivable that it exists and its object does not. After all, Hume endorses both the Separability Principle and the Conceivability Principle. The Separability Principle is the view that "whatever objects are different are distinguishable, and that whatever objects are distinguishable are separable by the thought and imagination" (T 1.1.7.3). For any two numerically distinct beings, one can *conceive* of them as separate—it is conceivable that one exists and the other does not.²⁹ Given the Conceivability Principle, it follows that it would be *possible* that one exists and the other does not (and vice versa). Therefore, if there were some instance of knowledge *k* that was distinct from its object, then it would be possible that *k* exists but its object does not. But if this were possible, then it would be possible that a knower could be in error about whether the known—a token knowledge relation—holds or not.³⁰ Since Hume denies that the latter is possible because a knower must be certain about what she knows, it follows that Hume must hold that every instance of knowledge *k* is the very same immediately present perception whose parts are the relata of the token knowledge relation that *k* has as an object.³¹

Consider the case of an idea of the resemblance holding between a patch of crimson and a patch of scarlet. For any two beings that are *not* immediately present perceptions or their parts, one cannot know that they bear any relations to one another. So, if one is to know this resemblance that holds between a patch of crimson and a patch of scarlet, it must be a relation between the parts of the very idea one has of it. If the patches were distinct from the idea, then their resemblance could fail to exist when the idea exists. It would be an error to have an idea of them resembling when it is not the case that they resemble. Since knowing precludes any possibility of erring, such an idea would not be an instance of knowledge.

²⁹ This is the standard interpretation of the Separability Principle. See, for instance, Garrett 1997 (ch. 3), Baxter 2011 (161-162), and Okamura 2019 (424-425).

³⁰ Per T 1.1.7, Hume is a nominalist who denies that there are uninstantiated properties. So, if a given token knowledge relation *R* were to not exist *in rebus* (i.e. instantiated by a perception or another being)—the possibility of which follows from Hume's principles in the above-noted ways—then it would not exist *simpliciter*. Yet, since token knowledge relations are metaphysically necessary, Hume maintains in T 1.3.6.1 that their contraries are contradictions and that it is not possible that their contraries exist. So, even though *R* would not exist in such a scenario, not-*R* could not exist either. This is not necessarily a problematic result. Hume has the resources to make a distinction between (i) the possibility that a token knowledge relation fails to hold without any of its contraries holding and (ii) the possibility that a token knowledge relation fails to hold while some of its contraries hold. It is open to Hume to hold that (i) is a genuine possibility while (ii) is not. The denial of the Law of Excluded Middle seems to be a necessary consequence of Hume's position here.

³¹ For discussion of a similar argument in the context of mental transparency more generally, see Qu 2017 (584-585).

Although my arguments for both parts of (iii) are derived from T 1.3.1 and Hume's principles (which are independently supported by the texts), they are also directly supported by the texts. In T 1.3.1.1, Hume's endorsement of the Constitutive Account is the best explanation of his assertions that knowledge relations "depend entirely on the ideas," that they remain "invariable, as long as our idea remains the same," and that they are "discoverable merely from their ideas." Hume makes similar claims elsewhere, as in T 1.3.3.9: "All certainty arises from the comparison of ideas, and from the discovery of such relations as are unalterable, so long as the ideas continue the same." And likewise in the first *Enquiry* when Hume discusses knowledge relations: "Propositions of this kind are discoverable by the mere operation of thought, without dependence on what is any where existent in the universe" (4.1).³² Claims like these are true only if the Constitutive Account is. If the Constitutive Account were false, then a knower's ideas of knowledge relations remaining the same would be no guarantee that the relations themselves "continue the same" or not (i.e. hold or not). The Constitutive Account provides the only explanation of what Peter Millican describes as Hume's "slide between *what is implied by the properties of the objects themselves* (independently of further information about their relative situation etc.) and *what is implied by the ideas of the objects themselves* (independently of other ideas)."³³

Admittedly, the passages I have presented so far do not find Hume asserting that every instance of knowledge must be a *perception*. Hume uses the terms 'idea' and 'thought' but not 'impression'. However, there is nothing about Hume's presentation that precludes instances of knowledge from being impressions. Impressions can have the knowledge relations as objects in precisely the same way that ideas can, and Hume's justification of the standards of knowledge is perfectly general in that it does not turn on any of the features distinctive of ideas. Nonetheless, with the preceding principle-driven argument for the Constitutive Account in hand, I will provide specific textual evidence for the possibility of Humean sensory knowledge in section 4. This will be the last piece of the puzzle. First, though, I must respond to some objections to the Constitutive Account.

3. Answering objections and sizing up the competition

3.1 - What about general knowledge?

A natural concern about the Constitutive Account is that it severely restricts what can be known. One might think that an expansion of the domain of the knowable is warranted since, in some cases, it seems that in virtue of knowing whether a token knowledge relation holds between the parts of one of my ideas, I also know something about other beings. For instance, if what I know

³² This is to presume that the relations of ideas referred to in the first *Enquiry* are knowledge relations. Hume makes this link himself in T 1.3.6.6, T 1.3.7.3, T 3.1.1.9, T 3.1.1.18-19, and T 3.2.2.20. Those who agree that the distinction between matters of fact and relations of ideas is at least roughly the same as that between probability relations and knowledge relations include Helen Beebe (2006, 19), Owen (1999, 83; 2009, 81-82), Emil Badici (2011, 459), and De Pierris (2015, 97-99). Millican (2017) joins Norman Kemp-Smith (1941, 355) in arguing that the distinction is not the same and that the *Enquiry* distinction "is at once more general and more satisfactory."

³³ Millican 2017 (22). It is this slide that leads Schmitt (2014, 88) to claim, contrary to the Constitutive Account, that Hume holds that "we know only that the relations hold on the objects, given the existence of the objects as represented by the ideas. We do not know that these relations hold on the objects unconditionally."

about a particular triangle depends *only* on it having tokens of properties that other triangles have tokens of as well, then it would seem as if I know something about triangles in general.

The best way to relate this objection to a position Hume could take would be to express it in terms of what he calls "adequate representation." If my idea of a particular right triangle is an adequate representation of other right triangles, then it seems that whatever I know about this triangle in virtue of it being a right triangle is merely one case of the knowledge that I have about all right triangles whatsoever. In the following passage, Hume defines this sort of adequacy and, to make matters worse (for my interpretation), explicitly links it to our attainment of knowledge:

Wherever ideas are adequate representations of objects, the relations, contradictions and agreements of the ideas are all applicable to the objects; and this we may in general observe to be the foundation of all human knowledge. (T 1.2.2.1)

If Hume's view is that adequate representation requires the represented beings to *actually* exist, then any idea could fail to adequately represent anything. Since adequate representation requires distinctness, if one idea is an adequate representation of another, then they could exist separately.³⁴ Given Hume's Separability and Conceivability Principles, the first could exist while the second does not, and vice versa. Applying this to the case of an idea that is an instance of knowledge, it follows that whether or not an instance of knowledge constitutes knowledge of other beings is an extrinsic matter. With Hume's statements about knowledge in T 1.3.1 in mind, it is hard to see how, then, an instance of knowledge could constitute general knowledge for Hume. In what sense do we know something *more* in the cases where, by fortunate happenstance, our instances of knowledge adequately represent distinct beings? There would be no difference in an instance of knowledge whether it adequately represents other beings or not.

This does not yet settle the issue, for my objector could respond as follows. If one could acquire general knowledge via adequate representation, then whatever token knowledge relations hold between the parts of an existent idea of a particular right triangle would belong to a shared type that has distinct tokens that *would* hold of other right triangles *were* they to exist. Perhaps an idea of a particular right triangle adequately represents possible right triangles, even though none actually exist. Whether any right triangles actually exist or not, there are possible right triangles, and it is these mere *possibilia* that the idea adequately represents.

The problem with this rejoinder is that the only way in which Hume makes room for adequate representation of beings that do not actually exist is in a roundabout way via his account of abstract ideas. Since Hume's account of abstract ideas is how he accounts for general thought in all domains, this account offers this objection its only chance of success.

Contrary to Locke, in T 1.1.7 Hume argues that there are only particular perceptions with fully determinate properties.³⁵ Hume denies that there are any perceptions that are general in their representational capacities in virtue of having indeterminate properties. This negative position is paired with a positive attempt to explain how, nonetheless, our ideas can be general

³⁴ The most common interpretation of Hume's view is that adequate representation requires the represented beings to actually exist. See, e.g., Schmitt 2014 (88-91) or Garrett 2015 (62).

³⁵ For the most straightforward case where Locke contests this view, see E III.iii.7-9.

representations. In brief, Hume's story is as follows.³⁶ Upon perceiving many particular ideas that resemble in some respect (or several), the mind begins to apply a linguistic term to them and thereby associate them with one another. Contact with such a term generally causes the mind to think of one of the particular ideas that it associates with the term. Typically, this idea is pertinent to the context at hand and its role is to stand for all the ideas that are similar to it in the relevant respects. So, for instance, if I hear the false claim that all right triangles are isosceles, my mind will immediately generate a counterexample in the form of an idea of a right triangle that is not isosceles.

If Hume were to grant that an idea of a particular right triangle could adequately represent all right triangles, even though none actually exist, then this idea must be an exemplar that is associated with others like it via a shared term. Thus, the only sense in which there are mere *possibilia* in Hume's system is via a group of ideas that would be triggered by this sort of associative tendency. The ideas in such a group do not exist in any form until they are summoned.³⁷

With this background in hand, the objection under consideration can be re-phrased as follows: would Hume agree that an instance of knowledge being associated with other ideas of the same type via a term in this way constitutes knowledge of the objects of those ideas? My response is simple. Given the stringent standards that Hume applies to knowledge, it is clear that this sort of associative disposition would *not* qualify as knowledge. As previously discussed, Hume classifies the knowledge relations as the objects of knowledge because awareness of the intrinsic properties of their relata provides the knower with certainty about whether they hold. Since there is nothing barring the mind from misclassifying ideas and erroneously associating them with terms that do not apply to them, we have no certainty about whether our present ideas are similar in the relevant respects with those ideas associated with them via a term. Consequently, the association of other ideas with our present instances of knowledge via a term should be, at best, understood as a *fallible effect* of our knowledge. The sense of 'knowledge' in the passage about adequate representation (T 1.2.2.1) is a colloquial, loose, and derivative one.

As we will see in the next subsection, there is a passage where Hume seems to define knowledge as a species of "assurance". The texts where Hume refers to this species of assurance indicate that it is a cluster of dispositions that arise subsequent to realizing knowledge as defined by the Constitutive Account. Until this passage has been addressed, the present objection will have not been put to rest once and for all. To this textual evidence I now turn.

3.2 - A competitor: the Assurance Account

Hume gives an explicit definition of knowledge in a passage outside of T 1.3.1 and the subsequent section. An opponent to the Constitutive Account could rely on this passage to justify an alternative interpretation. Unfortunately for my interpretation, T 1.3.1-2 lack a correspondingly explicit definition—in fact, this definition is the *only* explicit definition of knowledge Hume gives in his entire corpus. In this subsection, I will examine of the most

³⁶ For a congenial summary of Hume's position on abstract ideas, see Garrett 2015 (52-60). For a competing picture and an account of the interpretative geography, see Landy 2016.

³⁷ See T 1.1.7.7 for Hume's clearest statement to this effect.

plausible version of this sort of alternative interpretation. The passage containing the explicit definition is as follows. I will call it the *Definition Passage*.

Those philosophers, who have divided human reason into *knowledge* and *probability*, and have defin'd the first to be *that evidence, which arises from the comparison of ideas*, are oblig'd to comprehend all our arguments from causes or effects under the general term of *probability*. But tho' every one be free to use his terms in what sense he pleases; and accordingly in the precedent part of this discourse, I have follow'd this method of expression; 'tis however certain, that in common discourse we readily affirm, that many arguments from causation exceed probability, and may be receiv'd as a superior kind of evidence. One wou'd appear ridiculous, who wou'd say, that 'tis only probable the sun will rise to-morrow, or that all men must dye; tho' 'tis plain we have no farther assurance of these facts, than what experience affords us. For this reason, 'twou'd perhaps be more convenient, in order at once to preserve the common signification of words, and mark the several degrees of evidence, to distinguish human reason into three kinds, viz. *that from knowledge, from proofs, and from probabilities*. By knowledge, I mean the assurance arising from the comparison of ideas. By proofs, those arguments, which are deriv'd from the relation of cause and effect, and which are entirely free from doubt and uncertainty. By probability, that evidence, which is still attended with uncertainty. (T 1.3.11.2)

In this passage, Hume explicitly asserts that knowledge is "the assurance arising from the comparison of ideas" and he attributes a similar definition ("*that evidence, which arises from the comparison of ideas*") to "those philosophers, who have divided human reason into *knowledge* and *probability*." Given that Hume is one such philosopher and the latter definition is similar to the former, it seems that Hume means to be expressing a similar definition with both, as well as his endorsement of it, or so the defender of the alternative interpretation could argue. Call this interpretation the *Assurance Account*.³⁸

³⁸ The Assurance Account is the most common competitor to the Constitutive Account defended in the secondary literature, but its defenders do not defend it at great length. They include K.B. Price (1950, 427), Garrett (1997, 170), Meeker (see 2007, 229), and Louis Loeb (see 2008, 106, as well as 2002, 61fn1). Many apparently relevant discussions of Hume's position on knowledge, like that of Noonan (1999), in fact concern Hume's relationship with contemporary positions on knowledge. An exception is Schmitt's (2014, ch. 2). Schmitt attributes to Hume the view that knowledge is cognition that is "necessarily reliable." Full engagement with Schmitt's interpretation would take me too far afield, but I will make three brief remarks. First, I deny, contra Schmitt (2014, 73-75), that Hume holds that one's consciousness of one's immediately present perceptions provides knowledge of them in the strict sense defined in T 1.3.1. Second, I deny, contra Schmitt (2014, 69-72), that the primary sense of 'infallible' that Hume applies to knowledge refers to a feature of the operations that produce it. Knowledge is infallible in Hume's primary sense because the knower cannot err with respect to the known, regardless of the operations by which it comes about. In the case of intuition, it is especially clear that the features of the operations of the faculties that it arises from are entirely irrelevant. Third, Schmitt's account is incomplete because it does not specify the relationship between instances of knowledge and their objects. Although Schmitt's account is a viable alternative, I maintain that the Assurance Account is the most plausible alternative to the Constitutive Account since it is supported by the Definition Passage, which contains Hume's only explicit definition of knowledge and seems to straightforwardly undermine it. Furthermore, it is the Humean version of one of the accounts of knowledge commonly attributed to Locke in the secondary literature. This latter connection significantly increases its *prima facie* plausibility, given the links and affinities between the two thinkers on these issues. See footnotes 43, 45, 47, 49, and 52 below.

I give it this name because other passages from Hume's corpus indicate that Humean knowledge could be assurance but *not* evidence.³⁹ These passages find Hume failing to identify the two, and given how Hume describes each of them, it is more likely that Hume's view is that knowledge is a species of assurance. In general, Hume uses 'evidence' to refer to a *property* of beings like ideas, beliefs, principles, demonstrations, philosophical systems, and historical theories.⁴⁰ By contrast, Hume uses 'assurance' as a term for a wide range of cognitive successes, including occurrent perceptions and dispositions related to—and perhaps identical to—beliefs, probabilities, and instances of knowledge.⁴¹ Since Hume seems to think that each variety of assurance has a corresponding degree of evidence, it seems that, of the two, a species of assurance is what he would identify as knowledge. So, according to the Assurance Account, knowledge is a species of assurance that has a specific type or degree of evidence. This explains Hume's parallel use of the two terms in the Definition Passage.

But what is the relevant sort of assurance like? In the other passages where it is clear that Hume is using 'assurance' in connection with knowledge, Hume seems to be referring to dispositions rather than perceptions.⁴² From what Hume says with regards to this sort of assurance, we can infer that it is a cluster of especially reliable dispositions to think, to act, and to affirm in accordance with an object of knowledge (or a kind of them). Consider the following passage in which Hume discusses the assurance that a geometer has in geometrical propositions and principles:

Our ideas seem to give a perfect assurance, that no two right lines can have a common segment; but if we consider these ideas, we shall find, that they always suppose a sensible inclination of the two lines, and that where the angle they form is extremely small, we have no standard of a right line so precise as to assure us of the truth of this proposition. 'Tis the same case with most of the primary decisions of the mathematics. (T 1.3.1.4)

In this passage and in an earlier passage (T 1.2.4.30), Hume implies that geometers think that they have "perfect assurance"—or "infallible assurance" (as he describes it in T 1.2.4.30)—in *universal* geometrical claims, like the view that "no two right lines can have a common segment." Hume does not deny that geometers do, in fact, have assurance in these universal claims. Hume's concern is whether this assurance is "perfect" or "infallible" and thus appropriate; his concern is with epistemic certainty, not psychological certainty.⁴³ The reason Hume is concerned is that he maintains that there are cases where the geometer does not have a perception of two right lines lacking a common segment because the geometer's ideas of them are not up to the task. Hume argues that once the geometer inspects "most of the primary decisions" of geometry, which come in the form of universal claims like this one, she finds that there is not a precise enough "standard" to justify her assurance in them.

³⁹ For different readings, see Owen 1999 (125fn183 and 184-188) and Schmitt 2014 (78-80).

⁴⁰ See, e.g., T 0.1, T 1.1.3.4, T 1.2.2.5, T 1.2.4.32, and T 1.3.4.2.

⁴¹ See, e.g., T 1.3.1.4, T 1.3.2.2, T 1.4.2.14, T 1.4.7.14, T App.3, E 3.3, and E 6.4. For a discussion of Hume's "causal theory of assurance," which concerns a proper subset of these uses, see Loeb 2002 (39-44, 61, 76-77).

⁴² See T 1.2.4.25, T 1.2.4.30, T 1.3.1.4, T 1.3.4.3, T 1.3.13.19, T 1.4.2.14, T 2.3.10.2, and E 12.18.

⁴³ This parallels Locke's treatment of certainty. For discussion, see Schmitt 2014 (58-62).

What this entails is that the geometer's assurance in the universal claims of her science could not be identical to perceptions of token knowledge relations, whatever else it is like. If members of this species of assurance were perceptions of token knowledge relations, then there would be no need for the geometer to re-consider her ideas of two right lines to see if the lines can have a common segment. And there would be no possibility of finding, upon reconsideration, oneself incapable of *even conceiving* of the truth or falsehood of the universal claim when instantiated to the case at hand. Hume is clear that the problem generalizes to all ideas of right lines "where the angle they form is extremely small." As we have seen, perceptions of token knowledge relations provide the mind with infallibility about whether those relations hold or not. Therefore, the geometer's assurance in the universal claim that "no two right lines can have a common segment" could not be a perception of a token knowledge relation because her assurance in this claim when it is instantiated to those cases that are beyond her conceptual faculties could *not* be a perception of a token knowledge relation.

Still, the geometer has assurance in these claims. What, then, is her assurance in them? In answering this question, it is important to note that Hume does not deny that there are cases where we have perceptions of token knowledge relations in geometry.⁴⁴ The problem cases—such as those involving figures with "prodigious minuteness"—are those where geometers have unjustifiably generalized and extrapolated beyond the good cases. The consequences of this extrapolation are manifold. Geometers are willing to affirm and rely on their universal propositions and principles even for those cases that they have not verified. Geometers are confident in using their propositions and principles in demonstrations without hesitation.⁴⁵ And so on. On this basis, it is my contention that Hume holds that the species of assurance connected to knowledge is a cluster of especially reliable dispositions to think, to act, and to affirm in accordance with an object of knowledge (or a kind of them).⁴⁶ Further credence is lent to this interpretation by the fact that it conforms to Locke's usage of the term 'assurance' in connection with knowledge.⁴⁷

This interpretation of Hume's position on the nature of the species of assurance connected to knowledge is congruent with my response to the challenge of general knowledge. In the preceding subsection, I argued that the only way in which Hume could grant that we have

⁴⁴ For discussion, see Badici 2011 and De Pierris 2012.

⁴⁵ For cases where Locke explicitly uses 'assurance' and 'confidence' interchangeably, see E IV.xi.3 and E IV.xv.2. See also E I.i.2, E I.iii.13, and E IV.xvi.14, as noted by Jennifer Nagel (2016, 318). See footnotes 43, 47, 49, and 52 below for more discussion of this connection.

⁴⁶ In T 1.3.13.19, Hume confirms this reading in a discussion of the relationship between assurance and memory. Hume argues that our confidence in the faculty of memory rivals the assurance derived from demonstrations, thereby revealing that he sees the notions as similar.

⁴⁷ Hume's use of 'assurance' as a term for dispositions conforms to Locke's typical usage of the term. For cases where Locke uses the term in connection with knowledge, see E II.xxxii.6, E IV.i.8-9, and E IV.xi.2-8. For another sort of case, see E IV.xvi.6. As Samuel Rickless (2008, 85, 93, 93n10) and Keith Allen (2013, 251-252) note, Locke does not explicitly use 'assurance' to refer to knowledge in the strict sense, although he does use it to refer to habitual knowledge (see footnote 49 below), as well as sensitive knowledge (E IV.xv.2). It is disputed whether sensitive knowledge is knowledge in the strict sense by Locke's lights. In both his 2008 and his 2015, Rickless maintains that Locke holds that sensitive knowledge is not knowledge in the strict sense *because it is assurance*, and assurance, for Locke, is "a kind of less-than-certain judgment [...] founded in the highest possible degree of probability" (85). (As the reader will see, this parallels my view on the role of assurance in Hume's account of knowledge.) For a dissenting position, see Nagel 2016 (esp. 318-319).

general knowledge is by granting that we associate relevantly similar ideas of token knowledge relations via common terms and thereby "know" (in some derivative sense) those token knowledge relations that are *not* immediately present to the mind. My present contention should be understood as the claim that the species of assurance connected to knowledge is a cluster of dispositions that includes such associations. In fact, in the problem cases previously discussed, where the geometer has unjustified assurance, the geometer mistakenly associates ideas with a term (or a sentence composed of terms) that are *not* similar in the relevant respects. Cases of misclassification like these undergird my claim that these associations should be, at best, understood as *fallible* effects of our knowledge.

Yet, this dispositional aspect of the Assurance Account is only the first of three that differentiate it from the Constitutive Account. The second difference is that the relevant sort of assurance arises, per the Definition Passage, from "the comparison of ideas." Given my preceding analysis of Hume's position in T 1.3.1.1-2, as well as his use of the same terms there, it is clear that the relevant comparisons are *ideas* of tokens of the knowledge relations. There is no room for Humean sensory knowledge under the Assurance Account. The third difference is that the assurance must *arise* from ideas of tokens of the knowledge relations. This sort of causal language indicates that the assurance generally occurs temporally posterior to the ideas of tokens of the knowledge relations that it arises from. Except for some special cases, Hume holds that causal relata are successive in time and effects occur after their causes.⁴⁸ If the Constitutive Account is correct, then instances of knowledge cannot be temporally posterior to the objects that make them instances of knowledge. The relationship between an instance of knowledge and each relatum of its object is that of whole-part, so an instance of knowledge is cotemporaneous with the object it must have.

A statement Hume makes in the *Treatise* about assurance and demonstrations underscores the divide between the two competing interpretations. There, Hume asserts that "the assurance of a demonstration proceeds always from a comparison of ideas, tho' it may continue after the comparison is forgot" (T 1.3.4.3).⁴⁹ Throughout his corpus, Hume maintains that there are only two ways to achieve knowledge: via intuition or via demonstration.⁵⁰ A typical demonstration is the mental analogue of a multi-premise argument and its conclusion is an idea of a token of a knowledge relation.⁵¹ It is a linked series of idea comparisons. If demonstrations generate knowledge and the Assurance Account is correct, then "the assurance of a demonstration" to which Hume refers in T 1.3.4.3 is knowledge. In this passage, Hume contrasts a demonstrator at the time that she concludes a demonstration with someone who has concluded a demonstration in the past but has forgotten the demonstration. Crucially, Hume states that the assurance "may continue after the comparison is forgot," which means that if the Assurance Account is correct, a knowledge relation may be *entirely absent* from one's mind, and yet one can still have assurance—and thus knowledge—of it.⁵² On the Constitutive Account, Hume would deny that

⁴⁸ See T 1.3.2.7 for a clear statement of this aspect of Hume's view.

⁴⁹ In E IV.i.8-9, Locke considers precisely this sort of case. Locke describes it as a case where "such truths whereof the mind having been convinced, it retains the memory of the conviction, without the proofs" and he deems the assurance a kind of "habitual knowledge."

⁵⁰ See T 1.3.3.1-3 for an argument of Hume's that assumes this dualistic view.

⁵¹ For a concise description of how demonstrations are structured, see Owen 1999 (98-99).

⁵² In this respect, the Assurance Account attributes to Hume a position parallel to some commentators' interpretation of Locke's position on assurance. Rickless (2008, 85), for instance, argues that what "leads Locke to give such

the relation between an object of an instance of knowledge and that instance could be like this. The Constitutive Account is defined by the claim that the perception of the token of a knowledge relation *is itself* the instance of knowledge.

As Hume indicates in T 1.3.4.3, the assurance arising from having an idea of a knowledge relation can remain, and generally does remain, after that idea fades. This sort of delay makes room for the possibility of error. After all, at any time when one has assurance but no longer has an idea of the beings at issue, one could be mistaken about whether a token knowledge relation holds between them or not. One could demonstrate some arithmetical claim, forget the demonstration, and nonetheless have assurance in it. As noted previously, one could have misclassified the related beings in question and erred in associating them via a term with ideas of token knowledge relations. The defender of the Constitutive Account can grant that the mind is generally reliable in generating the relevant sort of assurance only from perceptions of the knowledge relations and in applying this assurance to the good cases. Yet, for Hume, knowledge is a matter of certainty, not mere reliability. In this way, only the Constitutive Account respects Hume's standards for knowledge.

3.3 - Further objections considered

If the Constitutive Account is correct, and Humean knowledge is *not* the assurance arising from ideas of tokens of the knowledge relations, then it seems the Definition Passage must be interpreted as misleading or, worse, as containing a false definition. This is a significant interpretative cost to pay. However, a close inspection of the relevant lines of the Definition Passage reveals another option.

Consider, in particular, the latter half of the passage. Hume states that he plans to "mark the several degrees of evidence, to distinguish human reason into three kinds, viz. that *from knowledge, from proofs, and from probabilities.*" This statement is rather confusing. It seems like there are distinct topics here: the three kinds of reasoning recognized by Hume and then the "several degrees of evidence" that are possessed by their fruits. Note the use of the term 'from' before each of the three kinds. Should we take his concern here to be with the assurance that we get *from* knowledge, *from* proofs, and *from* probability, and not with knowledge itself, proof itself, or probability itself? It is unclear. We could interpret the definitions as definitions of the assurance arising from knowledge, proofs, and probability, or we could interpret them as definitions of knowledge, proofs, and probability themselves.

I resolve this ambiguity in the following manner. This passage is Hume's recognition that the conventional linguistic usage of the term 'knowledge' is not limited to *occurrent* knowledge and instead extends to cover *dispositional* knowledge as well. The first part of the passage finds Hume signaling that, in the rest of the passage, he plans to "preserve the common signification of words." (Hence why Hume grants that there is a colloquial sense in which proofs "are entirely free from doubt and uncertainty", despite them not being intuitive or demonstrative and thus

assurance the name of 'knowledge' (even though assurance is not the same as knowledge, strictly understood) is that, *for practical purposes*, there is little or no difference between assurance and (strict) knowledge." Hume makes the same point about there being practically "little or no difference" between the two in T 1.3.1.6.

uncertain.⁵³) As already explained, assurance is dispositional. So, although Hume's position is that knowledge is, strictly speaking, as the Constitutive Account renders it, he recognizes that there are dispositions that arise from it that allow it to be retained in some derivative form even after its object is no longer present to mind (which is generally how knowledge is understood and described by the competent English speaker).⁵⁴ In this way, the Assurance Account must be rejected insofar as it is formulated as a competitor to the Constitutive Account, but it can be accepted insofar as it is rendered in a complementary way—namely, as a specification of the lingering and generally reliable mental effects of knowledge.

The Assurance Account *qua* rival still has the advantage of not running afoul of Hume's famous statement that "the reference of the idea to an object" is "an extraneous denomination, of which in itself it bears no mark or character" (T 1.1.7.6). This statement is commonly understood to be an expression of Hume's rejection of any intrinsic sort of intentionality.⁵⁵ Nevertheless, Hume regularly refers to what perceptions are "of." The weak kind of intentionality possessed by those perceptions that bear the relevant kinds of resemblance and causal relations to others can explain many of Hume's references of this sort.⁵⁶ This kind of intentionality comes rather cheap. In fact, Hume holds that all ideas possess it in virtue of being "copies" of impressions.⁵⁷ In some of the other cases that Hume refers to, there is an absence of either a causal relation or a resemblance between the perception in question and its object.⁵⁸ Likewise, in some cases, a perception is a copy of another but does not represent it. This means that a perception being a copy of another is neither necessary nor sufficient to have it as an object. Don Garrett argues that, instead, these cases show that some "perceptions represent as they do, for Hume, at least partly in virtue of the kinds of causal or functional roles they come to play in the mind."⁵⁹

I grant that *most* of the objects in Hume's system are not essential to the ideas and impressions that have them. I also grant that Hume could not countenance the possibility of an essential object which is *distinct* from the idea or impression that has it. As I argued in section 2, Hume's endorsement of both the Separability Principle and the Conceivability Principle rules out anything like Descartes' objective reality. My proposal is of a different variety. Instances of Humean knowledge have essential objects, but these objects are not distinct from them. The relata of these objects are parts of the instances themselves. It is the Constitutive Account, after all. Given that the objects of instances of knowledge must be this way *for there to be any*

⁵³ See Schmitt 2014 (41) for discussion.

⁵⁴ Hume continues to alternate between occurrent and dispositional senses of probability throughout the subsequent sections, and he uses 'knowledge' in the colloquial dispositional sense at many other points in the *Treatise*, as Garrett (2015, 42) notes. See, e.g., T 1.3.8.13, T 1.3.13.10, and A 21.

⁵⁵ For instance, Garrett (2006, 307) takes this statement to be strong evidence that "Hume, however, rejects the view that ideas are intrinsically representational." Qu (2017, 597) agrees, arguing that "the point about intentionality being extrinsic seems to generalise," although he does interpret Hume as holding that passions can have intrinsic intentionality.

⁵⁶ For discussion, see Garrett 1997 (41-57) and Garrett 2006 (308-13).

⁵⁷ See also T 1.1.1.3, T 1.1.1.7, T 1.2.3.11, T 1.3.7.5, T 1.3.14.6, and T 1.3.14.11. Rachel Cohon and Owen seize on the wording of these passages and argue that Hume holds that sensory impressions do not represent anything at all. For discussion, see Cohon & Owen 1997, as well as Owen 2009 (92-95). For a competing view, see Garrett 2006 (304-306) and Garrett 2015 (71).

⁵⁸ For examples and discussion, see Garrett 2006 (308-313) and Garrett 2015 (72-73).

⁵⁹ Garrett 2015 (72). As my discussion implies, I defend a hybrid theory, under which Hume relies on multiple types of intentionality, depending on the context. For discussion of related issues, see Cottrell 2018 (2-7).

knowledge at all, the Constitutive Account is the middle way. It avoids the above argument and yet it allows for the certainty that Hume demands of knowledge. In this sense, my response to the challenge that the remark from T 1.1.7.6 presents has already been given.

The final objection that I will consider comes from section 3.1.1 of the *Treatise* ("*Moral distinctions not deriv'd from reason*"). My response to this objection will reveal the ways in which Hume's metaphysical options interact with his position on knowledge, thereby addressing many related objections.

In this section, Hume gives an argument against the claim that "morality is susceptible of demonstration" (T 3.1.1.18). Since "no matter of fact [i.e. probability relation] is capable of being demonstrated," Hume busies himself with evaluating whether moral truths could be any of the knowledge relations.⁶⁰ This concern is further justified by the fact that Hume's opponents hold that morality is constituted by necessary truths—or, as he puts it, "eternal immutable fitnesses and unfitnesses of things" (T 3.1.1.17). As I have noted, Hume holds that the knowledge relations are necessary. Hume's argument is as follows:

If you assert, that vice and virtue consist in relations susceptible of certainty and demonstration, you must confine yourself to those *four* relations, which alone admit of that degree of evidence; and in that case you run into absurdities, from which you will never be able to extricate yourself. For as you make the very essence of morality to lie in the relations, and as there is no one of these relations but what is applicable, not only to an irrational, but also to an inanimate object; it follows, that even such objects must be susceptible of merit or demerit. *Resemblance, contrariety, degrees in quality, and proportions in quantity and number*; all these relations belong as properly to matter, as to our actions, passions, and volitions. 'Tis unquestionable, therefore, that morality lies not in any of these relations, nor the sense of it in their discovery. (T 3.1.1.19)

This argument confirms that the knowledge relations are the only objects of knowledge, but it also spawns an objection to the Constitutive Account that goes as follows. If Hume were to hold the Constitutive Account, then surely Hume should *not* assert here that knowledge relations can be instantiated by bodies. According to the Constitutive Account, all instances of knowledge are immediately present perceptions, and bodies are *not* immediately present perceptions.

Yet, on any interpretation of Hume where mind-independent beings like bodies are immediately present to the mind, the Constitutive Account is compatible with us having knowledge of them. If Hume's considered position on the metaphysics of immediately present impressions is that of ordinary people (the "vulgar", as he describes them in T 1.4.2), then Hume is a direct realist who allows knowledge of knowledge relations holding between mind-independent beings. For instance, if a green blade of grass and a green leaf are mind-independent beings and yet they are immediately present to the mind, then one can know that they resemble with respect to greenness at the time that they are immediately present.

⁶⁰ See footnote 32 for discussion of and citations relevant to my identification of matters of fact with the probability relations.

Few commentators interpret Hume as endorsing the direct realist position discussed in T 1.4.2. Hume is widely read as arguing there that we *believe* that our immediately present perceptions are bodies, but that our beliefs can be shown to be false.⁶¹ Nevertheless, Hume prefaces Book 3 of the *Treatise* with an "Advertisement" that reveals that he wants the book to be "*understood by ordinary readers*":

I think it proper to inform the public, that tho' this be a third volume of the Treatise of Human Nature, yet 'tis in some measure independent of the other two, and requires not that the reader shou'd enter into all the abstract reasonings contain'd in them. I am hopeful it may be understood by ordinary readers, with as little attention as is usually given to any books of reasoning. It must only be observ'd, that I continue to make use of the terms, impressions and ideas, in the same sense as formerly; and that by impressions I mean our stronger perceptions, such as our sensations, affections and sentiments; and by ideas the fainter perceptions, or the copies of these in the memory and imagination.

I take this statement to be Hume's signal that he will *not* be presuming either of the alternative metaphysical positions on the nature of bodies that he considers in T 1.4.2, especially given their complexity. The first alternative is indirect realism, where one's immediately present perceptions can, at best, represent mind-independent beings distinct from them.⁶² The second alternative is a variety of solipsism, where one's immediately present perceptions cannot represent anything but other perceptions.⁶³ Since Hume argues in T 1.4.2 that "*ordinary readers*" identify some of their impressions with bodies, this is what Hume is presuming in T 3.1.1—and this is the sense in which one can *know* that knowledge relations hold between bodies. T 3.1.1.19 and similar passages should be understood as referring to this sort of view of the metaphysics of bodies.

If, by contrast, Hume denies that any mind-independent beings could be immediately present perceptions, then Hume must deny that knowledge could extend beyond one's mental states/objects. All of the relata of candidate knowledge relations must be immediately present to the mind and, on these two alternatives, no mind-independent beings could be immediately present in this way. Therefore, our knowledge could not extend beyond our mental states/objects on these two alternative metaphysical views.

4. Humean sensory knowledge

In this section, I will argue that Hume holds that we can have sensory knowledge. Given that impressions are the perceptions involved in sense perception, this means that, on my interpretation, it is possible that some impressions are instances of knowledge because they are at least partially constituted by the tokens of the knowledge relations that they have as objects. The texts that I will rely upon to argue for this claim are found in the *Treatise* and provide further evidence for the Constitutive Account. Just as the *Treatise* finds Hume expressing his position on

⁶¹ Those who disagree about the precise nature of Hume's view agree about this much. See the next two footnotes for relevant citations regarding the alternatives.

⁶² Interpreters who attribute versions of this position to Hume include John Passmore (1980), Donald Livingston (1984), Edward Craig (1987), Galen Strawson (1989, 2002), and Garrett (2006, 2015).

⁶³ Interpreters who attribute versions of this position to Hume include H.H. Price (1940), H.A. Prichard (1950), Simon Blackburn (2002), David Fate Norton (2002), Yumiko Inukai (2011), and Kenneth Winkler (2015).

knowledge in all of its nuances, so too does it find him expressing his Fork with its third prong. The first such passage finds Hume making a distinction between sense perception and reasoning:

All kinds of reasoning consist in nothing but a *comparison*, and a discovery of those relations, either constant or inconstant, which two or more objects bear to each other. This comparison we may make, either when both objects are present to the senses, or when neither of them is present, or when only one. When both the objects are present to the senses along with the relation, we call *this* perception rather than reasoning; nor is there in this case any exercise of the thought, or any action, properly speaking, but a mere passive admission of the impressions thro' the organs of sensation. (T 1.3.2.2)

Hume uses 'constant' and 'inconstant' here to refer, respectively, to the knowledge and probability relations.⁶⁴ As we have seen, knowledge relations hold constant in virtue of the intrinsic properties of their relata, whereas probability relations do not. In the second sentence, Hume makes a threefold distinction that cuts across both kinds of relations. Hume states that when we compare objects and form philosophical relations, the relata can be such that both are present to the senses, neither is present to the senses, or only one is present to the senses. When both are present to the senses, along with the relation, Hume claims that "we call *this* perception rather than reasoning". This claim is made in connection with the opening sentence, wherein Hume claims that "all kinds of reasoning consist in nothing but a *comparison*, and a discovery of those relations, either constant or inconstant, which two or more objects bear to each other." Hume's view, then, is that reasoning is constituted by perceptions of relations where at least one relata is not present to the senses, whereas sense perception of relations is constituted by perceptions of relations where both relata are present to the senses.

It is a short step from this passage to the possibility of Humean knowledge via sense perception. If a token relation is a knowledge relation and you perceive it, as well as both of its relata, via "a mere passive admission of the impressions thro' the organs of sensation," then you perceive that relation and its relata via sense. If the Constitutive Account is correct, this impression *just is* an instance of knowledge. Thus, we can have sensory knowledge.⁶⁵

As previously noted, Hume maintains that there is a distinction between intuition and demonstration, which are the two ways in which we can acquire knowledge. The relationship between the two is asymmetric; demonstration is defined in terms of intuition, but not vice versa. In typical cases, demonstrative knowledge is realized when one links multiple instances of intuitive knowledge to one another in order to form a perception of a token of a knowledge relation.⁶⁶ Intuitive knowledge, in turn, is realized when such a linking process does not occur; intuition is immediate.⁶⁷ In T 1.3.3.2, Hume reveals this aspect of his view when arguing against

⁶⁴ See Millican 2017 (17-18) for discussion.

⁶⁵ Note that this means that I hold that sensory impressions represent, even in isolation. They represent parts of themselves—namely, what Ainslie (2010, 47) calls their "image-content." See footnotes 57 and 59. See Schmitt 2014 (67-69) for a competing picture.

⁶⁶ As Owen (1999, 9) puts it, "Two ideas are demonstratively related if the relation between them is conceived, not immediately, but via other intermediate ideas. The link between each pair of adjacent ideas in the resulting chain must be intuitive." For discussion, see Owen 1999 (93-98).

⁶⁷ As Garrett puts it, intuition is an "immediate apprehension of relations of ideas" (2004, 98n39) and "immediate and non-inferential" (2015, 90).

a causal version of the Principle of Sufficient Reason ("*whatever has a beginning also has a cause of existence*"). Hume states this principle and then he curtly claims that none of the knowledge relations are "imply'd" in it, inferring from this that it "therefore is not intuitively certain." Hume is asserting that the mere consideration of the terms of this proposition reveals that they are not linked via one of the knowledge relations. If intuition were inferential, then mere consideration of the terms of a proposition would not be sufficient to rule out the possibility of intuiting the proposition because one could lack the intermediate ideas necessary to infer the relation that constitutes it. In this respect, Hume's position is indebted to that of Locke, who argues that

in every step Reason makes in demonstrative Knowledge, there is an intuitive Knowledge of that Agreement or Disagreement, it seeks, with the next intermediate Idea, which it uses as a Proof: For if it were not so, that yet would need a Proof. Since without the Perception of such Agreement or Disagreement, there is no Knowledge produced: If it be perceived by it self, it is intuitive Knowledge: If it cannot be perceived by it self, there is need of some intervening Idea, as a common measure to shew their Agreement or Disagreement. (E IV.ii.7)⁶⁸

Since both relata of a token of a knowledge relation must be present to the senses in any case of knowledge acquired via sense perception, one can perceive that they bear that relation immediately. It follows that if there is sensory knowledge, then we should expect Hume to categorize it as intuitive knowledge. And there is, in fact, a striking passage where Hume indicates that we can know via sense perception and, in accordance with what we would expect if the foregoing reading is correct, he states that such knowledge is intuitive rather than demonstrative:

It appears, therefore, that of these seven philosophical relations, there remain only four, which depending solely upon ideas, can be the objects of knowledge and certainty. These four are *resemblance, contrariety, degrees in quality, and proportions in quantity or number*. Three of these relations are discoverable at first sight, and fall more properly under the province of intuition than demonstration. When any objects *resemble* each other, the resemblance will at first strike the eye, or rather the mind; and seldom requires a second examination. The case is the same with *contrariety*, and with the *degrees* of any *quality*. No one can once doubt but existence and non-existence destroy each other, and are perfectly incompatible and contrary. And tho' it be impossible to judge exactly of the degrees of any quality, such as colour, taste, heat, cold, when the difference betwixt them is very small; yet 'tis easy to decide, that any of them is superior or inferior to another, when their difference is considerable. And this decision we always pronounce at first sight, without any enquiry or reasoning. (T 1.3.1.2)

In this passage, Hume begins by distinguishing the three probability relations from the four knowledge relations. Next, Hume argues that contrarities, resemblances, and qualitative relations are "discoverable at first sight." This reference to vision, made several times in the passage, seems to be Hume's way of emphasizing that it is the senses which enable us to perceive tokens of these three knowledge relations. So long as token colors, tastes, and the like are

⁶⁸ See De Pierris 2015 (51-62) for further discussion of this connection with Locke.

sufficiently different, we see that they bear one or more of these three knowledge relations to each other "without any enquiry or reasoning." Given the context, it is clear that the contrast to which Hume refers in this last quote is the very same contrast between sense perception and reasoning that he introduces in the passage I quoted previously in this section (T 1.3.2.2).⁶⁹ This reading is buttressed by Hume's comment that these three knowledge relations "fall more properly under the province of intuition than demonstration." Only if vision is immediate in the same way that intuition is immediate would Hume make such an assertion; since Hume implies that the "province of intuition" is broader than vision alone, his view seems to be that vision of knowledge relations is a species of intuition.

In the subsequent passage (T 1.3.1.3), Hume considers whether proportions in quantity or number—tokens of the fourth kind of knowledge relation—can be perceived. Hume argues that generally they cannot, since most of the time we "can only guess" at whether two quantities bear some exact proportion to one another.⁷⁰ Hume grants that there may be some cases involving "very short numbers, or very limited portions of extension; which are comprehended in an instant, and where we perceive an impossibility of falling into any considerable error." Thus, Hume holds that tokens of all four knowledge relations can be perceived, although some are more commonly perceived than others. Since there are not any other texts that cut against this interpretation, we are justified in interpreting Hume as arguing that we can have sensory knowledge, despite the relative brevity of his statements.⁷¹

These passages are most naturally read under the presumption that the Constitutive Account is true. Hume's phrasing indicates that he holds that we know at the same time that we perceive tokens of the knowledge relations via sense, and Hume gives no reason to read him in a contrary fashion. There is no mention of assurance or of any mental processes that must occur before knowledge is acquired in the kinds of cases discussed (assurance, after all, arises posterior to perceptions of knowledge relations). This is exactly what we would expect if the Constitutive Account is correct.

5. Conclusion

In this paper, I have argued that the standards Hume uses to justify his claims about the objects of knowledge reveal that (i) every instance of knowledge must be an immediately present perception; (ii) an object of this perception must be a token of a knowledge relation; and (iii) this token knowledge relation must have parts of the instance of knowledge as *relata*. Since the reasons Hume gives for (i) apply to both ideas and impressions, this account of knowledge makes room for sensory knowledge constituted by impressions. None of the details of Hume's

⁶⁹ See also T 1.3.6.6.

⁷⁰ See also T 1.2.4.23.

⁷¹ Commentators who agree that Hume holds that some tokens of the knowledge relations are perceived in visual experience include K.B. Price (1950, 427-428), Garrett (2015, 92), Millican (2017, 46-48), Boehm (2013, 73-74), and Inukai (2010, 195-202). Norton (1982, 228n77) argues that it is not Hume's "official position", which may be compatible with my interpretation. There are others who argue that some tokens of the knowledge relations are perceivable *and yet contingent* because their *relata* are themselves matters of fact. See Owen (1999, 95; 2009, 83) and Beebe (2006, 21, 24). Yet, every commentator—with the possible exception of Millican, who seems to argue in passing that Hume should hold that there is intuitive sensory knowledge—denies that (or is silent on the question of whether) any impression *could itself be* knowledge. See, e.g., Boehm 2013, 73-75, 79-81.

argumentation in T 1.3.1 precludes intuitive knowledge of this variety, and the textual evidence from the subsequent section further strengthens the case.

With this background from the *Treatise* in hand, Hume's use of his Fork in the first *Enquiry* can be understood in a new light. As the preceding quote of T 1.3.2.2 indicates, Hume distinguishes in the *Treatise* between perception and reasoning. This distinction is present in the first *Enquiry* but Hume does not explicitly relate it to his broader position. Consider the "negative argument" (E 4.17) about induction with which Hume attempts to show that "even after we have experience of the operations of cause and effect, our conclusions from that experience are not founded on reasoning, or any process of the understanding" (E 4.15). Earlier in the section where this argument is found, Hume introduces his Fork and he *seems* to present it as two-pronged. In addition, Hume *seems* to rely on a two-pronged Fork in this argument since his first premise is that "all reasonings may be divided into two kinds, namely demonstrative reasoning, or that concerning relations of ideas, and moral reasoning, or that concerning matter of fact and existence" (E 4.18). However, Hume's argument concerns inference and reasoning, *not* perception. Throughout his "negative argument" about induction, Hume simply presumes that we cannot intuit, whether via sense or not, that two beings are, were, or will be causally related. It is not that the Fork has only two prongs—it is that only two prongs are relevant to the argument at hand.

Given the topics Hume addresses in the first *Enquiry*, it is not surprising that he does not clarify that his Fork has three prongs. In the *Treatise* we find Hume presenting his Fork with all of its nuances—and a third prong—while in the first *Enquiry* he gives rougher glosses of the view. This reflects, in part, Hume's stated goal in the "Advertisement" to the first *Enquiry* of making this later work easier to follow and understand than the *Treatise*. On a wide variety of topics, Hume passes over many of the complications he presents in the *Treatise*.

The same goes for Hume's fiery concluding paragraphs of the first *Enquiry*, which do not concern intuition. They concern, rather, the "objects of the abstract sciences or of demonstration" (E 12.27). Hume's point is *not* that it is only "*abstract reasoning concerning quantity or number*" (E 12.34) that we can be certain about. We can also be certain about the knowledge relations holding between objects of the senses. Books about sensory knowledge may be boring and seldom written, but they should not be committed to the flames because they run afoul of Hume's Fork. Relations of impressions are its third prong.

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Abbreviations

- 'T' book, part, section, paragraph from Hume's *Treatise* (Oxford, 2007), unless citation is from the Appendix main text, then the convention is 'T App' = paragraph, or unless citation is from the Appendix notes, then the convention is book, part, section, paragraph from Hume's *Treatise* with 'n' for note on the corresponding paragraph in the Appendix main text
- 'A' paragraph from the *Abstract* to Hume's *Treatise* (Oxford, 2007).
- 'E' when followed by Arabic numeral: section, paragraph from Hume's first *Enquiry* (Oxford, 2007).
- 'D' part, paragraph from Hume's *Dialogues* (Cambridge, 2007).
- 'E' when followed by Roman numeral: book, chapter, paragraph from Locke's *Essay* (Oxford, 1975).

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