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# Hume on knowledge of the past

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Dissertation

**HUME ON KNOWLEDGE OF THE PAST**

by

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# HUME ON KNOWLEDGE OF THE PAST

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## ABSTRACT

Much of Hume scholarship in the twentieth- and twenty-first centuries has focused on developing naturalistic interpretations by way of combating the traditional skeptical reading of Hume. While on the skeptical reading Hume is engaged in a project of dismantling our fundamental areas of knowledge—like causation, the external world, and the self—on naturalistic readings Hume approaches these subjects as a scientist and ultimately advances positive epistemological aims. However, naturalistic interpreters have neglected to address an important theme of the skeptical reading: that Hume is a skeptic about knowledge of the past. My dissertation addresses this theme by developing naturalistic interpretations of Hume’s accounts of memory, temporal concepts, and belief about the past. I argue that, together, these accounts constitute a positive epistemology. My arguments engage with historical and contemporary literature on time and temporal experience as well as with debates in Hume scholarship.

My first chapter clarifies some important preliminaries, specifically, Hume’s views on how the mind represents objects and on the role of experience in delimiting what the mind can represent. My second chapter defends Hume’s criteria for memory. Hume characterizes memories as ideas that feel a certain way and that correspond to the experiences from which they derived. I argue that these criteria achieve two aims: they

classify ideas for the purposes of scientific explanation and they define the term ‘memory.’ My third chapter shows that Hume has a robust and attractively simple theory of temporal experience: experience directly manifests time by being successive. This theory allows Hume to explain how concepts like ‘time,’ ‘simultaneity,’ and ‘tense’ originate in experience. Finally, my fourth chapter applies my findings in the previous chapters to explaining Hume’s views on how the mind forms beliefs about the past. Drawing on the scholarship on Hume’s views on knowledge, I argue that for Hume our typical beliefs about the past constitute knowledge, rather than mere belief. In this way, knowledge of the past is not the gap in Hume’s philosophical system that many have believed it to be, but is rather a credit to his system.

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## INTRODUCTION

Since the mid twentieth century, much of Hume scholarship has focused on answering a charge that had already been levelled against Hume in his own time, and that Hume himself had tried to answer: the charge of maintaining ‘universal skepticism,’ ‘doubting everything except his own existence,’ and deeming it a ‘folly’ to ‘pretend to believe anything with certainty.’<sup>1</sup> Similar charges of skepticism continued to be levelled against Hume for centuries to come. Reid wrote of Hume’s philosophy that ‘it can have no other tendency, than to shew the acuteness of the sophist, at the expence of disgracing reason and human nature, and making mankind Yahoos’ (1764/1997, 21). Beattie, accordingly, saw Hume engaged in a ‘demolition of common sense’ and in the ‘rearing of a fabric of doctrine, upon which engines might easily be erected sufficient to overturn all belief, science, religion, virtue, and society, from the very foundation’ (1778, 215). Although Kant celebrated Hume’s insights on inductive reasoning, referring to them as ‘the first spark of light’ (1783/1977, 260), he still declared Hume to have ‘ran his ship ashore, for safety’s sake, landing on skepticism, there to let it lie and rot’ (262). In his introduction to what became a standard edition of Hume’s works (1874), T. H. Green described Hume’s legacy to be an experiment with Lockean principles, the upshot of which is that ‘knowledge is impossible’ and ‘philosophy futile’ (1874/2011, 2). Russell followed suit and described Hume as a

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<sup>1</sup> Hume stated and addressed this charge in *A Letter from a Gentleman to his Friend in Edinburgh* (1745). The letter was a response to a published document that aimed to discredit Hume’s candidacy for Professor of Moral Philosophy at the University of Edinburgh, titled *A Specimen of the Principles concerning Religion and Morality, maintain’d in a Book lately publish’d, intituled, A Treatise of Human Nature*.

sceptic and as a ‘dead end’ in *A History of Western Philosophy* (1947, 685). Evidently, until more recently, Hume’s own denial of these charges did not hold sway.<sup>2</sup>

It has been a dominant trend among twentieth- and twenty-first century scholars to combat this negative perception of Hume.<sup>3</sup> This trend can be largely attributed to Norman Kemp Smith’s ‘naturalistic’ interpretation, according to which ‘Hume’s philosophy can be more adequately described as naturalistic than as sceptical’ (1941, 84). Kemp Smith and the many other interpreters who have followed in his footsteps emphasize the strong scientific currents in Hume’s philosophy.<sup>4</sup> After all, Hume explicitly labelled his work a ‘science of human nature’ (T 1.1.1.12 SBN 7) and ‘an attempt to introduce the experimental method of reasoning into moral subjects’ (subtitle to *A Treatise of Human Nature*). Kemp Smith argues that what Hume sought most to establish was not a skeptical conclusion, but a scientific thesis about human psychology: that ‘feeling, not reason or understanding... is the determining influence in human, as in other forms of animal life’ (1941, 11, 84-85); in establishing this thesis, Hume in fact shows ‘certain beliefs or judgments...to be ‘natural,’ ‘inevitable’, and ‘indispensable’, and thus removed beyond the reach of our sceptical doubts’ (87). In a similar vein, scholars now tend to interpret Hume’s arguments on inductive reasoning, demonstrative reasoning, the idea of the external world, and the idea

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<sup>2</sup> Hume writes in *Letter from a Gentleman*: ‘In Reality, a Philosopher who affects to doubt of the Maxims of *common Reason*, and even of his *Senses*, declares sufficiently that he is not in earnest, and that he intends not to advance an Opinion which he would recommend as Standards of Judgment and Action’ (L 21 Nor 425-6).

<sup>3</sup> Note, however, that some scholars continue to read Hume as a skeptic, e.g., Waxman (1994), Baxter (2008), and Meeker (2013).

<sup>4</sup> This emphasis is reflected in numerous references to Hume as ‘the Newton of the moral sciences’ (e.g. Passmore 1968, 131; Noxon 1973, 29; McIntyre 1994; Morris 2019)

of the self—arguments that were previously viewed as unequivocally skeptical—as concerned *primarily* (even if not solely) with the scientific explanation of the mental processes behind these ideas and forms of reasoning.<sup>5</sup> Moreover, many scholars have offered interpretations of Hume’s theory of epistemic value according to which, on that theory, our basic beliefs about causation, the external world, and the self are epistemically valuable despite the threat of skeptical doubts; contrary to the traditional reading, Hume is not a skeptic about these areas of knowledge.<sup>6</sup>

Yet, one theme of the traditional skeptical interpretation has received little commentary—that Hume is committed to skepticism about knowledge of the past. Reid’s rejection of the ‘theory of ideas’ (to which Hume subscribed) places stock in an argument that the theory leads to skepticism about the past—not only (as was already suspected) about the external world. The ‘theory of ideas’ is the standard framework among early modern philosophers for explaining the mind. On this framework, the mind is immediately acquainted only with certain mental entities (ideas). Reid contrasts this view of the mind with the ‘vulgar’ or common sense view that the mind can be (and usually is) immediately acquainted with objects that are part of the world at large, including external objects and past objects. Whereas on the theory-of-ideas framework memory can offer knowledge of the past only *via ideas of past objects*, on the common-sense view (as Reid understands it) ‘memory is an *immediate* knowledge of something past’ (1785/2002, 287). Reid defends

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<sup>5</sup> See, e.g., the interpretations of these arguments in Stroud 1977; Garrett 1997, 2015; Mounce 1999; Owen 2002.

<sup>6</sup> See, e.g., Baier 1991; Garrett 1997, 2015; Loeb 2002. §4.3 gives a more extensive overview of these interpretations.

the common-sense view as correct and insists that no explanation is needed of *how* we have such immediate knowledge of the past: ‘memory is an original faculty...of which we can give no account, but that we are so made’ (255). The theory-of-ideas framework, in contrast, invites the question of how we can know that our ideas are in fact epistemic vehicles to external objects or past objects. Just as this framework is consistent with the non-existence of the external world (as Descartes’ ‘dream doubt’ suggests), so it is consistent with the non-existence of the past:

There is the same need of arguments to prove, that the ideas of memory are pictures of things that really did happen, as that the ideas of sense are pictures of external objects which now exist. In both cases, it will be impossible to find any argument that has real weight. (290)

Skepticism about the past would be an especially undesirable consequence of a theory of mind. It would restrict the things we can know to what we are experiencing in the present moment.

Reid backs this charge of skepticism with specific objections to Hume and Locke’s accounts of memory. One objection is that their accounts *presuppose* the mind’s immediate acquaintance with the past (even though the ‘theory of ideas’ does not allow for such an acquaintance). Thus, when Locke characterizes memories as ideas that ‘the mind previously had’ and that are accompanied by ‘*a perception of having had the idea before,*’ Reid argues, ‘this perception, one would think, supposes a remembrance of [i.e. immediate acquaintance with] those [ideas] we had before, otherwise the similitude or identity could not be perceived’ (285). Similarly, when Hume characterizes memories as ideas that constitute ‘the second appearances of previous impressions,’ he seems to presuppose an

ability to know that the ideas are in fact *second* appearances; in doing so, Reid writes, ‘he takes for granted that kind of memory which he rejects [i.e. immediate acquaintance with the past]’ (287). Another objection is that their accounts fail to offer sufficient criteria for memory. Locke’s criteria are met by impressions that resemble previous impressions, such as the impression of looking at an object the second time (285). Hume’s criteria are also met by twice-around impressions, at least provided that they are fainter than the original (289).

In addition, Reid criticizes Locke’s proposal that our idea of time can be attributed to an experience of succession—a proposal that Hume endorses, albeit not in all its particulars. Tracing the idea of time to origins in experience is paramount in Locke and Hume’s philosophical systems, since they view experience as the source of all ideas. Reid rules out the possibility of experiencing succession. It was generally assumed in the early modern period that only the present moment exists (Falkenstein 2013, 103-4). On this assumption, Reid argues, ‘no kind of succession can be an object either of the senses, or of consciousness; because the operations of both are confined to the present point of time [i.e. they can occur only in the present point, since only that point exists], and there can be no succession in a point of time’ (270). Reid also argues that, even if we could experience succession and obtain an idea of *succession* from it, the idea of *time* could not originate in this idea of succession. In order for a succession to be temporal and thus generate an idea of time, the *members* or the *minimum intervals* in the succession would have to be themselves temporal, otherwise the totality of the elements could not be. Here, Reid assumes that the properties of a complex object must be given in the simples that compose



it, in other words, that ‘every part is similar to the whole, and of the same nature’ (273)—what Kemp Smith calls the ‘composition theory’ (1941, 279). However, the members and minimum intervals of a succession are not themselves successions; hence, they would have to be temporal without being successions. It follows that time is *antecedent* to the sort of temporal succession that could generate an idea of time; succession is not the *origin* of the idea (272). Without an adequate account of the idea of time and its origins, Locke and Hume’s philosophical systems seem indeed ill-equipped to answer the charge of skepticism about knowledge of the past. Reid’s own view is that the idea of time is generated by memory (258), that it represents ‘one of the simplest objects of thought,’ and that ‘it must be purely the effect of our constitution, and given us by some original power of the mind’ (273).

The claim that the idea of time is not traceable to experience, but is part of the constitution of the mind, is also a key feature of Kant’s rejection of Hume’s approach. In agreement with Reid, Kant states,

Time is not an empirical concept that has been derived from any experience. For neither coexistence nor succession would ever come within our perception, if the representation of time were not presupposed as underlying them *a priori* (1781/1929, A29/B46).

Rather than something we can experience, time is a built-in *form* or *structure* in the mind under which all experience is subsumed; Kant labels it a ‘form of sensibility’ or ‘form of intuition.’ As such, time is a necessary mark on all experience: ‘it can never be omitted’ and it ‘precedes the actual appearance of objects, since in fact it makes them possible’ (1783/1977, 283-284). As a necessary *a priori* mental structure, time allows us to derive

from its principles that are synthetic (i.e. not analytic) but still a priori and necessary, for instance, that ‘time has only one dimension,’ and that ‘different times are not coexistent but successive’ (1781/1929, A29/B46). These principles also include, most importantly, the fundamental principles of arithmetic. It is because arithmetical principles are derived from the temporal structure of the mind that arithmetic has the status of a *pure* science (Prolegomena 1783/1977, 283). Kant diagnosed it as a ‘great mistake’ on Hume’s behalf and as the main reason for his ‘landing on skepticism’ that he failed to recognize that concepts and laws could be derived from the necessary structure of the mind in this way (1783/1977, 272-273, 313). Had Hume realized that mathematics has these origins, and that, consequently, the same origins are also possible for metaphysics, he would have ‘saved metaphysics from the danger of a contemptuous ill-treatment’ (273).

Despite its role in the traditional skeptical interpretation of Hume, the criticism that Hume cannot account for knowledge of time and the past has gone largely unanswered, even as other themes of the skeptical interpretation have been vigorously debated. What is more, the overall trend in the relatively scant literature on Hume’s theories of time and memory has been to *sanction* the Reidian and Kantian assessments, not to oppose them. Hume’s theory of memory has had an especially bad reputation—it has been described as ‘most unsatisfactory’ (Price 1940, 5), ‘notoriously weak’ (MacNabb 1966, 41), and even as ‘inconsistent in epic proportions’ (Passmore 1968, 94). Some of the most focused treatments of it have aimed not at defense but at unveiling or excusing Hume’s misconceptions and errors (i.e. Noxon 1976; Pears 1990; McDonough 2002). One of the most sympathetic treatments (i.e. Johnson 1987, 1995) in fact endorses the Reidian

interpretation of Hume as a skeptic about knowledge of the past. The sympathetic non-skeptical treatments (i.e. Flage 1985 and Traiger 2011), as I note later, do not fully resolve the main complications in the theory. The literature on Hume's theory of time, in turn, has shown a tendency to reverberate the Reidian-Kantian doctrine that experience alone cannot acquaint us with time; many scholars consider the idea of time to be an exception to—if not a downright problem for—Hume's 'content empiricism,' the principle that experience is the source of all mental content (i.e. Kemp Smith 1941, 273-4; Hendel 1963, 409; Mijuskovic 1977, 387; Johnson 1989; Waxman 1994, 116; Frasca-Spada 1998, 75; Bardon 2007; Allison 2008, 51). Even though there have been in-depth sympathetic readings of Hume's theory of time in recent years, which directly address some of the Reidian-Kantian concerns (e.g. Baxter 2008; Falkenstein 1997, 2006, 2017), these do not yet amount to a complete account of Hume's views on temporal knowledge—for instance, they do not address the question of how knowledge of *tense* is possible on Hume's theory of mind.<sup>7</sup>

The aim of this dissertation is to fill this lacuna in the scholarship by offering a comprehensive naturalistic interpretation of Hume's theory of knowledge of the past. I consider the interpretation I develop 'naturalistic' in that, like other interpretations in this tradition, it emphasizes the scientific character of Hume's approach to the subject, as well as its fit with a positive epistemology that regards our fundamental beliefs as epistemically valuable. Ultimately, I argue that Hume offers compelling theories of memory, temporal

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<sup>7</sup> Baxter's interpretation in particular ultimately views Hume as a 'Pyrrhonian skeptic' who 'finds no final reason actively to endorse any views as true' (2008, 4, 9).

concepts, and belief about the past, which together comprise a rigorous account of knowledge of the past.

It is worth emphasizing that my aims are both *interpretive* and *evaluative*. I aim to offer an accurate portrayal of Hume's views on the subject at hand, but, in addition, I aim to *defend* the plausibility of Hume's views and of his overall framework for approaching the subject. I pursue these aims in tandem because they are mutually complementary (if not interdependent): arriving at the most accurate interpretation of a text usually involves weighing in considerations about plausibility, at least insofar as the author is unlikely to have advanced implausible views; conversely, arriving at an interpretation on which the author's views are compelling is usually furthered by careful examination of the text, at least insofar as such examination reveals details and nuances that enhance the complexity and plausibility of the author's position. Thus, my interpretation of Hume's views sometimes draws on plausibility considerations (as will be clear from my language) and my defense of his views sometimes draws on textual details that other interpreters have overlooked.

In working towards the evaluative aim—specifically, the aim of showing the capacity of Hume's philosophical framework—this dissertation covers topics that Hume himself did not dwell on but that nonetheless test his framework in important ways. In some cases, I consider how Hume *could* respond to objections that Hume scholarship or contemporary philosophical literature have brought into focus. In other cases, I expound on how Hume's framework could encompass explanations of phenomena that might seem to resist a Humean analysis and yet are crucial to a theory of knowledge of the past—

phenomena like mental representation, the concept of simultaneity, and the concept of tense.

Also in the service of the evaluative aim, I sometimes appeal to contemporary insights that help us to recognize the plausibility of Hume's views, even if Hume did not anticipate these insights. For instance, in Chapter 2 I argue that Putnam's arguments about definition show Hume's approach to definition to be coherent. In such instances, I am not *attributing* to *Hume* the contemporary insights—an attribution that is likely be anachronistic. Rather, I am arguing that Hume's *own* insights deserve to be taken seriously because more recent developments in philosophy have revealed that they are not as flawed as scholars previously thought.

Since the nature of *mental representation* determines how the mind represents (and ultimately has knowledge of) the past, Chapter 1 examines Hume's views on mental representation. Specifically, Hume's 'content empiricism' constrains his theory of knowledge of the past insofar as it posits, as a condition for that knowledge, that experience present us with the contents of our ideas about time. I offer a precise statement of content empiricism. Drawing on the existing interpretations, I also delineate Hume's views on the nature and causes of mental representation.

Chapter 2 examines Hume's theory of memory. Hume characterizes memory using two kinds of criteria: ideas' phenomenal character and their correspondence to the past experiences from which they derived. I defend Hume's criteria by showing that they achieve two theoretical aims: a scientific classification of ideas and a definition of

‘memory.’ In particular, as noted above, I argue that Hume’s definition of ‘memory’ is coherent in light of Putnamian considerations about definitions.

In Chapter 3, I show that, in keeping with his ‘content empiricism,’ Hume grounds the contents of our temporal concepts in experience by identifying *time* with *succession*, where succession is an aspect that impressions instantiate. An impression like that of a musical melody instantiates time or succession by being made up of parts ‘disposed in a certain manner,’ namely, in a successive manner (T 1.2.3.4 SBN 34). Our ideas represent time as a result of copying such impressions and their manner of disposition. I argue that this seemingly rudimentary view of time is robust enough to encompass explanations of such complex phenomena as the experience of movement, the notion of time without change, the concept of simultaneity, and the concept of tense. While Hume does not discuss the concept of tense, I propose that he could have explained it by means of what I call the ‘tense principle:’ when the idea of a succession is simultaneous with an impression of a member of the succession, it represents that member as present.

Finally, Chapter 4 applies my findings in the previous chapters to explaining the nature of knowledge of the past. I show that Hume’s theory of belief, his theory of the causes of representation, his conception of memory as ideas that correspond to the past, and the ‘tense principle’ together entail that memories are beliefs about the past. I then explain the sources of non-mnemonic beliefs about the past using Hume’s theory of causal inference. Finally, I draw on existing interpretations of Hume’s views on epistemic normativity—interpretations showing that for Hume our beliefs in causation, the external world, and the self constitute knowledge, rather than mere belief—to argue that, by the

same reasoning, for Hume our typical mnemonic and non-mnemonic beliefs about the past also constitute knowledge. In this way, Hume's theory of knowledge of the past is continuous with the positive epistemology that the naturalistic interpretations have brought to light.

## CHAPTER 1: MENTAL REPRESENTATION

### 1.1. Introduction

As is well known, the early modern framework for studying the mind postulates the existence of certain mental entities—generally called ‘*ideas*’—in terms of which all mental phenomena are understood. Hume adopts this framework, but instead of referring to these entities as ‘ideas’ he labels them ‘*perceptions*.’ He divides perceptions into *impressions*, the lively entities we generally call ‘feelings’ or ‘experiences,’ and *ideas*, the faint entities we call ‘thoughts’ (T 1.1.1.1 SBN 1). He also divides perceptions into *simple* and *complex*: the simple being perceptions that cannot be divided into parts, and the complex those that are composites of the simple (T 1.1.1.2 SBN 2).

In order to understand how, on Hume’s philosophical system, the mind achieves knowledge of the past, we must understand how Humean perceptions make it possible. One challenge to this task is the Reidian challenge (noted in the Introduction) of how to infer that that our perceptions of past objects are ‘pictures of things that really did happen’ (1785/2002, 290). A more fundamental challenge, however, is how to account for perceptions’ capacity to *represent* or *be pictures of* past objects in the first place. For Reid and Kant, the capacity to represent time and the past is a built-in feature of the mind. For Hume, however, perceptions’ capacity to represent any content is ultimately dependent on experiences of that content—or so Hume’s reputation as a ‘content empiricist’ suggests. What is perplexing is how experience could be a source of contents as complex as time and the past. As noted earlier, many scholars regard the idea of time as an *exception* to Hume’s content empiricism.



The first step to tackling the subject of how perceptions represent time and the past is to clarify Hume's content empiricism (his exact view on the empirical limits to mental representation) as well as his more general theory on the nature of mental representation (how perceptions represent anything at all). Both are contentious topics in the scholarship. In this chapter, I offer a precise statement of Hume's content empiricism (§1.2.1); I discuss the evidence for attributing content empiricism as I define it to Hume as well as its relation to Hume's famous 'Copy Principle' (§1.2.2 and §1.2.3). I then discuss the various interpretations of Hume's theory of mental representation; as a reconciliation of the existing interpretations, I propose that we interpret Hume's theory to be that a perception's representation of an object consists in its playing the same causal or functional role as the object, and that ideas come to represent objects in this way by copying impressions that instantiate them. The picture of mental representation that emerges here will later be crucial for grasping some important features of Hume's treatment of memory, temporal concepts, and belief about that past.

## **1.2. Content Empiricism**

### **1.2.1. Statement of content empiricism**

I will argue that Hume implicitly maintains the following principle on how experience delimits the mind's representational capacities:

*In order for an idea to represent an object, an impression must first instantiate the object or its basic aspects.*

Hume introduces the notion of an 'aspect' in his discussion of 'distinctions of reason' (T 1.1.7.18 SBN 25). He indicates that an aspect is a *point of resemblance* between two or more objects. Whiteness is an aspect of a white globe in that it is a point in which the globe

resembles a white cube; spherical shape is another aspect in that it is a point in which the globe resembles a black globe. Hume stresses that aspects need not be distinct or separable from one another. Whiteness and sphericity are not distinct or separable *parts* of the globe; rather, they are *resemblances* the globe bears to other objects. A ‘distinction of reason’ is our ability to consider the globe ‘in different aspects:’ we consider it *qua* white object by ‘turning our view’ to its resemblance with the white cube, and *qua* spherical object by turning our view to its resemblance with the black globe.

Hume implies that, even though the imagination cannot separate certain aspects (such as color and shape), it can nevertheless combine these aspects in different ways. What Hume denies in T 1.1.7.18 is that we could imagine sphericity *on its own*, without at the same time imagining other aspects of the spherical object such as color (in the case of a visual object) or texture (in the case of a tactile one): ‘a person, who desires us to consider the figure of a globe of white marble without thinking on its colour, desires an impossibility.’ However, Hume is *not* denying that we could combine sphericity with some other color and thereby imagine, for instance, an orange globe. He explicitly allows for this imaginative capacity in noting that we can imagine golden pavements and ruby walls (T 1.1.1.4 SBN 3). In the *Enquiry*, he observes, ‘when we think of a golden mountain, we only join two consistent ideas, *gold*, and *mountain*, with which we were formerly acquainted’ (E 2.5 SBN 19). Hume is *not* suggesting that the idea of gold ‘with which we were acquainted’ is an idea of goldenness devoid of shape. He is saying, rather, that the imagination can combine the idea of a gold object (comprising both goldenness and shape as *aspects*) and the idea of a mountain to form the idea of a golden mountain.

By ‘basic aspect’ I understand an aspect that is not reducible to other aspects—an aspect such that, if the mind had no prior idea of it, it could not come to represent it by combining ideas of other aspects. Greenness is a basic aspect. The shape of a unicorn, in contrast, is an aspect that the imagination could represent by combining ideas of spatial arrangements such as lines, curves, and spatial depth. What I am calling a ‘basic aspect’ is what Locke called a ‘simple idea,’ an idea that ‘contains in it nothing but one uniform appearance’ (II.ii.1). As Ayers describes it, a Lockean simple idea is ‘a limit in phenomenal discrimination;’ it is also *indefinable*, or impossible to convey in words (1991, 40; see also Chappell 1994, 36). Hume does not himself introduce the notion of a basic aspect. In contrast to Locke, he uses ‘simple idea’ to refer to an idea that ‘admits of no distinction nor separation’ (T 1.1.1.2 SBN 2). On Hume’s view, the simple perceptions comprising the complex perception of a white globe are *not* perceptions of whiteness and sphericity—Hume indicates that whiteness and sphericity are not *parts* of a perception (T 1.1.7.18). Rather, the simple perceptions are perceptions of minimum visible points. Basic aspects are distinct from Humean simple perceptions in that the former, unlike the latter, *can* be made up of parts (e.g. a globe’s spatiality is made up of spatial minima); in addition, simple perceptions can instantiate multiple basic aspects (e.g. a minimum visible white point instantiates both whiteness and minimality).<sup>8</sup> In any case, as I show in the next section

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<sup>8</sup> Hakkarainen argues that simple perceptions must be ‘qualitatively simple’ because if they had multiple qualities (such as greenness and minimality) they would divide into those qualities, and hence not be simple (2012, 60, 62-63). However, Hume’s discussion of ‘distinctions of reason’ clearly emphasizes that objects do *not* divide into their qualities. A white globe does not divide into whiteness and sphericity (T 1.1.7.18 SBN 25). If qualities are not *parts* of perceptions, a perception can be simple yet instantiate multiple qualities.

(§1.2.2), Hume implicitly holds that the idea of any basic aspect requires a prior impression of that aspect.<sup>9</sup>

An impression instantiates an object or aspect by being itself an instance of that object or aspect. An impression might instantiate a white globe by being itself a white globe, or whiteness by being itself white. In §3.2.1, I show that for Hume an impression instantiates space or time by being itself spatial or temporal.

Hume is standardly considered to be one of the greatest champions of a view variously labelled as ‘content,’ ‘concept,’ or ‘meaning’ empiricism—broadly construed, the view that experience somehow delimits what the mind can represent. In attributing to Hume the above-stated principle, I am following this interpretive tradition; hence, I will refer to the above-stated principle as ‘content empiricism.’ My articulation of content empiricism is congruous with other articulations in the literature (note, however, that since content empiricism is often articulated only in broad strokes, these other articulations might not correspond precisely to my own). Consider Bennett’s statement of Hume’s ‘meaning empiricism:’ ‘no classificatory word makes sense to us unless (a) we have sensorily encountered things to which it applies, or (b) we can define it in terms of words which satisfy (a)’ (1971, 26). While Bennett focuses on the conditions for *a word’s having meaning*, for Hume words have meaning by being associated with mental representations;<sup>10</sup> thus, Bennett’s ‘meaning empiricism’ also indicates a condition for the mental representation of an object—that experience first acquaint us with the object or with its

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<sup>9</sup> As I note in §1.2.4, however, this principle admits of exceptions, like the ‘missing shade of blue.’

<sup>10</sup> See §2.3.3 and Ott (2006, 235-236, 241-242).

semantic components. Garrett defines ‘conceptual empiricism’ as ‘the view that the semantic content of thought is always fully derived from things or features of things as they have been encountered in sensory or reflective experience’ (1997, 33). Similarly, Winkler’s ‘content empiricism’ is ‘the view that the content of any conception can be expressed, at least in part, in experiential terms’ (2010, 48-51). Interpreting ‘semantic content’ and ‘content’ to refer to what thoughts and conceptions represent,<sup>11</sup> these statements also express the notion that experiences of an object or of its basic aspects are what enable the mental representation of that object.<sup>12</sup>

### 1.2.2. Evidence that Hume maintains content empiricism

Content empiricism is clearly in the background of Hume’s proposal and subsequent uses of the Copy Principle: the principle that ‘*all our simple ideas in their first appearance are deriv’d from simple impressions, which are correspondent to them, and which they exactly represent*’ (T 1.1.1.7 SBN 4). Hume explicitly states that the Copy Principle is Locke’s ‘no-innate-idea’ thesis expressed in different terms: ‘it is probable that no more was meant by those, who denied innate ideas, than that all ideas were copies of our impressions’ (E 1 Note A SBN 22). His reason for expressing Locke’s thesis differently is that Locke’s use

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<sup>11</sup> In standard philosophical usage, ‘content’ refers to the object of a representation. It is clear from the context of Garrett and Winkler’s articulations that they use the term standardly.

<sup>12</sup> Bennett and Garrett’s articulations in their more recent work do not indicate any significant changes (Bennett 2001, 213-215; Garrett 2015, 44). Other articulations of Hume’s content empiricism that are closely in keeping with my definition include: Strawson, ‘[an idea’s] content—its true content—is ultimately just the result of some process of copying (and perhaps combining) the contents of impressions, and is wholly derived from these impressions’ (1989, 102); Noonan, ‘a simple (indefinable) general term can only be understood if something which falls under it has been encountered in veridical sensory experience’ (1999, 66); and Broughton, ‘our experience is what can explain what we are able to think about’ (2006, 52).

of ‘idea’ is too broad. Locke uses ‘idea’ to refer, approximately, to the mental entities responsible for not only thought but sensation as well. Hume argues that, because the term ‘innate’ is ambiguous, the doctrine that no ideas (in Locke’s sense) are innate is misleading. If, on the one hand, we take ‘innate’ to mean ‘natural,’ it follows that all our ideas are innate; if, on the other, we take it to mean ‘contemporary to our birth,’ it is not clear why it matters philosophically whether or not ideas are innate; moreover, insofar as passions like self-love can reasonably be deemed innate under most definitions of the term, Locke’s doctrine seems plainly false. By using ‘idea’ more narrowly (to mean faint perceptions) and by distinguishing ideas from impressions (or lively perceptions), Hume can define an ‘innate’ perception as a perception *not* copied from another perception, and thus more clearly articulate Locke’s doctrine as the principle that ideas (in Hume’s sense) are always copied from other perceptions. Notwithstanding this critique of Locke’s terminology, Hume clearly indicates that he intends the Copy Principle to express the same thesis (T 1.1.1.12 SBN 7; Abstract 6 SBN 647; E Note A SBN 22).

Locke’s no-innate-idea thesis, in turn, can safely be interpreted as the view that what the mind represents is never innate, but is always traceable to experience.<sup>13</sup> Although

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<sup>13</sup> Locke’s rejection of innate ideas is more nuanced than this brief synopsis might suggest. Locke focuses on arguing that, since experience sufficiently explains everything the mind represents, the notion that any ideas are innate is explanatorily superfluous. Some might interpret this argument as stopping short of the conclusion that innate ideas do not exist; however, Locke clearly states that the notion of innate ideas is *false* as well as superfluous, because its superfluousness is indicative of its falsity: ‘it would be sufficient to convince unprejudiced readers of the falseness of this supposition [that innate ideas exist], if I should only show ... how men, barely by the use of their natural faculties, may attain to all the knowledge they have, without the help of any innate impressions’ (I.ii.1).

Locke's term 'idea' is notoriously ambiguous, and although the literature on its meaning is vast, there is nonetheless a fair amount of consensus that the term refers (at least on many of Locke's uses of it) to the *objects* of mental representations (to what our mental states are *of* or *about*) (see, especially, I.i.8, II.viii.8, and IV.xxi.4). Some contemporary labels for what Locke calls 'ideas' are 'representational content,' 'semantic content,' or 'intentional object.' For present purposes, I will set aside the question of the metaphysical nature of ideas. It must be noted, however, that ideas are distinct from external-world objects: for example, the object of my thought of a unicorn is not an external-world object. It should also be noted that, since external-world objects *can* be objects of representational mental states (i.e. mental states can be *of* or *about* them), ideas are not the *only* objects of such states. Ideas are, rather, the *immediate* or *proximate* object of a representational mental state: they are the immediate datum in the mind (an image of a tree, for instance) in virtue of which the mind can also represent other objects (like an external-world tree).<sup>14</sup> What is crucial for present purposes is that for Locke ideas are closely associated with representational mental states, in that every such state represents an idea (even if it represents other objects as well), and every idea is an object of such a state (though not necessarily the *only* object).<sup>15</sup>

Taking 'ideas' in this sense, the no-innate-idea thesis is a thesis about the conditions for mental representation. In saying that no ideas are innate, Locke is saying that what our

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<sup>14</sup> I take the term 'proximate content' from Ainslie (2015, 67; see also 45-46).

<sup>15</sup> The consensus on this view includes Mackie (1985), Ayers (1986), and Chappell (1994). Yolton is also part of this consensus insofar as he takes 'idea' to refer to 'cognitive content,' though on his view 'idea' refers *also* to the mental states or acts that are directed at this content (1975, 384).

representational mental states are *of* or *about* (that is, their immediate contents) is not innate. Locke also expresses the no-innate-idea thesis by stating that every idea is ‘imprinted’ on the mind by experience (i.e. by sensation or reflection) (II.i.5); in stating so, he means that what a mental state is *of* or *about* must be given in experience.

More precisely, Locke’s position is that every *simple* idea is imprinted on the mind by experience. Simple ideas for Locke are the ‘uniform appearances’ or basic aspects that our mental states represent (II.ii.1). The mind can generate complex ideas out of simple ones by ‘repeating, comparing, and uniting them’ (II.ii.2). The resulting complex ideas would not be ‘imprinted on the mind by experience,’ but would be composed of ideas that are. Ultimately, Locke holds that every idea must be either found in experience or composed of basic aspects that are found in experience. Locke also maintains that ideas are ‘all the materials of thinking’ (II.i.2): ‘in all that great extent wherein the mind wanders in those remote speculations it may seem to be elevated with, it stirs not one jot beyond those ideas which sense or reflection have offered for its contemplation’ (II.i.24). Here, Locke indicates that, even though the mind can represent objects other than ideas (such as external-world objects), it cannot represent any objects the aspects of which cannot be reduced to ideas that it acquired through experience. The no-innate-idea thesis is thus equivalent to content empiricism: it states that in order for the mind to represent an object, it must first have ideas (in Locke’s sense) of it or of its basic aspects, and the mind can only have these ideas if experience imprinted them on it. In introducing the Copy Principle as an equivalent of that thesis, Hume implies that he intends the Copy Principle to express content empiricism.



Hume also implies this intention in his uses of the Copy Principle in his skeptical arguments. At several critical points in the *Treatise*, Hume draws an inference from the fact that we lack an impression of a certain object to the conclusion that we lack an idea that represents that object (T 1.1.6.1 SBN 15-16; T 1.3.14.11 SBN 160-1; T 1.4.6.2 SBN 251-2). For instance, from the observation that there is no impression that instantiates a simple and identical self, Hume draws the conclusion that there is no idea of such a self (T 1.4.6.2 SBN 251-2). Hume appeals to the Copy Principle as an intermediate link in these inferences. However, the Copy Principle supplies the necessary inferential link *only if* it regulates what ideas can represent—specifically, if it limits what ideas can represent to objects or basic aspects that are found in experience. Thus, Hume seems to identify (or, at the very least, closely associate) the Copy Principle with content empiricism.

I noted in the previous section that Hume himself does not introduce the notion of a basic aspect. Yet, his endorsement of Locke’s no-innate-idea thesis gives us reason to think that he requires any basic aspects that the mind represents to first be found in experience. It is important to note here that an object’s simple parts—in Hume’s sense of ‘simple’—do not always comprehend its basic aspects, either individually or collectively. For instance, an object’s spatiality or temporality is not given in any single one of its parts or in the mere aggregate of the parts—it consists in a certain ‘*manner of appearance*’ of those parts (T 1.2.3.4 SBN 34; Kemp Smith 1941, 271).<sup>16</sup> We should *not* interpret Hume’s content empiricism as the principle that an idea’s representation of an object requires an

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<sup>16</sup> Kemp Smith observes that for Hume space and time are features that are not found in simple parts or in mere aggregates of simple parts (1941, 279).

impression of the object *or of its parts* (rather than *of its aspects*): if we did, Hume's content empiricism would allow for ideas of some basic aspects where there are no impressions of those aspects. Hume's views on the empirical limits of mental representation would then depart considerably from Locke's. Hume is committed to a stricter principle—the principle that an idea's representation of an object requires experiences of the object or of its basic aspects.<sup>17</sup>

### 1.2.3. Mapping the Copy Principle onto content empiricism

Despite the fact that Hume implies the Copy Principle to be an expression of content empiricism, it is not easy to ascertain how the literal meaning of the principle corresponds to content empiricism. This difficulty stems from the fact that the meaning of the principle (even its literal meaning) is not obvious to begin with. Hume's articulations of the principle are generally variants of his initial statement of it, '*all our simple ideas in their first appearance are deriv'd from simple impressions, which are correspondent to them, and which they exactly represent*' (T 1.1.1.7 SBN 4) (see, e.g. T 1.1.7.5 SBN 19; T 1.2.3.1 SBN 33; T 1.3.14.11 SBN 160-1; T 2.1.11.7 SBN 318-9). An obstacle to interpreting this principle is understanding the exact nature of the entities that Hume labels 'perceptions,' 'impressions,' and 'ideas' and that he regards as the basic constituents of any mental state or activity. It is a matter of scholarly debate whether Hume views these entities as the immediate *objects* of mental states (as what our mental states are *of* or *about*, just as Locke

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<sup>17</sup> This principle is stricter because *basic aspects* are more exhaustive of representational contents than *parts*. If a mind can represent all possible basic aspects, it can represent all possible parts (note, here, that spatial minimality is a basic aspect). Yet, a mind that could represent all possible parts would not thereby be able to represent all possible aspects (since, as noted above, an object's parts do not always comprehend its basic aspects).

views ‘ideas’), or whether he instead views them as mental states in their own right, which can be representational and be directed at (or be *of*) objects, but which can also consist of (either partly or entirely) non-representational phenomena in the mind.<sup>18</sup> In defense of the first alternative (that perceptions are intentional objects), one might cite Hume’s apparent disapproval of a ‘philosophical view’ that distinguishes between perceptions and their objects in T 1.4.2 (Waxman 2016, 144-145). In defense of the second alternative (that perceptions are mental states), one might cite Hume’s appeals to features of perceptions that cannot easily be construed as features of intentional objects, such as liveliness and ‘the action of the mind’ (Ainslie 2015, 211-217). The Copy Principle closely approximates content empiricism if we interpret ‘impressions’ and ‘ideas’ as intentional objects (at least provided that we also attribute to Hume Locke’s view that ideas as such are ‘all the materials of thinking’ and cannot themselves represent anything that is not reducible to ideas). If we interpret ‘impressions’ and ‘ideas’ as mental states, however, the Copy Principle does not so much regulate mental representation as it regulates those mental states themselves qua mental states. Note, specifically, that the Copy Principle as such would not set limits to what an idea can represent (i.e. it would not stipulate anything that an idea *cannot* represent). It would require that every simple idea represent an impression (namely, the impression from which it is derived), but it would not limit what the idea represents to

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<sup>18</sup> I mention only two interpretive options (out of potentially many more) because they suffice for the purposes of highlighting the ambiguity of the Copy Principle. For instances of the first reading (i.e. the intentional-object reading), see Kemp Smith (1941, 11); Bennett (1971, 222); Penelhum (1975, 28-9); Stroud (1977, 17-18); and Waxman (1994, 10, 18; 2016, 144-145). For instances of the second reading (i.e. the mental-state reading) see Ainslie (2015, 211-217) and Alanen (2006, 193).

*just* that impression.<sup>19</sup> Thus, on the second alternative, the Copy Principle would not be equivalent to content empiricism; content empiricism *does* set limits on what an idea can represent—namely, contents that are found in experience.

It is beyond the scope of this dissertation to properly defend a view on whether perceptions are intentional objects or mental states—a task that hinges on the interpretation of some notoriously challenging parts of Hume’s philosophy, like his theories of the mind and of the external world (T 1.4.6 and T 1.4.2). Hence, this dissertation will remain neutral on this point. In other words, my analyses of memory, temporal concepts, and belief about the past in the following chapters will be compatible with both an ‘objects’ reading of ‘perceptions’ and a ‘mental states’ reading.

One way to map the Copy Principle onto content empiricism is to attribute to Hume a theory of mental representation on which *copying* (i.e. causal derivation and resemblance) is essential to *representing*, such that an idea can represent something only if it is a copy of it. The Copy Principle tells us that simple ideas are always copies of simple impressions. If so, then simple ideas are not copies of anything else (on the safe assumption that an object can be related by *both* causal derivation *and* resemblance to only one object). It follows from these premises that what a simple idea represents is entirely determined by the impression it copies. Thus, the Copy Principle together with this view of mental representation entail a thesis that closely approximates content empiricism: that for the

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<sup>19</sup> If the Copy Principle stipulated that a simple idea (understood as a mental state) represents *only* the impression from which it derived, it would conflict with Hume’s discussion of abstract ideas. In that discussion, Hume indicates that a simple idea can represent *more* than the impression from which it derived; when a simple idea of green is associated with the term ‘green,’ for instance, it represents greenness in general (T 1.1.7.7 SBN 20-21).

mind to have a simple idea of something an impression must first instantiate that something. As I observe in §1.3.2., several scholars have in fact attributed to Hume such a theory of mental representation.

I propose that, rather than constrain our interpretation of Hume's views on the nature of perceptions and mental representation by an attempt to salvage the precision of his writing (i.e. by mapping the literal meaning of the Copy Principle onto content empiricism), we instead interpret the principle non-literally. As I showed in the previous section, Hume clearly intends the Copy Principle as a statement of the empirical limits to the representational capacities of the mind. What is more, Hume's defense of the Copy Principle is a defense of precisely these empirical limits. Hume marshals the following evidence in defense of the Copy Principle:

When I shut my eyes and think of my chamber, the ideas I form are exact representations of the impressions I felt; nor is there any circumstance of the one, which is not to be found in the other. (T 1.1.1.3 SBN 2-3)

I can imagine to myself such a city as the *New Jerusalem*, whose pavement is gold and walls are rubies, tho' I never saw any such. I have seen *Paris*; but shall I affirm I can form such an idea of that city, as will perfectly represent all its streets and houses in their real and just proportions? (T 1.1.1.4 SBN 3)

To give a child an idea of scarlet or orange, of sweet or bitter, I present the objects, or in other words, convey to him these impressions; but proceed not so absurdly, as to endeavour to produce the impressions by exciting the ideas. (T 1.1.1.8 SBN 4-5)

We cannot form to ourselves a just idea of the taste of a pine-apple, without having actually tasted it. (T 1.1.1.9 SBN 5)

Hume's observations constitute evidence that the mind's *representation* of an object is always preceded by an experience of that object (as in the case of ideas of colors and tastes) or else by experiences of the object's aspects (as in the case of the ideas of Paris and New Jerusalem). In other words, every 'circumstance' in the objects that the mind represents is 'to be found' in something it has experienced. Experience supports an inductive generalization that the mental representation of an object must be preceded by an experience that instantiates either the object or its basic aspects.<sup>20</sup> Thus, Hume not only intends the Copy Principle as content empiricism—his evidence for the Copy Principle is evidence for content empiricism specifically. Given that Hume clearly states that he intends the Copy Principle to designate content empiricism, and, moreover, given that his evidence for the Copy Principle is evidence for content empiricism specifically, it is interpretively appropriate to read the Copy Principle as a statement of content empiricism, whether or not its literal meaning corresponds to the principle. My view here is *not* that the literal meaning of the Copy Principle does not map onto content empiricism, but rather, that ascertaining this correspondence is not necessary for our interpretation of it, given that Hume clearly states what he intends the principle to designate; in other words, it does not seem out of the question to read the principle non-literally. In addition, if the literal meaning of the principle did not map onto content empiricism, it would not affect Hume's grounds for maintaining content empiricism, since Hume offers evidence of content empiricism itself

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<sup>20</sup> I here follow Garrett (1997, 43-50) in interpreting the arguments in T 1.1.1 as inductive arguments.

(i.e. as opposed to offering evidence for a separate view that would entail content empiricism).<sup>21</sup>

#### 1.2.4. A corollary

Hume's defense of the Copy Principle indicates that he also maintains the following principle:

*In order for the mind to have an idea that represents an object, it is sufficient that it have an impression that instantiates the object.*

Hume observes that we can reliably introduce an idea of an object by introducing an impression of the object, as when we produce an idea of scarlet in a child by conveying an impression of scarlet; he also observes that impressions are constantly followed by ideas of what they instantiate (T 1.1.1.8 SBN 4-5). These observations support a sufficient causal condition for the mind to have an idea that represents a certain object, namely, that it have an impression that instantiates the object. This principle must be qualified by a distinction between the *occurrence* of an idea and the *disposition* to have an idea. Hume's examples show that it is sufficient for the *occurrence* of an idea of an object at time t2 that the mind have an experience of that object immediately prior (i.e. at time t1). Moreover, it seems that the experience of an object is generally sufficient for a *disposition* to have an (occurrent) idea of the object in the future in certain circumstances, for instance, when

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<sup>21</sup> Hume has often been charged with trying to derive conclusions about representation, concepts, and meaning from the Copy Principle, even though the Copy Principle as he phrases it cannot 'bear the weight' of conclusions about these subjects (Bennett 2001, 211-216; Landy 2012, 24). We can read Hume's arguments more charitably, however. Hume gives us reason to think that he intends the Copy Principle as content empiricism; moreover, Hume has adequate grounds for maintaining content empiricism. As content empiricism, the Copy Principle can in fact support Hume's conclusions.

having an experience of an associated object. Clearly, however, the experience of an object is *not* in and of itself sufficient for the *occurrence* of an idea of the object at any given time *t* after the experience.

Both content empiricism and the above corollary are empirical generalizations rather than necessary laws. As such, they admit of exceptions. Hume discusses the idea of ‘the missing shade of blue’ as a possible exception to content empiricism (T 1.1.1.10 SBN 5-6). We might likewise envision exceptions to the above corollary—cases where experiences fail to register immediate occurrent ideas or dispositions to ideas. Nonetheless, as Hume observes, exceptions to an empirical generalization do not invalidate the generalization (T 1.1.1.10 SBN 5-6). The regularity backing content empiricism in particular is strong enough that Hume appeals to the principle throughout the *Treatise* as though it were true of *all* cases of mental representation.

### **1.3. Mental representation**

#### **1.3.1. Methodological preliminaries**

Hume holds it to be a brute fact that resemblance, contiguity, and causation link ideas in the mind (T 1.1.4.6 SBN 13); that pride and humility are directed at the self (T 2.1.3.3 SBN 280); that pride is pleasant and humility painful (T 2.1.5.4 SBN 286); and that benevolence is conjoined to love and anger to hatred (T 2.2.6.6 SBN 368). In each of these instances, Hume comments that the *causes* of the principle in question are ‘*original qualities* of human nature,’ or features of the mind’s ‘original constitution.’ While he hints that these ‘original qualities’ are physiological (T 1.2.5.20 SBN 60), he stresses that attempting to explain them would be ‘presumptuous’ and produce only ‘obscure and uncertain



speculations’ (T Intro 8, SBN xvii; T 1.1.4.6 SBN 13). He cautions against the ‘intemperate desire of searching into causes:’ some principles about the mind cannot be attributed to any further principle or cause, but must be assumed to be simply a function of the mind’s basic structure (T 1.1.4.6 SBN 13).

Hume supposes that mental representation is not a brute fact of this kind when he inquires after the causes of various mental representations, including seemingly fundamental ones like that of external objects and that of the self. This assumption might be challenged: why assume that we can identify the causes of mental representation? Might not the representation of external objects and that of the self be simply functions of the mind’s original constitution?<sup>22</sup>

One reason for Hume’s supposition that mental representation is explainable is his methodology. Hume follows a Newtonian methodological directive to subsume natural phenomena under a small number of universal principles: ‘we must endeavour to render all our principles as universal as possible, by tracing up our experiments to the utmost, and explaining all effects from the simplest and fewest causes’ (T Intro 8 SBN xvii). He explicitly applies this directive in arguing that moral sentiments admit of causal explanation:

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<sup>22</sup> Several scholars have argued that Hume has a naturalistic theory of mental representation—a theory that explains mental representation in terms of relations found throughout the natural world (Garrett 2006; Hamid 2015, 172; Cottrell 2018). Note, however, that establishing that Hume has a naturalistic theory of mental representation does not answer the above question. Naturalistic theories still allow some qualities to be ‘original’ (i.e. explanatorily basic). If so, we can still ask what Hume’s reasons are for assuming that mental representation does not belong in this category of ‘original qualities.’

It may now be ask'd *in general*, concerning this pain or pleasure, that distinguishes moral good and evil, *From what principles is it derived, and whence does it arise in the human mind?* To this I reply, *first*, that 'tis absurd to imagine, that in every particular instance, these sentiments are produc'd by an *original* quality and *primary* constitution. For as the number of our duties is, in a manner, infinite, 'tis impossible that our original instincts should extend to each of them, and from our very first infancy impress on the human mind all that multitude of precepts, which are contain'd in the completest system of ethics. Such a method of proceeding is not conformable to the usual maxims, by which nature is conducted, where a few principles produce all that variety we observe in the universe, and every thing is carry'd on in the easiest and most simple manner. 'Tis necessary, therefore, to abridge these primary impulses, and find some more general principles, upon which all our notions of morals are founded. (T 3.1.2.6 SBN 473)

Hume's argument is that, were we to allow that moral sentiments arise in certain circumstances simply in virtue of the mind's 'original constitution,' then, given how numerous and diverse these circumstances are, we would be allowing natural phenomena to be highly irregular. Doing so would be contrary to the Newtonian directive to view nature as regular. Just like moral sentiments, mental representations arise in a wide variety of circumstances. Ideas can represent both particular objects and general classes of objects (T 1.1.7.6 SBN 19-20). Qualitatively identical ideas can represent different objects, while qualitatively different ideas can represent one same object (T 1.1.7.8-9 SBN 21-22). Both impressions and ideas can represent (T 1.2.3.15 SBN 38-39; Garrett 2006, 304). In keeping with the Newtonian directive, then, Hume cannot regard all these instances of representation as explanatorily basic, or as simply functions of the mind's original constitution, but must seek general principles regulating them.

Before examining what general principles regulate mental representation for Hume, it is worth noting two desiderata suggested by Hume's methodology for the interpretation of these principles. First, the Newtonian directive just noted (to 'render all our principles as universal as possible' and to 'explain all effects from the simplest and fewest causes') means that Hume would approve of a theory of mental representation in proportion as it is parsimonious—in proportion as it uses the fewest possible principles to account for all instances of mental representation. In fact, on the Newtonian directive, a theory that accounted for both mental and non-mental representation on the fewest possible principles would be even more preferable. Hume describes children as representations of their parents (T 2.1.9.13 SBN 308-309), money and riches as representations of 'the goods of life' (T 2.2.5.6 SBN 359-60), and 'the giving of stone and earth' as a representation of the transfer of property (T 3.2.4.2 SBN 515-6). A maximally parsimonious theory of representation would be one that attributes representation across both the mental and non-mental domains to the same underlying causes.

Second, Hume's theory of mental representation must be one that explains not just its *causes* but also its *constitutive nature*. Hume maintains that *philosophical relations*—his term for any relation that we might posit between two objects when comparing them—reduce to seven basic kinds: resemblance, identity, relations of time and place, proportion in quantity or number, degrees in any quality, contrariety, and causation (T 1.1.5.1-2 SBN 13-14; T 1.1.3.1 SBN 69-70). Insofar as representation is a philosophical relation, its omission from this list implies that for Hume representation reduces to, or is constituted by, these other relations, and that an explanation of the constitutive nature of representation

is required. One might wonder whether Hume is in fact warranted in deeming representation to be thus reducible—or even in assuming his list of basic philosophical relations to be complete (Beebee 2011, 248, note 7). Here again, Hume’s methodology clarifies his reasons. The Newtonian directive aforementioned indicates that a philosophy that reduces representation to more basic relations (provided, of course, that it does so cogently), and that thereby limits the number of its basic explanatory principles and concepts, is preferable to one that construes it as an additional basic relation. As we will see, the recent literature on Hume’s views on representation suggests that Hume *does* cogently reduce representation in this way.

### **1.3.2. Hume’s theory of mental representation**

On one interpretation of Hume’s theory of mental representation, a perception’s representation of an object consists in its *copying* the object, that is, in its *resembling* and *being caused by* the object.<sup>23</sup> This interpretation is built on the observation that, at least in the case of simple ideas, the representation relation seems very closely connected to (maybe even identical with) the copy relation: a simple idea that represents a blue point does so by being a copy of a blue point. Though not as obvious in the case of complex ideas—which often represent objects from which they are *not* copied, such as fictional cities (‘The New Jerusalem’)—even then representation seems closely connected to copying. Complex ideas are arrangements of simple ideas. We can reasonably suppose that their representational capacity is fixed by their constituent simple ideas and their

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<sup>23</sup> Cohon and Owen (1997) and Landy (2012, 2017) are proponents of the copy interpretation. Falkenstein suggests a similar interpretation: that representation can be identified with resemblance (2015, 49).

arrangement—that they represent the objects that their constituent simple ideas represent, and represent them arranged in the same way those ideas are arranged (Landy 2017, 4-5; Cottrell 2018, 4). Because simple ideas represent by being copies, on this view copying would still be central to representation in complex ideas. Hume seems to attest to the connection between copying and mental representation in his statement of the Copy Principle: ‘*all our simple ideas in their first appearance are deriv’d from simple impressions, which are correspondent to them, and which they exactly represent*’ (T 1.1.1.7 SBN 4). In another passage, he seems to suggest that resemblance is necessary for representation: ‘... had we any idea of the substance of our minds, we must also have an impression of it; which is very difficult, if not impossible, to be conceiv’d. For how can an impression represent a substance, otherwise than by resembling it?’ (T 1.4.5.3 SBN 232-233).

On a second interpretation of Hume’s theory, a perception’s representing X consists in its assuming the causal or functional role of X. I will refer to a perception’s assuming an object’s role as its *mirroring* that object. For a perception to mirror an object is for it to produce effects that are the *same* or *parallel* to those that the object would produce (Garrett 2006, 310). Thus, for instance, a perception might represent fire by producing the same effects that fire would produce (e.g. fear), or, alternatively, by producing parallel effects (e.g. ideas of heat and smoke, which parallel the heat and smoke that fire itself would produce). This interpretation is motivated by Hume’s discussion of cases of both mental and non-mental representation in which an object seems to represent another object *not* by copying it, but by mirroring it in the way described. Thus, for instance, when an idea

represents a general kind, such as the class of all gold objects, it seems to do so *not* by copying the class, but by producing effects that parallel the effects that the class would produce. Thus, the class of all gold objects would produce impressions of particular instances of gold, wealth, or solubility in aqua regia; the idea of the class mirrors it by producing *ideas* of these things. Similarly, when money represents ‘the goods of life’ (T 2.2.5.6 SBN 359-60), it does so *not* by copying those goods, but by producing the same or parallel effects as they would produce.

A third interpretation combines both of these interpretations into a ‘hybrid’ interpretation. On the hybrid model, an idea’s copying an object is responsible for its representation of the object’s *intrinsic* features, whereas an idea’s mirroring an object is responsible for its representation of the object’s relations to other objects (Schafer 2013, 998). Thus, an idea of a gold object represents its color in virtue of *copying* it; yet, it represents the object’s membership in the class of all gold objects in virtue of mirroring the class. This interpretation incorporates the notion that copying is closely connected to representation: it views copying as the basis of the *representation of intrinsic features*; moreover, given that an idea must first represent an object’s intrinsic features before it can represent the object’s relations to other objects, this interpretation in fact views copying as essential to any kind of representation (Schafer 2013, 996-997). At the same time, the interpretation also incorporates the notion that the representation of certain objects (such as general kinds) consists not in copying but in mirroring.<sup>24</sup>

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<sup>24</sup> Similar hybrid interpretations have been proposed by Ainslie (2010; 2015, 64-69) and Hamid (2015). Hamid identifies representation with *signification*; I read his interpretation as a hybrid one

An advantage of the second interpretation—henceforth the ‘mirroring interpretation’—over both the ‘copy’ and ‘hybrid’ interpretations is that it offers a more unified account of the constitutive nature of representation. I noted in §1.3.1 that Hume needs an account of the constitutive nature of representation; he does not consider representation to be a basic or irreducible relation. On the copy and hybrid interpretations, the constitutive nature of representation cannot be uniform across all cases of representation. As I have already suggested, representation is *not* constituted by copying in many cases (e.g. an idea’s representation of a general kind<sup>25</sup> or money’s representation of the goods of life), and so the copy interpretation must explain representation in such cases as constituted differently.<sup>26</sup> Similarly, on the hybrid interpretation, the representation

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because he explains *signification* as a Berkeleyan relation that consists sometimes of *resemblance* (as in the case of images) and sometimes of *suggestion* (as in the case of words) (2015, 181).

<sup>25</sup> Landy defends the copy interpretation on this score by arguing that the representation of general kinds is in fact constituted by copying. He notes that an idea represents a general kind by representing a class of objects related to each other by resemblance; for instance, an idea represents the class of all gold objects by representing a class of objects resembling each other in terms of goldenness. If we think of such an idea as a complex idea, where its parts represent certain objects (such as gold objects) by being copies of them, and where these parts themselves resemble each other in terms of goldenness, then this complex idea represents a class of objects in the same way any other complex idea represents its object: namely, by having parts that represent certain objects and that are related in certain ways. Because the idea’s parts represent their respective objects by being copies of them, the idea’s representational capacity seems ultimately reducible to copying (Landy 2017, 10-13). However, while Landy’s proposal might explain how an idea represents a *limited* number of objects resembling each other, it does not explain how an idea represents *all* objects of a certain kind resembling each other—an idea cannot be made up of as many parts as there are gold objects. Hume clearly maintains that ideas of general kinds represent *all* objects of a certain kind (T 1.1.7.2 SBN 17-18; 1.1.7.7 SBN 20-21). He also explicitly states that these ideas represent those objects without ‘drawing them all out distinctly in the imagination’—that is, without having parts that are copies of those objects (T 1.1.7.7 SBN 20-21).

<sup>26</sup> Landy in fact suggests that representation by depiction (as when an image represents an object) is constituted by copying, but representation by proxy (as when a lawyer represents a client) is constituted by mirroring (2017, 7).

of intrinsic features is constituted differently than the representation of extrinsic features: in the former case representation is constituted by copying, in the latter by mirroring. Thus, the copy and hybrid interpretations do not specify a representation relation common to all cases of representation, but instead posit different constitutive natures in different cases. Because the mirroring interpretation *does* specify a common constitutive nature—mirroring<sup>27</sup>—it offers a more parsimonious account of representation.

An advantage of the copy and hybrid interpretations, however, is that they are more congruous with Hume's emphasis on the connection between copying and representing. Hume repeatedly associates copying and representing. As I noted in §1.2.2 and §1.2.3, he views the Copy Principle as a principle that regulates mental representation (i.e. as content empiricism). An interpretation on which copying is essential to representation helps to explain why Hume uses the language of copying in his discussion of representation. In contrast, the mirroring interpretation seems to leave Hume's emphasis on copying

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<sup>27</sup> It has been objected that the mirroring interpretation explains only the representation of an object's relational or structural features; it does not explain the representation of an object's *intrinsic* features, or the representation of an object *as* having certain features (Schafer 2013, 993-994; Landy 2017, 7). Thus, in mirroring a piece of gold, an idea represents features like its effects or its membership in different classes of objects, not features such as its particular color or shine; representation of the latter features consists in *copying* or *picturing* the object, not in mirroring. However, while this objection captures the intuition that copying or picturing are *importantly relevant* to representation of intrinsic features, it is not obvious why, even in these cases, the representation relation would not be ultimately a matter of mirroring. That is, it is not obvious why an idea's representing a piece of gold *as* having a particular color would not be ultimately a matter of its assuming the causal-functional role of a piece of gold *of that particular color*. Note that, in insisting on the mirroring interpretation, one is not proposing that the idea lacks phenomenology or that its phenomenology (or its being a copy, for that matter) is irrelevant to its representational capacity. One is only *identifying* the representational capacity with mirroring; phenomenology might still be crucial to that capacity—for instance, perhaps phenomenology is what *enables* the mirroring that constitutes representation of intrinsic features.



mysterious: if representation is simply a matter of assuming a causal or functional role, why are the impressions that an idea copies relevant to determining what it can and cannot represent?

One way to reconcile these various interpretations while preserving the virtues of each is to interpret the constitutive nature of mental representation as mirroring, but its *causal basis* as copying. That is, an idea's representation of an object like a piece of gold is *constituted* by its mirroring the object; yet, what *causally enables* the idea to mirror the object in that way is its *copying* certain relevant impressions, such as an impression of a piece of gold. We have already seen that the mirroring interpretation is a strong candidate as an interpretation of the constitutive nature of representation, since it attributes representation across all the cases Hume discusses to a common relation. The 'copy' interpretation, in turn, is a strong candidate as an interpretation of the *causal basis* of mental representation. To see why, consider, first, that there seems to be a close affinity between the properties of a representational object and the properties of the object it represents, insofar as having certain properties seems to better enable an object to *mirror* objects that have those properties. A photograph of a person mirrors that person as a result of resembling (i.e. having some of the same visual properties) as the person. If so, as Garrett (2006) notes, copying is naturally conducive to representation across both the mental and non-mental domains: when an object copies another, it acquires some of the properties of that object, which naturally facilitates its mirroring that object (311). More crucially, in the case of *ideas*, their mirroring an object seems to always involve their copying impressions of the object or of its basic aspects (even though, as we will see later, it often involves

imaginative mechanisms as well). Even when ideas represent general kinds, copying an instance of the kind is a necessary (though not sufficient) causal factor in their mirroring the kind (312-313). Thus, even though the mirroring interpretation better captures the constitutive nature of representation, it is nevertheless fitting that Hume emphasizes the role of copying in mental representation, since copying is its causal basis.

The notion that copying is the causal basis of mental representation complements Hume's content empiricism. If the mind's representation of an object consists in its having an idea that assumes the causal or functional role of the object, and if what enables this mirroring is the idea's copying impressions of the object or of its basic aspects, then these impressions are required before the mind can represent those objects.

It is worth noting that the literature on Hume's theory of representation often fails to distinguish between a theory of the causes of representation and a theory of its constitutive nature. Thus, for instance, Schafer relies on the language of 'determination' when stating the different theories that could be attributed to Hume: 'what an idea represents is *determined by...*'; 'what an idea represents is *the product of*' (2013, 983, 985, 996, 998); yet, this language leaves it ambiguous whether the theories in question concern the causes or the constitution of representation. Landy and Cottrell also rely on similarly ambiguous language: 'any representation that represents its object as having some feature does so by being a picture of that object' (Landy 2017, 2); 'a perception represents that of which it is a copy' (Landy 2017, 2); 'x represents y iff...' (Cottrell 2018, 4, 6). In all these instances, the language (i.e. the underlined terms) can be interpreted in either a causal or a constitutive sense. When we distinguish between a causal and a constitutive theory,

however, it becomes clear that the mirroring interpretation offers the most compelling account of Hume's constitutive theory, while the copy interpretation offers the most compelling account of his causal theory.

#### **1.4. Conclusion**

It is common to attribute to Hume the view that experience constrains what the mind can represent, yet this view is seldom articulated in detail. This chapter has established that Hume is committed to the principle that *in order for an idea to represent an object, an impression must first instantiate the object or its basic aspects*. I have proposed that we read the Copy Principle as a non-literal expression of content empiricism. Hume suggests that he intends the Copy Principle as an expression of this principle; moreover, the evidence Hume marshals in favor of the Copy Principle is evidence for content empiricism specifically.

This chapter has also established that Hume's theory of mental representation must account for both its constitutive nature and its causes. Interpreting a perception's representation of an object as *constituted* by its mirroring the object does justice to Hume's commitment to 'rendering all our principles as universal as possible,' since mirroring seems to be common to all cases of representation, both mental and non-mental. Interpreting an idea's representation of an object as *caused* by its copying impressions of the object does justice to Hume's frequent appeals to copying as the basis of mental representation.

Thus, a preliminary expectation on how ideas represent temporal and past objects is that, as a result of copying impressions that instantiate such objects (or at least their basic

aspects), ideas come to mirror the objects. Chapter 3 develops a more detailed account on this schema.

## CHAPTER 2: MEMORY<sup>28</sup>

### 2.1. Introduction

Contemporary philosophers distinguish between three kinds of memory: remembering an experience, such as watching the sunset, via a mental state that copies or ‘brings back’ that experience; remembering a fact that one did not directly experience or cannot ‘bring back,’ for instance, that Rabat is the capital of Morocco, or having been born on a sunny day; and remembering how to do something, like how to ride a bike (Deutscher and Martin 1966, 161-164). Early modern philosophers did not clearly distinguish between these kinds of memory. While Hume’s ‘memory’ clearly encompasses the first kind, it is unclear that it includes the other two. Remembering how to do something consists in an ability to replicate *behavior*, but for Hume memory is a capacity for *ideas*. Similarly, Hume describes memories as lively and as corresponding to the impressions from which they derived; yet, remembering facts like the aforementioned does not typically involve ideas fitting this description. Thus, I interpret Hume’s ‘memory’ as referring only to memory of experiences; accordingly, I will use the term to refer only to memory of experiences.

Hume specifies that in the context of the memory-imagination distinction, ‘imagination’ refers not just to fanciful ideas, but to *any ideas that are not memories*,

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<sup>28</sup> With the exception of §2.4, most of the content of this chapter has previously been published in Cruz, Maité. 2019. ‘Hume’s Dual Criteria for Memory,’ *Pacific Philosophical Quarterly* 100 (2019): 336-358. The structure of the content has been modified. The explanation in p.48 bottom (paragraph beginning ‘The terms...’) has been modified. The explanation in p.61 bottom (paragraph beginning ‘One might challenge..’) has been modified.

even to beliefs and ideas about demonstrative proofs (note that he uses ‘imagination’ differently in the context of distinguishing between reasoning and non-reasoning ideas) (T 1.3.9.19n22 SBN 117). Given the restriction of ‘memory’ to memory of experiences, I will accordingly use ‘imagination’ to refer to ideas that are not memories of experiences.

Hume lays out the entirety of his account of memory over the course of two brief sections of the *Treatise*. In ‘Of the ideas of the memory and imagination,’ he introduces two kinds of criteria for an idea’s being a memory: a criterion related to the idea’s phenomenal character and a criterion that the idea correspond to the past experience from which it derived (T 1.1.3 SBN 8). In ‘Of the impressions of the senses and memory,’ he raises what seems to be a skeptical doubt regarding our knowledge of ideas’ correspondence to past experiences, a doubt that would reduce his initial criteria for memory to only the phenomenal criterion (T 1.3.5 SBN 84).

The bad reputation of this account (as noted in the Introduction) owes mostly to Hume’s lack of clarity on the relation between the two criteria. Hume is unclear on whether he ultimately maintains or revokes the criterion of correspondence to the past. Scholars who read him as revoking it are faced with a highly counterintuitive definition of memory as nothing but phenomenal character.<sup>29</sup> On the other hand, scholars who read him as maintaining correspondence to the past find few resources in the text by way of understanding how the two criteria jointly characterize memory (how they amount to necessary and sufficient conditions) and by way of reaching a verdict on problematic

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<sup>29</sup> Johnson (1987, 1995) admits to attributing to Hume a highly counterintuitive notion of memory. I discuss Johnson’s interpretation in §2.2 and §2.3.2.

cases (ideas that conform to one criterion but not the other, like so-called ‘false memories’).<sup>30</sup>

This chapter clarifies and defends Hume’s theory of memory. After reviewing Hume’s criteria and the existing interpretations (§2.2), I examine the criteria in the context of two distinct theoretical aims: scientific classification and definition (§2.3.1). I argue that, *qua* scientific classification, Hume’s criteria cross-classify ideas according to both phenomenal character and correspondence to the past (§2.3.2); *qua* definition of ‘memory,’ Hume’s criteria are cogent on a Putnamian conception of definition, according to which a definition is a specification of the various linguistic categories associated with a term, rather than of the necessary and sufficient conditions for membership in its extension (§2.3.3). I then address Hume’s reasons for excluding representation of the self and representation of the past from the criteria (§2.4). These clarifications show that, while only the nuts and bolts of an account of memory, Hume’s criteria are much more coherent, intuitive, and philosophically promising than has standardly been supposed.

## **2.2. The dual criteria for memory**

As we saw in Chapter 1, Hume holds that all ideas—both memories and imaginings—are copies of impressions and represent objects the aspects of which were instantiated in

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<sup>30</sup> Noxon (1976), McDonough (2002), and Traiger (2011) interpret Hume as maintaining the correspondence criterion. I address their interpretations in §2.2. Flage (1985) reads the criterion as necessary and sufficient for memory. He interprets the criterion as *causal reference*: memories differ from imaginings in that a memory *refers* to a corresponding impression *as its cause*. However, while Hume describes the correspondence criterion as involving a causal connection between a memory and a past impression (see §2.2), he never describes it as requiring that a memory *refer* to a cause. Flage’s interpretation departs too widely from the text to adequately reflect Hume’s views.

impressions.<sup>31</sup> Memories and imaginings are different kinds of copies.<sup>32</sup> Hume's first criterion has been labelled the *phenomenal criterion* because it specifies differences between these kinds that are immediately accessible to introspection, or, to use Hume's word, 'sensible.'

We find by experience, that when any impression has been present with the mind, it again makes its appearance there as an idea; and this it may do after two different ways: either when in its new appearance it retains a considerable degree of its first vivacity, and is somewhat intermediate betwixt an impression and an idea; or when it intirely[sic] loses that vivacity, and is a perfect idea. The faculty, by which we repeat our impressions in the first manner, is called the Memory, and the other the Imagination. 'Tis evident at first sight, that the ideas of the memory are much more lively and strong than those of the imagination, and that the former faculty paints its objects in more distinct colours, than any which are employ'd by the latter. When we remember any past event, the idea of it flows in upon the mind in a forcible manner; whereas in the imagination the perception is faint and languid, and cannot without difficulty be preserv'd by the mind stedly[sic] and uniform for any considerable time. Here then is a sensible difference betwixt one species of ideas and another. (T 1.1.3.1 SBN 8-9)

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<sup>31</sup> Passmore interprets Hume's frequent appeals to 'impressions of the memory' throughout the Treatise (e.g. T 1.3.4.1 SBN 82-83; T 1.3.5.1 SBN 84; T 1.3.6.6-7 SBN 89; T 1.3.9.7 SBN 110; T 2.3.1.17 SBN 406) as inconsistent with his official classification of memories as ideas (Passmore 1968, 96). However, given that when Hume first introduces the locution he prefaces it by mentioning that he regards memories as *equivalent* to impressions (T 1.3.4.1 SBN 82-83), 'impression of the memory' should not be interpreted literally, as suggesting that memories are impressions, but instead as shorthand for 'impression-equivalent memory *idea*.'

<sup>32</sup> Even though Hume repeatedly appeals to memory and imagination also as *faculties* for ideas (T 1.1.3.1 SBN 8-9; T 1.3.9.19n22 SBN 117; T 1.4.6.18 SBN 260), he distinguishes between these faculties by distinguishing between the kinds of ideas they produce. Hence, I focus on the difference between the ideas. I leave any difference between the faculties above and beyond the differences in the ideas as a question for another investigation.



The phenomenal criterion is sometimes interpreted as simply the greater degree of liveliness that memories have over imagination ideas. While greater liveliness is certainly a crucial distinguishing trait of memory, Hume also mentions greater sharpness or acutance (memory ‘paints its objects in more distinct colours’) and greater persistence (memories can be ‘preserved by the mind steady and uniform for a considerable time’) (Broughton 1992, 157; Traiger 2008, 61-62). The phenomenal criterion is the set of differentiating features pertaining to the ideas’ phenomenal character. In some passages, Hume distinguishes memories by reference to liveliness alone (e.g. T 1.3.5.3-7 SBN 85-86). I interpret ‘liveliness’ in these passages as shorthand for the entire set of phenomenal features.<sup>33</sup> Accordingly, in what follows I also use ‘liveliness’ as shorthand.

The second criterion has been labelled the ‘epistemic,’ ‘formal,’ and ‘constitutive’ criterion because it specifies a difference between memories and imaginings that is not accessible to introspection, but that we theorize to exist between them. I call this criterion the *isomorphism criterion*.

There is another difference betwixt these two kinds of ideas, which is no less evident, namely that tho’ neither the ideas of the memory nor imagination, neither the lively nor faint ideas can make their appearance in the mind, unless their correspondent impressions have gone before to prepare the way for them, yet the imagination is not restrain’d to the same order and form with the original impressions; while the memory is in a manner ty’d down in that respect, without any power of variation.

’Tis evident, that the memory preserves the original form, in which its objects were presented, and that where-ever we depart from it in

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<sup>33</sup> Interpreting ‘liveliness’ more literally in these passages would be uncharitable given that Hume never revokes the remaining phenomenal features and that his account is much more plausible if the phenomenal difference comprises all these features.

recollecting any thing, it proceeds from some defect or imperfection in that faculty. An historian may, perhaps, for the more convenient carrying on of his narration, relate an event before another, to which it was in fact posterior; but then he takes notice of this disorder, if he be exact; and by that means replaces the idea in its due position. 'Tis the same case in our recollection of those places and persons, with which we were formerly acquainted. The chief exercise of the memory is not to preserve the simple ideas, but their order and position. (T 1.1.3.2-3 SBN 9)

The isomorphism criterion is much more difficult to interpret. Recall that ideas can be complex (made up of parts) or simple (indivisible). Hume distinguishes complex memories from complex imaginings by the fact that only the former are 'restrain'd' or 'ty'd down' to the same order of parts of the complex impressions from which they derived. My memory of Boston Commons is restrained to the parts-order of my impression of Boston Commons: if the state house was up the hill in the impression, it must be up the hill in the memory. Here, the terms 'restrain'd' and 'ty'd down' are ambiguous. They are commonly interpreted to suggest a *constitutive* feature of memory: that is, a memory is restrained to the order of its source impression in the sense that its being a memory logically implies that it corresponds to that order (e.g. Flage 1985, 172; Johnson [1987, 345; 1995, 55]; McDonough 2002, 74; Traiger 2008, 62-3). On the other hand, in the second paragraph above Hume suggests that an idea that departs from its source impression's order could still be a memory, but it would be a *defective* memory. Thus, 'restrain'd' and 'ty'd down' could instead refer to a *normative standard*: a memory is restrained to an order in the sense that, if it deviates from that order, it is a defective or imperfect memory. On this alternative, the criterion distinguishing memory and imagination is not that the former's order corresponds to past impressions and the latter's does not, but rather, that a normative

standard applies to memory that does not apply to the imagination (Allison 2008, 26; Bennett 2001, 208). Isomorphism is required for memory's adequacy, whereas imagination has no such standard of adequacy.

I adopt the 'constitutive' interpretation of the criterion. Both in this passage and in T 1.3.5 Hume describes memory as in fact preserving—not just as aiming to preserve—the order of its source impressions: 'Tis evident, that the memory preserves the original form ...'; 'tho' it be a peculiar property of the memory to preserve the original order and position of its ideas ...' (T 1.3.5.3 SBN 85). Nonetheless, in prescribing isomorphism as constitutive of memory the criterion need not prescribe full or exact isomorphism (McDonough 2002, 74; Traiger 2008, 63). If the criterion prescribes only partial isomorphism, an idea can still be a memory if it departs from the original order to some extent. Consistently with this criterion, we might hold memories to a normative standard according to which the greater their isomorphism with their original source, the better they are as memories. If so, some lack of isomorphism can be a 'defect or imperfection' in a memory without preventing it from being a memory: a memory might correspond enough to *be* a memory, yet not enough to be a *good* memory.

The terms 'form,' 'order,' and 'position' in Hume's description also require further clarification. One question is whether they refer to space or time: is the isomorphism between memories and their source impressions one of spatial arrangement, temporal arrangement, or both? (Traiger 2008, 62-3). In contrasting memories with imaginings like ideas of 'winged horses, fiery dragons, and monstrous giants,' Hume indicates that memories preserve the spatial arrangement of their source impressions (T 1.1.3.4 SBN 10).

In comparing memories to historical narrations, which aim to accurately represent the temporal order of events, Hume indicates that memories also preserve temporal arrangement (T 1.1.3.3 SBN 9).

A second question is whether ‘form’ and ‘order’ refer *only* to the spatial and temporal order of the simple ideas making up a memory, or whether they refer, in addition, to the spatial and temporal order of a memory itself with *other* memories. On the latter alternative, memories’ spatiotemporal relations to *other* memories must correspond to their source impressions’ spatiotemporal relations to *other* impressions. Since there are no obvious reasons to prefer one of these alternatives to the other, I will remain neutral between the two.<sup>34</sup>

Jeffrey McDonough describes an example where an idea coincidentally corresponds to a past impression despite the absence of a causal connection between the two; he alleges that such an idea meets the isomorphism criterion yet is not a memory (2002, 76, 81). However, Hume’s description of the criterion indicates that it consists not simply in an idea’s correspondence to any past impression, but in its correspondence to the impression *from which it is derived*: ‘the imagination is not restrain’d to the same order and form with the *original* impressions; while the memory is in a manner ty’d down in that respect...’ (T 1.1.3.2 SBN 9, my emphasis). A causal connection between the form of an

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<sup>34</sup> The isomorphism criterion has also sometimes been interpreted as a phenomenal difference. Hume’s descriptions of it in terms of ‘restraint’ and ‘powerlessness’ suggest that there is a feeling of difficulty or strain in an attempt to change the order of parts of a memory, while in contrast one can change the order of parts of an imagining at will (Price 1940, 4; Kemp Smith 1941, 233-4; Falkenstein 2013, 116). Notwithstanding this additional phenomenal difference, Hume makes it clear that the criterion is not *only* phenomenal.

idea and that of a past impression is thus built into the isomorphism criterion. For the same reason, Reid's counterexample to Hume's theory—that hitting your head softly against the wall after having hit it forcefully meets Hume's criteria for memory (1785/2002, 289)—misses the mark.

It is not a failing of Hume's account that it does not specify the precise degrees of liveliness or of isomorphism requisite for an idea's being a memory. Many ideas are not clearly memories or imaginings, but sit right at the threshold, such that 'we are frequently in doubt concerning the ideas of the memory' (T 1.3.5.5 SBN 85). Our introspective capacities may be too limited to discern minute differences in degrees. Hume does not need to ascertain a threshold to be warranted in claiming that *some* degrees of these features are responsible for an idea's being a memory.

Hume's account of memory differs from most other early-modern accounts in that the latter typically focus on determining the physiological basis for memory.<sup>35</sup> Hume, in contrast, seldom ventures into investigations of the physiological causes of mental phenomena.<sup>36</sup> While Locke discusses memory in some detail (II.x and II.xix), Hume seems to borrow little from Locke's account, despite his reliance on Locke on other subjects. There is no clear precedent to Hume's phenomenal criterion in Locke. Locke does employ a criterion of correspondence to past experiences—'remembrance' and

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<sup>35</sup> Descartes and Malebranche explained memory in terms of the traces or flexibility that the brain fibers retain after the spirits have passed through them, which allows for the easy passage of the spirits through those fibers at subsequent times (Descartes *Treatise on Man* §177-8; Malebranche *Search* 106). Hobbes considered memory to be the continuation of the motions that external objects cause in the sense organs (*Leviathan* Chapter II).

<sup>36</sup> T 1.2.5.20 is a rare instance of a physiological explanation in Hume. Wright (1983, 216-221) discusses the influence of physiological explanations on Hume's thought.

‘memory’ consist in the recurrence of a *same* past idea (II.X.2, II.XIX.1)—but he does not specify this criterion as isomorphism (that is, as correspondence *in the order of parts*).

Hume states the two different criteria in T 1.1.3 without specifying how they function as a characterization of memory. He does not indicate, for instance, whether he intends each criterion as sufficient or as necessary. Is an idea a memory if it is isomorphic with a past impression but not lively? Is it a memory if it is lively but not isomorphic? Understanding the precise relation between the two criteria—how it is that they jointly characterize memory—is the principal challenge to interpreting Hume’s theory of memory.

This challenge becomes especially difficult when considering Hume’s development of his views in T 1.3.5:

When we search for the characteristic, which distinguishes the *memory* from the imagination, we must immediately perceive, that it cannot lie in the simple ideas it presents to us ... These faculties are as little distinguish’d from each other by the arrangement of their complex ideas. For tho’ it be a peculiar property of the memory to preserve the original order and position of its ideas, while the imagination transposes and changes them, as it pleases; yet this difference is not sufficient to distinguish them in their operation, or make us know the one from the other; it being impossible to recal[sic] the past impressions, in order to compare them with our present ideas, and see whether their arrangement be exactly similar. Since therefore the memory is known, neither by the order of its *complex* ideas, nor the nature of its *simple* ones; it follows, that the difference betwixt it and the imagination lies in its superior force and vivacity. (T 1.3.5.3 SBN 85)

Hume seems to state that we have no way of ‘recalling’ past impressions, and so no way of directly comparing an idea to its source impression, as reason for questioning the isomorphism criterion. Yet, his final stance on the criterion is ambiguous. It is not clear if

Hume is *revoking* it, so that isomorphism with impressions is *not* a feature distinguishing memories from imaginings, or if, instead, he is simply observing it to be somehow *useless*—we cannot refer to isomorphism to distinguish memories and imaginings in practice, even if it constitutes a difference between the two. The second of these readings might seem paradoxical: if we cannot refer to a feature to distinguish a class of objects in practice, in what sense is the feature a criterion?

Before arguing for my interpretation of Hume's criteria and their relation, I want to address the existing interpretations. Oliver Johnson (1987, 1995), who reads the above passage as a revocation of the isomorphism criterion, argues that Hume's epistemology ultimately commits him to a definition of memory that appeals only to phenomenal character, and not to any connection to the past like isomorphism. Johnson claims that, in order to characterize memory by a connection to the past, Hume would need to provide justification for the supposition that the connection exists, but the fact that we can never 'bring back the past' so to speak means that we can never have the justification (1987, 352; 1995, 143-144 & 148). While Johnson acknowledges that he is attributing to Hume a definition of memory that 'few people would accept,' he maintains that Hume's epistemology rules out our common ways of thinking about memory as connected to the past, and that Hume himself came to this realization in T 1.3.5 (1995, 150). Johnson thus upholds the traditional Reidian interpretation of Hume as a skeptic about knowledge of the past.

There are at least three reasons to resist Johnson's interpretation. First, Hume's comment that we have no direct acquaintance with the past might imply that Hume is not

a *direct realist* about knowledge of the past, but it need not entail that he is a *skeptic* about it. Scholars have reconciled Hume's theoretical framework to various accounts of how beliefs about external objects are epistemically justified (e.g. Loeb 2002 and Kail 2007), even though Hume's framework does not allow for direct acquaintance with external objects. In the same way, it is not unfathomable that Hume could provide an explanation for the justification of beliefs about the past. Johnson is thus too quick to assume that Hume cannot defend the isomorphism criterion (I return to this issue in §2.3.2, §4.2.2 and §4.3). Second, while some textual segments lend support to Johnson's interpretation, there are also segments that contradict it. Even in the critical passage at T 1.3.5.3, Hume states, 'tho' it *be* a peculiar property of the memory to preserve the original order and position' (emphasis added). In the immediately following paragraphs, Hume writes, 'as an idea of the memory, by losing its force and vivacity, may degenerate to such a degree, as to be *taken* for an idea of the imagination; so on the other hand an idea of the imagination may acquire such a force and vivacity, as to *pass* for an idea of the memory' (T 1.3.5.6 SBN 86, emphasis added). If the phenomenal criterion were the *only* criterion for memory, as Johnson proposes, a memory that lost the typical phenomenal character would *become* an imagining, not merely *be taken* for one, and an imagining that acquired the character would *become* a memory, not simply *pass* for one. Johnson dismisses this passage as a confusion on Hume's part (1987, 348-9; 1995, 146-147), but a more charitable reading would recommend instead that Hume does *not* subscribe to a purely phenomenal characterization of memory. Third, and most importantly, the skepticism about the past that Johnson attributes to Hume is not only counterintuitive, but inconsistent with much of Hume's



psychological theory. It would imply that Hume should revoke not only the isomorphism criterion, but also his fundamental empiricist principle that ideas are copies of past impressions. Johnson acknowledges this implication but does not appreciate how powerful of an incentive it is for an alternate reading of Hume's theory (1995, 148-149).

Another interpretation is that Hume intends the two criteria to be *coextensive*. Thus, phenomenal character would be *indicative* of isomorphism for Hume: what we identify as memories using the phenomenal criterion are always ideas that are isomorphic with past impressions. This interpretation is implicit in discussions by James Noxon (1976) and Jeffrey McDonough (2002). Noxon and McDonough criticize Hume for helping himself to treating the two criteria as coextensive. Noxon charges Hume not only with supposing that the criteria are 'correlative' (174), but even with 'failing or refusing to recognize their logical independence' (277). He presents examples where they come apart—i.e. cases of lively non-isomorphic ideas—as problem cases for Hume's theory (275). Although McDonough recognizes that Hume is ultimately aware of the logical independence of the two criteria (83), like Noxon he regards the fact that the phenomenal criterion does not line up with the isomorphism criterion as a 'tension' and 'puzzle' in Hume's theory (73), a criticism that assumes that Hume's theory somehow depends on the criteria lining up.<sup>37</sup>

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<sup>37</sup> McDonough interprets the isomorphism criterion as Hume's answer to the question, 'what constitutes the difference between an idea of memory and an idea of imagination?' and the phenomenal criterion as his answer to, 'what are the marks which we, in practice, use to distinguish (what we take to be) ideas of the memory from (what we take to be) ideas of imagination?' He then claims that, as the answer to the second question, the phenomenal criterion 'appears to completely undermine' Hume's answer to the first question, or the isomorphism criterion (73). However, the phenomenal criterion would 'completely undermine' the isomorphism criterion only if Hume

The fact that, as Noxon and McDonough observe, phenomenal character clearly comes apart from isomorphism with the past (as in cases of pseudomemory) is not so much an objection to Hume's theory as it is a reason to resist attributing to Hume the notion that the criteria are coextensive in the first place. Hume never attests to the coextensiveness. On the contrary, he takes special pains to discuss cases where the criteria come apart, like the case of the liar whose ideas are so enlivened through repetition as to pass for memories (T 1.3.5.6 SBN 86).

Traiger (2008) reads the isomorphism criterion as *constitutive* of memory and the phenomenal criterion as *symptomatic* of memory (in the sense of being a *fallible* indication of an idea's being a memory) (66). Contrary to Noxon and McDonough, Traiger emphasizes that Hume presents the two criteria as *non-coextensive* (66). The interpretation I defend in the next section endorses Traiger's view of the phenomenal criterion as symptomatic of isomorphism. However, on my reading the criterion is part of the meaning of '*memory*,' whereas on Traiger's it seems to be only incidentally or concomitantly connected to memory. Hume describes liveliness as '*the* difference between memory and imagination' (T 1.3.5.3 SBN 85, my emphasis); he also describes a scenario where an idea '*becomes* immediately an idea of the memory' upon acquiring liveliness (T 1.3.5.5 SBN 85, my emphasis). These descriptions indicate that the relation between liveliness and memory is more fundamental than Traiger supposes.

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intended the former to be one-for-one correspondent with the latter. McDonough thus seems to suppose that Hume intends the two criteria to be coextensive.

One particular argument from McDonough deserves mentioning. McDonough draws a distinction between two ways of drawing the memory-imagination distinction:

- 1) (accurate memories and inaccurate memories) vs. (mere imagination)
- 2) (accurate memories) vs. (inaccurate memories and mere imagination)

Distinction (1) privileges the subjective experience of memory over accuracy as necessary and sufficient for memory, while distinction (2) privileges accuracy. McDonough contends that it is ‘important to have either (1) or (2) clearly in mind’ when distinguishing memory from imagination philosophically, yet Hume does *not* have either (1) or (2) clearly in mind (82). According to McDonough, Hume wavers between offering criteria for ‘(accurate and inaccurate memories)’ as opposed to ‘(imaginings)’—namely, the phenomenal criterion—and offering criteria for ‘(accurate memories)’ as opposed to ‘(inaccurate memories and imaginings)’—the isomorphism criterion (82-4). This wavering, McDonough suggests, explains Hume’s ‘otherwise strange performance with regards to memory’ (84).<sup>38</sup> In the next section, I defend an interpretation on which Hume does not waver between (1) and (2), and on which, more crucially, Hume does not need to adopt either (1) or (2).

### **2.3. Scientific classification and the definition of ‘memory’**

#### **2.3.1. Hume’s aims**

As a first step to understanding Hume’s theory of memory, it helps to identify Hume’s aims in presenting the theory. Hume’s central project in the *Treatise* and first *Enquiry* is a ‘science of human nature,’ a project that crucially involves ‘knowing the different operations of the mind, separating them from each other, and classing them under their

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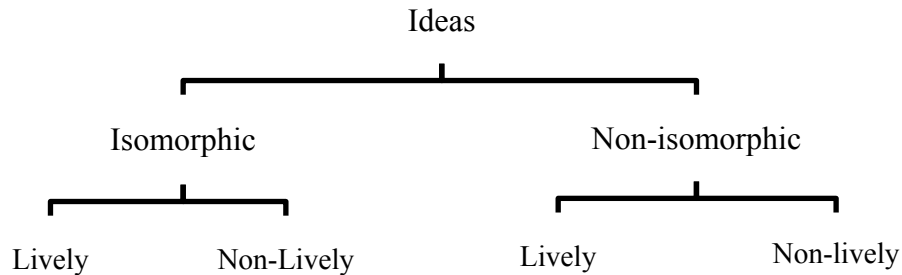
<sup>38</sup> Pears (1990, 41) raises the same criticism.

proper heads' (E 1.13 SBN 13). He aptly describes this part of his project as an 'anatomy of human nature' (T 1.4.6.23 SBN 263) and as a 'mental geography, or delineation of the distinct parts and powers of the mind' (E 1.13 SBN 13). He presents the criteria for memory at the outset of the *Treatise*, in the context of introducing the basic taxonomies that guide his subsequent investigations. An important aim of his criteria for memory, then, is to classify mental phenomena into scientific categories. By 'scientific category,' I mean a category useful for the purposes of scientific explanation.

A second possible aim is to define the term 'memory' as it is standardly used. Hume implies many times that the semantic analysis of some terms can be crucial for clarifying philosophical and scientific debates (e.g. Tn12 SBN 638-639; T 1.3.14.35 SBN 171; T 3.1.2.10 SBN 475; E Note A; E 8.23-25 SBN 95-96). One specific advantage of semantic analysis is that it can restrict the possible meanings of terms. For instance, it can restrict the meaning of 'necessity' to constant conjunction and psychological inference (E 8.5, E 8.21), and the meaning of 'liberty' to the ability to act according to the will (E 8.23-24 SBN 95). Restricting meanings in this way helps to prevent debates about phenomena whose existence is scientifically spurious, since such debates often stem from supposing, incorrectly, that a term signifies the phenomenon. Hume argues that the free-will debate has been misguided by assumptions that 'necessity' signifies something over and above regularity and 'liberty' chance, even though these objects are unintelligible or non-existent (E 8.25 SBN 95-96). Given the value Hume attaches to questions of meaning, the aim of his criteria for memory could be both scientific and semantic. I examine how Hume's criteria achieve these aims in turn.

### 2.3.2. Scientific classification

As an attempt at scientific classification, Hume’s criteria distinguish between ideas along two axes: phenomenal character and isomorphism with past impressions. These axes divide ideas into four scientific categories: isomorphic ideas (i.e. ideas isomorphic with their source impressions), non-isomorphic ideas, lively ideas (i.e. ideas with the phenomenal character specified under the phenomenal criterion), and non-lively ideas. While these categories are *logically independent* and *non-coextensive*—no two categories have the same extension—there is significant overlap between them, so that ideas can be cross-categorized as follows:



If these categories really are scientific, we can expect Hume to apply them to explain a range of phenomena in addition to memory. And in fact he does. The category of lively ideas has a broad application in Hume’s philosophy—for instance, in his explanation of why recent experiences have stronger effects on the judgment and passions (T 1.3.13.2 SBN 143-144), why recent pleasures have stronger effects on the will (T 2.3.6.5 SBN 426),

and why impressions, memories, and beliefs form a ‘system of reality’ (T 1.3.9.3 SBN 107-108)—but its most prominent role is in Hume’s account of causal inference. Specifically, Hume relies on the category to explain why ideas that are products of causal inferences, such as the idea that the sun will rise tomorrow, are *beliefs* and not mere imaginings. Hume argues that the belief attending these ideas is nothing but a certain feeling (T 1.3.7.5 SBN 96; T App 2-9 SBN 623-627; E 5.11-12 SBN 48-50). He describes the feeling as liveliness (presumably, the feeling is distinct, at least in degree, from the liveliness by which Hume characterizes memory). In a causal inference, an impression or lively idea (like a memory of the sun setting) *transfers liveliness* to an idea of a constantly conjoined object (like an idea of the sun rising) thereby turning it into a belief (T 1.3.8.6 SBN 100-101).

Hume appeals to memory’s ‘*tenacity*’ in explaining the inference behind our tendency to believe testimony (E 10.5 SBN 111-2); one of the causes of our belief in testimony is our recognition that human beings have ideas that are isomorphic with past experiences and that allow for the accurate reporting of past events. Where the category of isomorphic ideas is paramount, however, is in Hume’s account of the idea of personal identity. In fact, in that account his *two* memory categories—*both* lively *and* isomorphic ideas—play complementary roles. Hume begins the account by observing that, when different successive objects are connected by *resemblance*, *contiguity*, or *causation* (for instance, a small plant and a large tree), we tend to imagine that they constitute a single enduring object (T 1.4.6.7 SBN 255). He proceeds to argue that, in the same way, were the different successive perceptions in the mind connected by these relations, we would imagine them to be one same object, namely, a self. The category of isomorphic ideas is

precisely a category of ideas that *resemble* past impressions. In this respect, memory (as the category of isomorphic ideas) ‘contributes to the production’ of the idea of the self by itself supplying one of the relations on which the idea is built (T 1.4.6.18 SBN 260-1). An even more extensive relation among perceptions is *causation* (T 1.4.6.19 SBN 261). Hume states that memory ‘discovers’ the idea of the self because, in order to *realize* that these relations (resemblance and causation) run through the successive perceptions in the mind, we first need, as Hume puts it, an ‘acquaintance with the continuance and extent of this succession of perceptions;’ it is reasonable to suppose (though Hume does not spell out how) that ideas that belong to *both* the lively and isomorphic categories supply this acquaintance (T 1.4.6.20 SBN 261-2). Hume still needs to explain how even perceptions ‘beyond the reach’ of this mnemonic acquaintance (for instance, the perception of tasting a tomato for the first time) are imagined to belong to the self. The explanation is that we draw causal inferences from our lively isomorphic ideas to these perceptions: we ‘extend the same chain of causes’ (T 1.4.6.20 SBN 261-262). As per Hume’s account of causal inference, we *believe* in the existence of these perceptions, even though we have no memory of them, because our lively ideas transfer liveliness to them. The isomorphic and lively categories thus allow Hume to clarify the many different roles that memory (as the conglomerate of these categories) plays in the development of the idea of the self.

Although Hume does not himself propose it, the category of isomorphic ideas can also be used to explain *why* some ideas are lively. Hume’s ‘rules by which to judge of causes and effects’ suggest a causal relation between isomorphism and liveliness (T 1.3.15 SBN 173). Isomorphism seems to be constantly conjoined to liveliness (except in cases of

pseudomemories, in which ‘contrary causes’ likely operate [T 1.3.12.5 SBN 132]). A lack of isomorphism seems to be constantly conjoined to a lack of liveliness. The more isomorphic an idea is with its source impression, the greater its liveliness. Together with Hume’s rules, these considerations suggest that ideas ‘retain a considerable degree of the vivacity of the original impressions’ (T 1.1.3.1 SBN 8) *in virtue of* retaining the impressions’ form.

One might challenge the scientific status of the isomorphic and non-isomorphic categories by contending, like Johnson, that Hume’s epistemology cannot account for knowledge of isomorphism with past impressions. I answer this challenge fully in Chapter 4; there, I argue that Hume can in fact explain how we form beliefs about ideas’ isomorphism with past impressions and how these beliefs constitute knowledge (§4.2.2 and §4.3). For now, it is worth addressing Hume’s statement that ‘[isomorphism] is not sufficient to distinguish [memory and imagination] in their operation, or make us know the one from the other; it being impossible to recal[sic] the past impressions, in order to compare them with our present ideas...’ (T 1.3.5.3 85). As I read it, what Hume is denying in this passage is *not* our knowledge of isomorphism per se, but rather, our knowledge of it via ‘recalling’ or ‘bringing back’ a past impression. As I explain in §4.2.2 and §4.3.2, we do not have a memory-independent way of knowing memories’ isomorphism to past impressions, but in fact, we know of it through memory. Specifically, we know that an idea corresponds to an impression by having a second-order idea that represents the first idea and the correspondence. The second-order idea is a belief—and thus a basis for knowledge—on account of its liveliness. In fact, the second-order idea is a memory: it is



both lively and isomorphic to past experience (as a third-order idea would reveal). The fact that our knowledge of isomorphism depends on second-order lively ideas of the sort described means that isomorphism in and of itself is not *sufficient* for distinguishing memories from imaginings. If memories were not generally lively, we would never have knowledge of memories' isomorphism, because we would have only faint ideas of other ideas' correspondence to past impressions. As Hume notes, 'there would be no possibility of distinguishing [an imagining] from a remembrance of a like kind, were not the ideas of the imagination [i.e. in general] fainter and more obscure' (T 1.3.5.3 SBN 85). Hume's point in the passage is *not* that isomorphism cannot be known, but that it is not sufficient as a source of our knowledge of the memory-imagination distinction.

To the extent that Hume's account of memory identifies scientific categories, it succeeds *qua* scientific classification. Hume does not need to choose between McDonough's distinctions in order to sort ideas into scientific categories. He would hold *both* of McDonough's distinctions—which correspond to the distinctions between lively and non-lively, isomorphic and non-isomorphic—to be scientifically relevant. These two distinguishing axes entail four possible kinds of ideas (as per the foregoing chart): isomorphic and lively; non-isomorphic and non-lively; isomorphic and non-lively; and non-isomorphic and lively. If isomorphism is indeed causally connected to liveliness, as I have suggested, the last two kinds in this list are atypical.

Hume presents the 'isomorphic' and 'lively' categories not only as a scientific classification, but as a characterization of *memory*. He appeals to everyday descriptions of memory to support the phenomenal criterion—'I think I remember such an event, says one

...’ (T 1.3.5.6 SBN 86). He relies on the term ‘memory’ to denote sometimes isomorphic ideas (e.g. T 1.4.6.18 SBN 260) and other times lively ideas (e.g. T 1.3.5.3 SBN 85). Thus, however successful as a scientific classification, one can still reasonably demand an explanation of the relation between this classification and ‘memory,’ and of Hume’s rather ambiguous use of the term. I answer this demand in the following section.

### **2.3.3. The definition of ‘memory’**

To see how Hume’s criteria are cogent as a definition of ‘memory,’ we need to break with a conception of definition as a statement of necessary and sufficient conditions for inclusion in the extension of a term. Hume’s criteria do not fit this model of definition: the phenomenal criterion is neither necessary nor sufficient for inclusion in the extension of ‘memory’—as when a faint idea ‘is taken’ for an imagining and a lively idea ‘passes for’ a memory—and yet nonetheless Hume claims that ‘*the* difference between memory and imagination lies in its superior force and vivacity.’ The phenomenal criterion defines ‘memory’ without being necessary or sufficient.

An alternative conception of definition that supports the legitimacy of Hume’s definitional approach—not only in the account of memory, but in other subjects, as we are about to see—is that developed by Hilary Putnam in his papers ‘Is Semantics Possible?’ (1970), ‘Explanation and Reference’ (1973), and ‘The Meaning of ‘Meaning’’ (1975). Putnam argues that the meaning of most general terms cannot be ascertained by a list of necessary and sufficient conditions. The meaning of ‘lemon,’ for example, cannot be ascertained by listing yellowness, roundness, tartness, and the like, because the word’s meaning includes something *beyond* any such set of characteristics: namely, the underlying

nature of the objects to which we ostensibly apply the term. The fact that we can coherently apply ‘lemon’ to an object *not* yellow, round, or tart (namely, an abnormal lemon) shows that these properties do not fix the meaning of ‘lemon.’ Similarly, the fact that we would continue to apply ‘lemon’ to the same objects if we discovered that they were not really yellow, round, or tart (suppose that we were under a widespread delusion about lemons) shows that the meaning of ‘lemon’ is fixed, at least in part, by the kind of entity the objects we call ‘lemons’ are in reality. Given that meaning has this ostensive component, and given that our knowledge of the underlying nature of lemons is empirical and hence subject to revision by scientific research, most terms simply do not admit of definition by way of necessary and sufficient conditions (1970, 140-141). Putnam considers this conclusion to be true of most kinds of terms, not only natural-kind terms (1975, 242). Note, also, that Putnam’s criticisms of the traditional view of definition are closely related to, but independent of, his meaning externalism; those criticisms would be true even if meaning externalism were false.<sup>39</sup>

In place of the traditional view, Putnam proposes that in order to capture a term’s meaning a definition must take the form of a *vector*—a sequence of different kinds of linguistic categories (1970, 246, 269). The definition of a natural-kind term in particular could capture the term’s meaning by specifying four categories associated with the term:

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<sup>39</sup> The primary aim of Putnam’s 1970 and 1973 papers is to refute the traditional view of definition. He later used many of the same observations to argue, famously, that ‘meanings aren’t in the head’—that is, that knowing the meaning of a word is not purely a matter of being in a psychological state (1975, 227). The latter argument does not concern us here. It is possible to accept Putnam’s model of definition, and even his view that the underlying nature of objects can determine the meanings of words, while holding on to the view that knowledge of meaning is internal to psychological states (see, e.g., Talmage 1998).

syntactic markers, semantic markers, stereotype, and extension (1970, 150; 1973, 204; 1975, 269).<sup>40</sup> The most innovative aspect of this proposal is the distinction between stereotype and extension. The extension of a natural-kind term consists in the natural kind to which the objects that we ostensibly apply the term to belong; for ‘lemon,’ the extension might be organisms with a certain DNA. The stereotype consists in the conventional notion of the characteristics of a normal member of the kind, such as our notion that lemons are yellow, round, and tart (1970, 150; 1975, 230, 249).

I have outlined Putnam’s model of definition not in order to argue that Hume anticipated it—while Hume was interested in the semantic analysis of some terms, he did not develop his own theory of language, reference, or meaning—but in order to argue that Hume’s definition of ‘memory’ is intelligible in light of it. I propose that we interpret Hume’s definition as a vector of different kinds of linguistic categories, rather than as a list of necessary and sufficient conditions. Before developing this proposal, I want to suggest that, in fact, other Humean definitions are also more intuitive under Putnam’s model than under the traditional model. Hume seems to approach the task of defining a term along Putnamian lines in several instances. We can plausibly surmise that, not only in relation to ‘memory,’ but more generally, Putnam’s model of definition is one that Hume *would* welcome.

Throughout his writings, Hume suggests that every meaningful term is connected to an idea (e.g. T Abs. 7 SBN 648-649; T App. 11 SBN 633). I here follow Walter Ott in

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<sup>40</sup> Syntactical markers are the parts of speech that apply to a term (e.g. *noun* for ‘lemon’). Semantic markers are the semantic categories under which a term can be classified (e.g. *fruit*).

interpreting the connection as one of *signification*: terms are signs of ideas in the sense of being grounds for inferring the presence of certain ideas in speakers' minds (not in the sense of *referring to* ideas) (Ott 2006, 235-236; 241-242). Hume's account of abstract ideas implies that general terms are signs of *classes* or *sets* of ideas. A general term is a term we attach to every member of a set, where the set consists of objects that resemble each other in some aspect (T 1.1.7.7 SBN 20). To continue with the previous example, 'lemon' is the term we attach to every member of the set of objects that resemble each other with respect to lemonhood. Uttering or hearing a general term induces the mind to represent the entire set of objects to which the term is attached. The mind achieves this general representation, according to Hume, via a particular idea of one member of the set and a *readiness* to form ideas of the other members. A general term thus comes to signify a set of ideas, where these ideas are 'not really and in fact present' in a speaker's mind, but are *potentially* present or present 'in power' (T 1.1.7.7 SBN 20). To use Don Garrett's term, a general term signifies a *revival set*—the set of ideas that the mind is *ready* to entertain in connection with the term (1997, 24).

Hume also implies that defining a term consists, at least in part, in conveying the idea that the term signifies (e.g. T 1.2.4.26, SBN 49-50; T 2.1.2.1 SBN 277; M 3.42, SBN 202). Since general terms signify revival sets, defining a general term consists in somehow conveying its revival set to another person (Garrett 1997, 102-103; 2015, 124-125). As noted above, Hume characterizes membership in a revival set in terms of *aspects* or *points of resemblance*: members of a revival set resemble each other in some aspect. It seems, then, that conveying a term's revival set involves specifying the relevant resemblance.

Hume leaves it ambiguous what resemblance counts as relevant for this purpose, however. Scholars have argued that membership in a revival set is not subjective or arbitrary. The resemblance that fixes the revival set for ‘lemon’ is not just whatever resemblance happens to induce *my* mind to attach ‘lemon’ to an object; I would be mistaken about what ‘lemon’ signifies, for instance, if I understood its revival set to include limes or to exclude abnormal lemons (e.g. Ainslie 2010, 50; Cottrell 2016, 58). Even then, the requirement that revival-set membership be objective or public still leaves membership indeterminate, as there can be multiple, equally objective ways of specifying the resemblance that fixes a set’s membership. One can still ask, does resemblance with respect to color, shape, and taste determine the revival set of ‘lemon,’ or does resemblance with respect to DNA?

Hume’s own definitions reflect this indeterminacy. We have seen that Hume’s criteria for memory identify two points of resemblance in relation to ‘memory,’ namely, liveliness and isomorphism. As a definition of ‘memory,’ these criteria seem to specify two non-coextensive revival sets for the term. Hume’s definition of ‘cause’ is especially famous for its ambiguity. Hume asserts that ‘cause’ admits of two definitions:

We may define a cause to be ‘An object precedent and contiguous to another, and where all the objects resembling the former are plac’d in like relations of precedency and contiguity to those objects, that resemble the latter.’ If this definition be esteem’d defective, because drawn from objects foreign to the cause, we may substitute this other definition in its place, *viz.* ‘A cause is an object precedent and contiguous to another, and so united with it, that the idea of the one determines the mind to form the idea of the other, and the impression of the one to form a more lively idea of the other.’ (T 1.3.14.31 SBN 169-170)

Whereas according to the first definition objects in the revival set for ‘cause’ resemble each other in *being constantly conjoined* to other objects, according to the second definition they do so in *disposing the mind to draw a certain inference*. This dual definition leaves the revival set for ‘cause’ ambiguous because, notoriously, its two prongs seem to be neither logically equivalent nor coextensive.<sup>41</sup> Hume’s definition of ‘virtue’ exhibits a similar duality and ambiguity (Garrett 1997, 107). At times, Hume defines ‘virtue’ as ‘every quality of the mind, which is *useful* or *agreeable* to the *person himself* or to *others*’ (M 9.12 SBN 268); other times, as ‘whatever mental quality or action gives to a spectator the pleasing sentiment of approbation’ (M App1.10 SBN 289).

Hume’s definition of ‘cause’ has been particularly controversial. Scholars have attempted to resolve its ambiguity in numerous ways.<sup>42</sup> While there is much more to this issue than this chapter can address, it is worth considering, as an alternative to these attempts, whether a Humean definition in fact needs to specify a determinate revival set. Suppose that Hume subscribes to the Putnamian rather than the traditional model of definition. He would then hold that, for at least some terms, a definition is not a description of necessary and sufficient conditions for membership in the term’s extension, but a vector comprising several linguistic categories, like an extension and stereotype. In Hume’s terminology, Putnam’s model suggests that some terms are associated with more than one

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<sup>41</sup> Cases of *undiscovered* constant conjunctions show that objects can fit the first description and not the second; cases of inferences based on *unrepresentative samples* show that objects can fit the second description and not the first (Garrett 1997, 98-99).

<sup>42</sup> Proposals include: privileging the first definition as Hume’s only intended definition (e.g. Robinson 1962); interpreting Hume to ultimately reject both definitions (e.g. Strawson 1989, 208); proving the coextensiveness of the definitions (e.g. Garrett 1997, 101-111); arguing that the ‘definitions’ are not *semantic* definitions (e.g. Beebe 2011).

revival set. ‘Lemon’ is associated both with the set of yellow, round, and tart objects and with the set of lemon-DNA objects. On this model, it is neither a complication nor an oddity that Hume’s definitions of ‘memory,’ ‘cause,’ and ‘virtue’ are ambiguous between different revival sets, if there are in fact multiple revival sets semantically associated with each of these terms. It is in this sense that Putnam’s model offers a better framework for understanding Hume’s definitions than the traditional model.

My proposal is that we interpret Hume’s definitions as vectors *of the sort* Putnam describes, and that, in addition, we regard this approach to definitions as intelligible in light of Putnam’s arguments. I stress ‘of the sort’ because Hume’s definitions do not exactly fit the format that Putnam outlines for natural-kind terms. Recall Putnam’s proposal that the definition of a natural-kind term specify an extension and stereotype, where the extension consists in the natural kind associated with the term, and the stereotype in the conventional notion of the characteristics of a normal member of the kind. Hume conceives of the semantic components of ‘memory,’ ‘cause,’ and ‘virtue’ differently.<sup>43</sup> Instead of an

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<sup>43</sup> I opt not to interpret Hume’s definitions as specifications of natural kinds. Hume was likely familiar with the concept of a natural kind through Locke’s distinction between ‘real’ and ‘nominal essences,’ but he did not make use of it. He distinguishes between *substances* and *modes* (T 1.1.6 SBN 15), but, unlike Locke, he does not develop a concept of *kinds* of substances, or divide kinds of substances into real/natural and nominal/conventional. Even if Hume *had* made use of the concept of a natural kind, it is not clear that he would have considered ‘memory,’ ‘cause,’ and ‘virtue’ to be natural-kind terms. Thus, as noted above, his definitions are more naturally interpreted as specifications of *productive* and *responsive* sets. The fact that ‘memory,’ ‘cause,’ and ‘virtue’ might not be natural-kind terms does not affect the analogy to ‘lemon’ or the applicability of Putnam’s analysis of that term. The main point of the analogy is that all these terms resist definition by necessary and sufficient conditions and instead require definition by a vector of linguistic categories. Putnam explicitly notes that his analysis of definition applies not only to natural-kind terms, but ‘to the great majority of all nouns, and to other parts of speech as well’ (1975, 242). He



extension and stereotype as Putnam understands them, his definitions specify a *productive* and a *responsive* set for each term, the former being the set of objects typically productive of a certain response, and the latter the set of objects actually attended with the response.<sup>44</sup> Thus, his definition of ‘cause’ specifies *both* the set of constantly conjoined pairs (the set of objects that *typically* produces the mental disposition to infer one object from another) *and* the set of objects *actually* attended with the mental disposition to infer one object from another. Similarly, his definition of ‘virtue’ specifies *both* the set of useful and agreeable qualities (the set of objects that *typically* produces the ‘pleasing sentiment of approbation’) *and* the set of qualities *actually* attended with the sentiment. If, as I noted in §4.1, isomorphism with a past impression typically produces liveliness in an idea, Hume’s definition of ‘memory’ also specifies a productive and a responsive set: the set of isomorphic ideas and the set of lively ideas, respectively.

For each of these terms, Hume identifies the productive set with the extension. As we have seen, he holds that isomorphic ideas are memories, even when faint, and non-

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also explicitly states that the stereotype-extension format is not the only adequate format for defining a term (1975, 268).

<sup>44</sup> I adopt the distinction between productive and responsive sets from Garrett (2015, 125, 133). Garrett offers a strategy for delimiting the productive and responsive sets for ‘cause’ and ‘virtue’ in a way that renders each term’s sets coextensive. The strategy is to restrict both the productive and responsive sets to the experiences and responses of an *individual human observer*, or else to read them both as encompassing the experiences and responses of an *idealized spectator*. (1997, 108-109; 2015, 134-135). On my reading, the productive and responsive sets for a term do not *need* to be coextensive for Hume’s definitions to be intelligible. Putnam’s arguments show that a term’s meaning often comprises a variety of facts, even though these facts do not jointly amount to anything like necessary and sufficient conditions for membership in a set. Accordingly, Hume holds the view that a term’s meaning sometimes comprises a productive and a responsive set. Putnam’s arguments imply that this view is plausible even if the two sets are not coextensive.

isomorphic ideas imaginings, no matter how lively (T 1.3.5.6 SBN 86). He holds that objects ‘really are’ causes only as long as they satisfy the requirements in his ‘rules by which to judge of causes and effects’—rules that ascertain constant conjunction— independently of whether they elicit a mental disposition to draw an inference (T 1.3.15.1 SBN 173). Similarly, he excludes celibacy, fasting, penance and other ‘monkish virtues’ from being virtues because they are neither useful nor agreeable, even if they elicit the sentiment of approbation in the ‘delirious and dismal’ (M 9.3 SBN 270). In treating the productive rather than the responsive set as the determinant of extension, Hume seems motivated by the assumption that a term’s extension is a principle-governed set. The objects that *typically* produce a certain response can be determined by induction and scientific reasoning; the objects that *actually are* attended with the response, in contrast, cannot be predicted without a margin of error.

One might challenge the Putnamian model of definition by asking why we should conceive of a term’s meaning as broader than its extension. Why not say, instead, that objects with lemon-DNA exhaust the meaning of ‘lemon’? Accordingly, if isomorphic ideas constitute the extension of ‘memory,’ why not say that ‘memory’ just means isomorphic ideas? The answer to this challenge is to emphasize that features like color, shape, and taste for ‘lemon’ and liveliness for ‘memory’ are sufficiently embedded into our usage of these terms to be *semantically* connected to them, not simply *incidentally* connected. By way of stressing this point, Putnam observes that it would be *obligatory* to convey that lemons are typically yellow, round, and tart when teaching someone the meaning of ‘lemon’ (1975, 252). Hume would likely argue that stereotypes and responsive

sets are components of meaning in that they constitute genuine revival sets. An average speaker can reasonably be expected to entertain (or be ready to entertain) ideas of yellow, round, and tart objects when uttering or hearing ‘lemon,’ and ideas of lively ideas when uttering or hearing ‘memory.’

My interpretation of Hume’s definition of ‘memory’ does not require Hume to abandon the isomorphism criterion (as per Johnson), to stipulate a relation of coextensiveness between the two criteria (as per Noxon and McDonough), or to treat liveliness as merely a concomitant of memory (as per Traiger). Furthermore, on the present understanding of definition, it is not true (as per McDonough) that ‘memory’ must be defined according to *either* (1) ([accurate and inaccurate memories] vs. [mere imagination]) *or* (2) ([accurate memories] vs. [inaccurate memories and mere imagination]). ‘Memory’ can instead be defined as a vector comprising *both* the set of objects typically productive of a certain psychological response *and* the set of objects actually attended with that response. For Hume, (1) determines the latter set while (2) determines the former.

My interpretation also clarifies why Hume seems to pursue a scientific classification in tandem with a definition ‘memory,’ and why he uses ‘memory’ to refer to both the ‘isomorphic’ and ‘lively’ categories. It simply is the case that the meaning of ‘memory’ comprises both categories. Insofar as the categories are scientific, ‘memory’ is a scientifically useful term. Hume’s approach to ‘memory’ simply reflects the semantic character of the term and the fact that defining it is of a piece with developing a scientific classification.

#### 2.4. Memory and representation of the past and the self

A conspicuous feature of Hume's characterization of memory is that *representation of the past* is not a criterion for memory (Pears 1990, 37-39). Other philosophical accounts stress precisely this criterion. Thus, Aristotle writes, 'whenever one exercises the faculty of remembering, he must say within himself, 'I formerly heard (or otherwise perceived) this,' or 'I formerly had this thought'' (*Parva Naturalia*, 'On Memory'). According to Hobbes, the difference between memory and imagination is that, while both are instances of 'decaying sense,' memory mental states 'express the decay' and 'signify that the Sense is fading, old, and past' (*Leviathan*, Chapter 2). Locke defined memory as 'the mind's power to revive perceptions, which it has once had, with this additional perception annexed to them, that it has had them before' (II.x.2).<sup>45</sup>

Another apparent omission is a criterion of *representation of the self*. Butler and Reid stress this criterion in charging Locke's theory of personal identity with circularity (Butler *Analogy of Religion*, Dissertation I; Reid 1785/2002, 277). According to Locke, memory of an experience is what produces the idea of identity with the subject of that experience. Butler and Reid reply that, since for the idea of the past experience to be a memory in the first place is for it to refer to our self as the subject of the experience, the

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<sup>45</sup>Copenhaver (2017) interprets Locke's reference to an 'additional perception of having had the idea before' as a reference to a sense of acquaintance or familiarity, not to a mental representation of the past; if this reading is correct, memories do not need to represent the past for Locke—they only need to feel familiar. It may be asked why Hume abstains from positing not only a criterion of representation of the past but even a criterion of familiarity. I here defer this question to a future discussion.

idea of personal identity must be prior to and independent of memory, rather than produced by it.

Why does Hume not consider these seemingly relevant criteria (or any other features of the representational contents of memory) in his characterization of memory? In Chapter 1, I argued that for Hume mental representation is *not* an ‘original’ or explanatorily basic quality of the mind, but requires causal explanation (§1.3.1). And, as we have seen (§2.3.2), Hume devotes special attention to explaining the causes of the representation of the self: since impressions do not instantiate simple and identical selves, ideas do not represent such selves by simply copying impressions of them; hence, the causes of representation of the self cannot be straightforwardly attributed to copying. Similarly, the causes of representation of the past evade an explanation solely in terms of copying (§3.4.2). In both cases, the explanation must appeal to additional imaginative mechanisms. In contrast, the features by which Hume characterizes memory—*isomorphism* and *liveliness*—are much more basic. Hume suggests that these features are simply ‘evident’ or ‘found by experience’ (T 1.1.3.1-3 SBN 8-9). He intimates no need of explaining the causes of ideas’ having these features (even if, as I have suggested, *liveliness can* be causally explained [§2.3.2]). He seems to view these features either as ‘original qualities’ or else as so basic as not to require a special investigation into their causes. Indeed, he introduces memory as one of the ‘elements of [his] philosophy’ (T 1.1.4.7 SBN 13).

When we consider the *scientific* aim of Hume’s characterization of memory—to classify mental phenomena into categories useful for scientific explanation—one possible reason for his omission of criteria like representation of the past and the self is that memory

is a much more useful category (or set of categories) when it is explanatorily basic. Original qualities—such the principles of association and the impression-idea distinction—provide the building blocks or the basic axioms of Hume’s science of the mind. By characterizing memory in terms of explanatorily basic features like isomorphism and liveliness, Hume allows memory to serve as a building block in his science. As such, memory (or the categories it comprises) can be put to use in a broader range of explanations. For one thing, Hume can avail himself of memory to explain how we form the idea of the self (§2.3.2); in later chapters, I suggest that memory can also explain how we form ideas and beliefs about tense (§3.4.2, §4.2.2). In contrast, if memory were characterized by representation of the past and self, it could not be used to explain the origins of these ideas, on pain of circularity.

If we turn to the *semantic* aim of Hume’s theory, it may seem less clear why representation of the past and self are not part of the definition of memory. As we have seen, Hume’s criteria specify a productive and a responsive set for ‘memory.’ Given the intuitive association between memories and representation of the past and self, and given that isomorphic ideas in fact *produce* representation of the past and the self (§2.3.2, 3.4.2, §4.2.2), it can be argued that the responsive set for memory should be characterized by these features. In Putnam’s terms, it seems it would be obligatory to specify these representational contents when teaching someone the meaning of ‘memory.’ I propose that our best answer to this point on Hume’s behalf is to grant that Hume’s definition of ‘memory’ (specifically, his specification of the responsive set) is not exhaustive. This lack of thoroughness is not egregious, however. Hume might have simply been more focused on the scientific aim of his theory than on the semantic; after all, he seems to explicitly

announce a focus on scientific aims when he characterizes his project as a ‘science of human nature.’ If so, it may be that Hume did not deem it crucial to his project to offer an exhaustive definition of ‘memory,’ and instead fixed on the semantic components that are most scientifically useful. His definition is still illuminating as a model, albeit one that could be filled in in greater detail.

## **2.5. Conclusion**

The two approaches to the definition of ‘memory’ noted by McDonough bespeak a lack of consensus among philosophers and non-philosophers alike on the question of whether accuracy or subjective experience is more central to the definition of memory. As non-philosophers, we describe pseudomemories sometimes as ‘remembering falsely,’ other times as ‘just imagining’ or ‘making things up.’ As philosophers, our intuitions are split between privileging accuracy when defining memory, on pain of allowing memories of events that never happened, and privileging the subjective experience of memory, on pain of making memory conditional on facts external to one’s subjective experience.

Hume’s account of memory does justice to this predicament. The fact that the relation between his two criteria is perplexing only reflects a broader philosophical bewilderment on the nature of memory. Hume’s dual criteria are perplexing only at first sight, however. I have argued that one aim of Hume’s account is to scientifically classify ideas, and that his criteria coherently cross-classify ideas according to both isomorphism with the past and phenomenal character. In addition, I have argued that, on a conception of definition as a vector comprising various linguistic categories associated with a term, Hume’s criteria are plausible as a definition of ‘memory’ that specifies a productive set

(isomorphic ideas) and a responsive set (lively ideas), where the former constitutes the term's extension. Hume's definition of memory suggests a conciliatory verdict on the debate over the mnemonic status of pseudomemories: pseudomemories do not fall under the extension of 'memory;' yet, they have a legitimate claim to the title 'memory' insofar as they are semantically associated with the term—much as yellow, round, and tart objects have a claim to the title 'lemon.' If my arguments are sound and Hume's account has this conciliatory potential, it is ultimately to Hume's credit that he does not abandon one criterion to the other.



## CHAPTER 3: TEMPORAL CONCEPTS

### 3.1. Introduction

In keeping with his content empiricism, Hume explains the idea of time as originating in impressions that instantiate time. Impressions instantiate time by being made up of successive parts. Time is simply the successive arrangement of the parts of a complex impression. Such impressions give rise to ideas that copy and (as a result) *mirror* or *represent* the successiveness that the impressions instantiate (§1.3.2). When an idea of time or successiveness is attached to a general term, it becomes an *abstract idea* or *concept* of time.

A distinctive (and, indeed, attractive) feature of this theory is its simplicity. In contrast to theories in the Kantian tradition, which postulate *a priori* mental structures, Hume's theory explains time (both our experience and conception of it) entirely in terms of a feature that experience instantiates, namely, successiveness. Yet, this simplicity might seem to come at the cost of failing to explain certain complex phenomena. It might seem that some features of our experience of time cannot be explained solely in terms of successiveness: for example, the feeling of movement or motion that attends some successions, but which seems irreducible to mere succession; the simultaneity of sensations from different sense modalities; or the temporality of unchanging (and seemingly non-successive) objects. Additionally, Hume's theory of time explains only *tenseless* time: it explains how we experience and think of objects as occurring *one after another*, but not how we come to think of objects as *past*, *present*, and *future*.

In this chapter, I address the main challenges to Hume's theory of time by interpreting and developing his views on three temporal concepts: time (§3.2), simultaneity (§3.3), and tense (§3.4). After discussing Hume's characterization of impressions and ideas of time (§3.2.1-§3.2.2) and his metaphysical ambitions (§3.2.3), I offer a solution to a famous challenge to Hume's thesis that an impression of succession is *identical* to a succession of impressions (§3.2.4). I then develop a Humean account of the concept of simultaneity, modeled on Hume's account of geometric equality (§3.3.1); drawing on my analysis of simultaneity, I offer an interpretation of Hume's account of the 'fiction' of an unchanging enduring object (§3.3.2-§3.3.3). Finally, I discuss a proposal on how Hume could explain the content of the idea of tense (§3.4.1) and its origins (§3.4.2). We will see that Hume's views ultimately capture the complexity of our temporal notions, not in spite of, but in virtue of, his commitment to tracing their contents to experience.

## **3.2. Time**

### **3.2.1. The impression of time**

A central tenet of Hume's theories of space and time is that impressions are not by nature formless mental entities: they can manifest various kinds of arrangements, or, as Hume phrases it, they can be 'disposed in certain manners' (T 1.2.3.4 SBN 34). The visual impression of a table is made up of simple impressions of colored points arranged in a certain way—namely, a spatial way. The auditory impression of a melody is made up of simple impressions of musical notes arranged in a certain way—a successive or temporal

way (T 1.2.3.10 SBN 36).<sup>46</sup> Both are complex impressions—impressions made up of parts.<sup>47</sup> Neither is a mere conglomeration of parts, however. Each consists of parts *and* a manner of disposition of those parts.

These arrangements or ‘manners of disposition’ are *aspects* of impressions (§1.2.1). Spatiality is the way in which the visual impression of a table resembles the visual impression of a tree or the tactile impression of a book. Successiveness or temporality is the way in which the auditory impression of a melody resembles the visual impression of an object in motion or the tactile impression of a series of taps on the shoulder. Spatiality and temporality cannot be distinguished or separated from other aspects of impressions: just as an apple’s color cannot be distinguished from its shape except by a ‘distinction of reason,’ the temporality of a melody cannot be distinguished from its sound.

Kemp Smith correctly observes that a manner of disposition is *not* reducible to a simple impression or a mere sum thereof, but ‘lie[s] beyond the nature of each and all of our simple impressions’ (1941, 273-4). He too quickly concludes, however, that a manner of disposition is ‘contemplated or intuited, but not sensed’—that it is ‘non-impressional’

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<sup>46</sup> I use ‘succession’ and its cognates to refer to a *temporal* series (as opposed to any kind of series). Hume evidently uses ‘succession’ to refer to temporal succession: the idea of time could not derive from the succession of our perceptions in the way Hume describes if that succession was not temporal.

<sup>47</sup> It has been argued that Hume inherited the view of time as made up of parts from Descartes (Lennon 1985; Baxter 2015). Hume himself argues that if time was not made up of different parts, ‘we cou’d not conceive a longer or shorter duration’ (T 1.2.3.8 SBN 35-36). Note that this argument can also be applied to space. Notwithstanding the Cartesian influence and the metaphysical rationale for the view, Hume maintains the view primarily on empirical or phenomenological grounds: the impression of five notes played on a flute is divisible into parts as a matter of phenomenology.

(274). Being irreducible to simple impressions does not make manners of disposition ‘non-impressional.’<sup>48</sup> Manners of disposition *are* ‘impressional’—they are given in impressions—in that they are aspects of *complex* impressions. For Hume, impressions are not always simples or mere conglomerations of simples: they can be complexes involving parts *and* arrangements of those parts (Falkenstein 1997[b], 194-195; Garrett 1997, 53; Baxter 2008, 20).<sup>49</sup> Appreciating that impressions in fact *instantiate* manners of disposition, and that successiveness or temporality is one such manner of disposition, is crucial for understanding how, consistently with Hume’s content empiricism, the idea of time is based on impressions that directly acquaint us with time.<sup>50</sup>

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<sup>48</sup> Like Kemp Smith, Johnson and Bardon consider it to be problematic that, according to Hume’s theory, none of the simple impressions making up a succession of impressions involves an impression of time (Johnson 1989, 217; Bardon 2007, 56). However, if the impression of time is by its very nature an impression made up of parts, then the expectation that an impression of time should be discoverable in a simple impression is mistaken in the first place.

<sup>49</sup> Kemp Smith regards Hume as a mental atomist who inconsistently posits ‘manners of disposition’ that cannot be given in the mental atoms: ‘Hume held to the assumption, so little questioned in his day, of what Gibson has entitled the ‘composition theory’; the theory, namely, that it is in simples, to the exclusion of any supplementary factors, relational or other, that compounds consist. Hume holds to this theory, even in the very act of recognizing that there are in addition to the simples two ‘manners’ or ‘orders,’ each unique in its kind, and each a feature not to be found in any of the simples so ordered’ (1941, 279). It is questionable, however, that we should regard Hume as a mental atomist of the sort described. Rather, the very fact that Hume allows simple perceptions to be ‘disposed in various manners’ is evidence that he was *not* a mental atomist—at least not the kind of atomist that sees compounds as consisting in simples ‘to the exclusion of any supplementary factors.’

<sup>50</sup> Many scholars have thought that the ideas of space and time are inconsistent with Hume’s content empiricism (Kemp Smith 1941, 273-4; Hendel 1963, 409; Mijuskovic 1977, 387; Waxman 1994, 116; Frasca-Spada 1998, 75; Allison 2008, 51). Once we appreciate that for Hume space and time (as manners of disposition) are in fact given in impressions, however, the inconsistency disappears. Coventry argues that the ideas of space and time do not violate the Copy Principle because they are made up of simple ideas that derive from simple impressions (2010, 87); however, she fails to emphasize that the ideas represent not only *components* that are instantiated in impressions, but also *manners of disposition* of those components that are instantiated in impressions.

It might be thought that if only the present moment exists, then only present impressions exist, and present impressions on their own cannot instantiate succession; hence, impressions cannot instantiate succession (Bardon 2007, 55-56). The view that only the present moment exists has indeed been a powerful incentive for theorizing temporal experience to consist entirely of momentary present mental states.<sup>51</sup> In addition, from a historical perspective, it is a view one might reasonably expect Hume to have held.<sup>52</sup> Despite the relevance of the objection, however, we have reasons *not* to interpret Hume's theory to be constrained by this view. One of Hume's methodological principles is that conclusions about experience must be prior to and determine metaphysical conclusions, not vice versa.<sup>53</sup> In the Introduction to the *Treatise* he states that experience is the foundation for the science of human nature, and that this science is in turn the foundation for all the other sciences (T Intro.7 SBN xvi). Accordingly, an empirical investigation into the experience of time is foundational to any inquiry into time as a property of the external world. Hume restates the same principle in Book I Part II. In response to the objection that

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<sup>51</sup> The view that only the present moment exists is known as 'presentism.' Philosophers like Augustine and Reid argue from presentism to the conclusion that the experience of time is not itself temporally extended (does not have past or future parts), but consists entirely of present mental states, specifically, of immediate awareness of present objects, memories of past ones, and expectations of future ones (Augustine *Confessions* Book XI, 26; Reid 1785/2002, 270). 'Retentionalist' models of temporal experience (§3.2.4) also seem motivated, at least to some extent, by presentism—by a need to explain how experience, being constrained to the present, can represent time (see Dainton 2017[b]).

<sup>52</sup> Most philosophers in the early modern period were presentists. Falkenstein notes evidence of presentist commitments in Descartes, Malebranche, Hobbes, Berkeley, Leibniz, Bayle, Gassendi, Locke, and Reid (2013, 103-4).

<sup>53</sup> While it is not impossible to find metaphysical assumptions in Hume's writings, such assumptions are fairly minimal (see Baxter 2008, 6).

his account of vacuum explains only how objects appear, rather than how they really are, he raises doubts regarding any investigation into how objects are that is not predicated on facts about how they appear (T 1.2.5.26 SBN 64). It would be contrary to Hume's methodology to constrain his investigation of the experience of time by prior metaphysical notions, such as the notion that only the present moment exists.

Hume characterizes succession by difference: for two or more impressions to be successive, they must not be qualitatively identical or 'unchangeable' but must be different (T 1.2.3.8-11 SBN 35-37). His grounds for this tenet are empirical.<sup>54</sup> There are no experiences or impressions of successions made up of *exactly* resembling members. What *seem* to be such experiences—the impression of a whole note or a note that lasts for several beats, for instance—are always experiences of qualitatively identical objects *against a background of other differences*, so that the objects of such experiences are still constituted by change.

Hume argues that any impression of time is *identical* to a series of successively disposed impressions. He observes that an impression of time always involves a series of successive impressions: in the absence of a successive series, as when we are asleep or occupied with a single thought, we have no impression of time (T 1.2.3.7 SBN 35). He adds that when we *do* have an impression of time, like the impression of a melody, the

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<sup>54</sup> Hume seems to draw this tenet from Locke. Locke held that ideas 'constantly change and shift' and that we never have 'one unvaried single idea in the mind, without any other, for any considerable time.' Any 'unvaried single idea' that extends over time is always accompanied by other changing ideas (II.XIV.13). If we were ever to have an unvaried single idea without any other, such an idea would not convey a sense of time passing (II.XIV.4). Falkenstein (2017[a]) criticizes Hume on this point.

impression of time is not anything over and above the successive sounds of the notes: the sounds do not generate an additional impression separable from them that could be called an impression of time, but rather, the sounds themselves *are* the impression of time (T 1.2.3.10 SBN 36-37). Finally, he states that a series of successive impressions is in and of itself sufficient for an impression of time: an impression of time ‘can plainly be *nothing but* different impressions disposed in a certain manner, that is, succeeding each other’ (T 1.2.3.10 SBN 37; my emphasis). Thus, any impression of time—any temporal experience—consists essentially of impressions disposed successively.<sup>55</sup> By analogy, any impression of space consists essentially of impressions disposed spatially. Henceforth, I refer to this thesis as the ‘identity thesis.’

### 3.2.2. The idea of time

The ideas of space and time originate from impressions of space and time by copying them. The impression of a table, a spatial disposition of simple color impressions, gives rise to an idea that copies and (as a result) *mirrors* the simple impressions and their spatial disposition (§1.3.2). Accordingly, the impression of a melody, a succession of simple sound impressions, gives rise to an idea that copies and mirrors the simple impressions and their successiveness.

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<sup>55</sup> Hume’s phrase ‘impression of time’ has been thought to be inconsistent with his claim that we have no impression of time distinct and separable from a succession of impressions (Hendel 1963, 412; Johnson 1989, 210-1). However, there is only an inconsistency if we interpret ‘impression of time’ to refer to a *simple* impression. If we interpret it to refer to a *complex* impression whose parts are ordered successively, the impression of time is in fact indistinguishable from a succession of impressions (Falkenstein 2013, 112; Fogelin 1985, 34).

Just like impressions, ideas are not essentially formless mental entities. Most if not all ideas are made up of spatially or temporally disposed parts. Hume emphasizes that ideas of space are literally extended (T 1.4.5.15 SBN 239-40). Some ideas can even ‘swell up to a considerable bulk’ (T 1.2.2.2 SBN 29-30).

In accordance with Hume’s theory of abstract ideas, *abstract* ideas of space and time are particular ideas (such as of a table or melody), which are attached to the general terms ‘space’ and time,’ where these general terms are associated with and call to mind other spatial and temporal ideas (§2.3.3; T 1.1.7.10 SBN 22). By being attached to general terms and thereby reviving other spatial and temporal ideas, the abstract ideas represent space and time as *aspects*: they represent the way in which the various ideas resemble one another. Both the abstract idea of space and that of time represent a point of resemblance across an exceedingly vast number of perceptions—in the case of space, across visual and tactile perceptions, and in the case of time, across perceptions of any kind. This point of resemblance might not be immediately obvious, especially between perceptions that are different in most other respects, such as the visual perception of a tree and the tactile perception of a book. Hume suggests that we learn to notice space qua aspect gradually: we first notice the resemblance between differently colored sets of dots; we might then notice the resemblance between differently colored and differently shaped visual perceptions; only at a late stage do we ‘carry the resemblance beyond objects of one sense’ and notice the resemblance between perceptions of different sense modalities (T 1.2.3.5



SBN 34).<sup>56</sup> In pointing out this gradual development, Hume suggests that, as we learn to notice wider ranging resemblances, our ideas of space develop from less to more abstract: from ideas of particular spatial objects, to ideas of shapes, to ideas of visual and tactile space, to an idea of space in general. Our ideas of time develop analogously.

By explaining the origin of the idea of time to be the succession of impressions, Hume's theory has struck some commentators as circular. The alleged circularity is that 'succession' is itself a temporal concept presupposing an idea of time, and that without a prior concept of time there could not be an awareness of successiveness in the first place (Rosenberg 1993, 83; Johnson 1989, 217-8). What this objection fails to recognize is that Hume attributes the origin of the idea of time not to a prior *concept* of succession, but to succession as an *observable aspect* of impressions. As an observable aspect, succession does not presuppose a prior concept of time. Nor does becoming aware of this aspect require a prior concept of time: successiveness can 'naturally intrude on our attention' insofar as it is a point of resemblance across many sets of perceptions (Baxter 2008, 20).

The view that the idea of time originates in successive perceptions was shared by several seventeenth- and eighteenth-century philosophers, notably by some who commonly influenced Hume, like Locke, Malebranche, and Berkeley.<sup>57</sup> Hume explicitly

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<sup>56</sup> For a discussion of resemblance across vision and touch with respect to space see Waxman (2005, 517-21) and Allison (2008, 46-49).

<sup>57</sup> Locke: '*Reflection* on these appearances of several *Ideas* one after another in our Minds, is that which furnishes us with the *Idea* of *Succession*: And the distance between any parts of that *Succession*, or between the appearance of any two *Ideas* in our Minds, is that we call *Duration*' (II.XIV.3). Malebranche: 'The confused memory of all these successive thoughts is the same thing as the judgment of our duration' (45). Berkeley: 'Whenever I attempt to frame a simple idea of

acknowledged Locke's influence on his theory (T 1.2.3.7 SBN 35). The latter posited the source of the idea of time to be, ultimately, the 'train of *Ideas*, which constantly succeed one another in one's Understanding' and is 'evident to any one who will but observe what passes in his own Mind' (II.XIV.3). Reflection on this 'train' of ideas supplies the idea of succession, which in turn supplies the idea of duration (the distance between two parts of the succession), which in turn supplies the idea of time (the measurement of duration) (II.xiv.3, II.xiv.17). Locke rejected the view that motion is the source of the ideas of duration and time by arguing that we only perceive motion in the first place by the successiveness of our perceptions, and that we are aware of duration even when we perceive successiveness without motion, so that successiveness, not motion, is the ultimate source. He observed that some objects that we suppose to be in motion do not appear to be because the perceptions that represent them are not successive—for instance, our perceptions of an object moving in a circle at top speed are not successive, and thus they represent a static circle rather than a moving object (II.xiv.6-10). Hume referred to this observation to distinguish between the succession of perceptions and that of external objects, and to emphasize that it is the former that causes the idea of time, since any successive external objects that did not *appear* successive would be incapable of generating the idea (T 1.2.3.7 SBN 35). Though Hume adopted Locke's view that successive perceptions are the source of the idea of time, he departed from Locke in arguing that the idea of time is inseparable from succession. For Locke, the ideas of duration and time once

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time, abstracted from the succession of ideas in my mind, which flows uniformly and is participated by all beings, I am lost and embangled in inextricable difficulties' (*Principles* sec. 98).

acquired could be applied to any objects whatsoever, successive or not (II.XIV.24-25, II.XV.11). In contrast, Hume argued that the idea of time ‘can never in any propriety or exactness be applied to [a non-succession]’ (T 1.2.3.11 SBN 37).

Hume argues that we can have no idea of time as anything other than a succession. Recall that Hume’s content empiricism circumscribes ideas’ representational contents to objects or aspects that are first instantiated in impressions (§1.2). In T 1.2.3, Hume refers back to content empiricism and also to the principle that if two objects ‘be not different, they are not distinguishable; and if they be not distinguishable, they cannot be separated’ (T 1.2.3.10 SBN 36-37). These two principles imply that, given that time is identical to succession in our *impressions* of it, the only content that our *ideas* of time can have is time as succession. Ideas cannot distinguish between two aspects found in impressions if the two are identical (i.e. not different), nor can they represent any aspect *not* found in impressions. Thus, not only is it impossible for time to be *experienced* apart from succession, but also for it to be ‘*conceiv’d* without our conceiving any succession of objects’ (T 1.2.3.9 SBN 36).

Because for Hume time is identical to succession (both in our impressions and ideas of it), he uses the terms ‘time,’ ‘duration,’ and ‘succession’ interchangeably. This usage sets him apart from philosophers like Descartes, Locke, Spinoza, and Leibniz, who understood ‘duration’ as a mode or attribute of objects (even unchangeable, succession-less objects), and ‘time’ as the measurement of this mode or attribute by its division into equal periods, as marked by regularly repeating motions such as those of a pendulum, the

moon, or the earth.<sup>58</sup> Hume, in contrast, denies that we can have any notion of duration as an attribute of succession-less objects, nor, consequently, an idea of the measurement of such an attribute. Experience provides only one temporal notion: succession. ‘Time’ and ‘duration’ can only correctly denote succession.<sup>59</sup>

Space and time form the basis for spatial and temporal relations between objects. An object is spatially related to another by being disposed in a spatial manner with respect to it, for instance, by being left or right of it. An object is temporally related to another by being disposed successively with respect to it, such as by being before or after it. Hume includes ‘contiguity in space and time’ as one of the three fundamental associations or ‘uniting principles’ among ideas (T 1.1.4.1 SBN 10-11). The idea of an object recalls or ‘conveys the mind to’ the idea of that object which is spatially or temporally contiguous with the first object (T 1.1.4.1 SBN 11).

Hume’s theory of time can be labelled a *relational* theory in that it construes time not as an entity that exists independently of objects (as an *absolutist* theory would), but, rather, as a relation (or, more precisely, a *manner of disposition*) among objects. Since time

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<sup>58</sup> Descartes *Principles of Philosophy*, Part I, Sections 55-57; Locke II.XIV.17, II.XV.11; Spinoza *Ethics* Part II Def. 5 and Proposition 45 Scholium; Leibniz ‘Conversation of Philarete and Ariste’ p.261. I take this comparison from McRae (1980, 119-120).

<sup>59</sup> The difference between ‘time’ or ‘duration’ and ‘succession’ is only connotative. Hume generally uses ‘time’ and ‘duration’ when referring to the successive manner of disposition as the *content* of ideas, whereas he uses ‘succession’ to refer to the same manner of disposition as a property of perceptions. Thus, he uses the phrases ‘idea of time’ and ‘idea of duration’ but not ‘idea of succession,’ and ‘succession of perceptions’ but not ‘temporal disposition of perceptions.’ Nonetheless, ‘time,’ ‘duration,’ and ‘succession’ denote the same thing, a certain manner of disposition.

is identical to succession, time does not exist outside or independently of the objects that comprise the succession.<sup>60</sup>

### 3.2.3. Time in objects

It is worth clarifying that the particular and abstract ideas of time that Hume explains in Book I Part II are not just representations of time *as a feature of perceptions*; they are representations of time *as a feature of any objects whatsoever*, whether perceptions or not. As Hume later observes, save when we are philosophizing about the mind, our impressions and ideas do not represent their objects *as perceptions* (that is, as distinct from external objects); rather, ‘the very image, which is present to the senses, is with us the real body’ (T 1.4.2.36 SBN 205). My impression or idea of a billiard ball’s motion does not represent *a perception* succeeding another *perception*, but the *billiard ball itself* in successive spatial locations.

I here assume that the question of how we represent time as external, as well as the question of how we come to distinguish between time as a feature of perceptions and as a feature of external objects, is independent of the question of how we represent time *simpliciter*. The former questions find their answer in T 1.4.2, where Hume explains the formation of beliefs about external objects.

A separate question is whether, in discussing time as something that our impressions and ideas *represent*, Hume purports to reach conclusions about time *as it is in reality*. On the one hand, he holds that our representations sometimes license inferences to

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<sup>60</sup> The question of whether space, time, and motion are absolute or relational was a key point of contention in the early modern period, as the *Leibniz-Clarke Correspondence* (1715-1716) attests.

conclusions about reality. He frequently invokes the ‘conceivability principle:’ if something is conceivable, then it is possible (T 1.1.7.6 SBN 19-20; T 1.2.2.8 SBN 32; T 1.4.5.10 SBN 236). A related principle is the ‘contradiction principle:’ if something would be contradictory when conceiving of it, such as a mountain without a valley, then it is impossible (T 1.2.2.8 SBN 32).<sup>61</sup> More contentiously, he claims that ‘wherever ideas are adequate representations of objects, the relations, contradictions and agreements of the ideas are all applicable to the objects;’ this claim is part of an argument that, because our ideas of the parts of space and time represent those parts as *finitely* divisible, and because these ideas are adequate representations, the *real* parts of space and time are finitely divisible (T 1.2.2.1 SBN 29). In these instances, Hume suggests that at least some propositions about time as we represent it are also true of time as it is in reality.

On the other hand, in his discussion of the notion of a vacuum Hume denies any attempt on his part to reach conclusions about the ‘real nature and operations of objects’ (T 1.2.5.25 SBN 63):

... my intention never was to penetrate into the nature of bodies, or explain the secret causes of their operations. For besides that this belongs not to my present purpose, I am afraid, that such an enterprize is beyond the reach of human understanding, and that we can never pretend to know body otherwise than by those external properties, which discover themselves to the senses. (T 1.2.5.26 SBN 64)

As 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 ... If we carry our enquiry beyond the appearances of

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<sup>61</sup> My attribution of this principle to Hume is motivated by Lightner (1997, 116) and Ainslie (2015, 176).

objects to the senses, I am afraid, that most of our conclusions will be full of scepticism and uncertainty. (Tn12 SBN 64)

Here, Hume seems to indicate that his propositions about space and time are strictly confined to time as it appears, or as our impressions and ideas represent it.

We can reconcile these seemingly inconsistent stances by recognizing that Hume's attempts to reach conclusions about reality are attempts to reach only *modal* conclusions—conclusions about what is possible, impossible, and necessary. The 'conceivability' and 'contradiction' principles explicitly license only modal conclusions. While the 'adequacy principle' might seem more metaphysically robust, even then Hume indicates that it only licenses conclusions as to the 'relations, contradictions, and agreements' of objects; we might interpret these terms to refer only to *necessary* relations between objects. Hume's application of the principle suggests this interpretation. Immediately after introducing it, Hume proceeds to establish that the notion of infinite divisibility involves a contradiction (T 1.2.2.1-4 SBN 29-31); consequently, as a matter of necessity, the real parts of space and time must be finitely divisible. In contrast, when stating his reluctance to 'enter into disquisitions concerning the real nature and operations of objects,' Hume is expressing reluctance to speculate about actual (i.e. not modal) facts about reality—that is, facts about the 'real nature of bodies' or 'the secret causes of their operation.' Hume makes this statement in the context of arguing that we obtain the idea of vacuum from perceptions of invisible and intangible distances; the statement is a way of 'pleading guilty' to the

objection that his account does not explain ‘the cause, which separates bodies after this manner’ (T 1.2.5.25 SBN 63-64). Thus understood, the two stances are compatible.<sup>62</sup>

#### 3.2.4. Successions of impressions and impressions of succession

A phenomenon at the crux of many debates on temporal experience is that of the difference between watching the movement of a clock’s second hand and watching that of the hour hand. Assume both hands move continuously. The experience of watching the hour hand, like that of watching the second hand, is comprised of successive feelings of various locations of the hand. Clearly, however, the experience of the second hand involves a distinct feeling (be it of succession, change, or motion) that the experience of the hour hand does not involve.

This phenomenon is commonly considered proof that, as William James put it, ‘*a succession of feelings, in and of itself, is not a feeling of succession*’ (1890, 628). In fact, for over a century, James’ expression has been almost axiomatic in the literature on temporal experience. It is taken to be evident that, since both the experience of the second hand and that of the hour hand consist of successive feelings, the successiveness of the

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<sup>62</sup>A different proposal by Baxter (2009, 116-7) and Ainslie (2010, 62) is to distinguish between two senses of ‘reality.’ ‘Reality’ can refer to facts about what objects are like beyond the realm of human perception—facts about Kantian noumena or ‘things-in-themselves.’ ‘Reality’ can refer instead to facts about objects as they are *within* the realm of human perception, facts we can discover by scientific study of those objects, in contrast to fleeting or unstable appearances of the objects (such as the bent appearance of a stick inside a glass of water). Baxter and Ainslie propose that, in suggesting we can infer conclusions about reality on the basis of our representations, Hume is referring to the second sense of ‘reality;’ when expressing his reluctance to draw these inferences, he is referring to the first sense. While an in-depth discussion of this proposal is beyond the scope of this chapter, Hume’s statement that infinite divisibility is ‘*really* impossible and contradictory, without any farther excuse or evasion’ seems to resist the qualification that Baxter and Ainslie recommend.



feelings cannot be what explains the feeling of succession that obtains only when watching the second hand. Something more than a succession of feelings is necessary for a feeling of succession.<sup>63</sup>

If James' distinction is correct, Hume's theory of temporal experience is essentially misguided. James' distinction directly opposes Hume's identity thesis, which states that the referents of these inverted phrases are one and the same. Insofar as the clock hands constitute evidence for James' distinction, then, they constitute counterevidence for Hume's theory.

I will argue that Hume has a way out of this difficulty in Locke's analysis of the experience of motion.<sup>64</sup> Before turning to this argument, I want to suggest that, in fact, Locke's analysis offers a promising alternative to some of the standard accounts of the phenomenon in the contemporary literature. The account James himself championed appeals to a Kantian 'unity of consciousness:' unlike the successive feelings of the hour hand, the successive feelings of the second hand are unified or experienced *together* (1890, 608-610, 628-629). The notion that unity of consciousness is what is at stake in these cases

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<sup>63</sup> For a discussion of James' expression and its role in the contemporary literature on temporal experience, see Hoerl (2013).

<sup>64</sup> A different proposal on Hume's potential response to James' challenge is Falkenstein's (2017[a]). Falkenstein interprets Hume to hold the view that 'only one part of time ever exists and this part is unextended' (2017[a], 48). On his reading of Hume, both the experience of the second hand and that of the hour hand consist in perceptions coming in and out of existence. What distinguishes one from the other is that the former involves 'a more effortless, rapid or precognitive form of perceiving that something has moved' (50). My main misgiving on this proposal is that, as I noted in §3.2.1., Hume is not committed to the view that 'only one part of time ever exists.' Hume's characterization of time as the manner in which perceptions are disposed naturally suggests that the perceptions that constitute time all exist.

takes such deep root in the philosophical tradition that it is commonly appealed to as uncontroversial;<sup>65</sup> indeed, it is the starting point for the *retentionalist* approach to temporal experience.<sup>66</sup> While a proper criticism of this line of explanation is beyond the scope of this dissertation, it is not difficult to see why Humeans, at the very least, would be motivated to look for an alternative. Hume rejects any ‘real bond’ between perceptions (T 1.4.6.16 SBN 259). The only bonds between perceptions that he acknowledges are resemblance, contiguity, and causation, and these bonds amount simply to ways in which *ideas*—not impressions—are generally associated (T 1.1.4.1 SBN 10-11).

A second standard account appeals to *temporal limits* to experience. On this account, experience has limited duration; for an experience to comprise any two events, the two events cannot be separated by a longer stretch of time than the finite stretch of time of experience. This finite stretch of time is commonly called the ‘specious present.’ Accordingly, the experience of the hour hand does not constitute an experience of succession because changes in the hour hand are separated by a duration longer than that of the specious present; thus, instead of an experience of the changes, we have only an experience of the hand at one location and a memory of it at another. In contrast, because changes in the second hand are separated by a duration *shorter* than that of the specious

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<sup>65</sup> See, e.g., Bardon 2007, 56; Dainton 2011, 389; Yaffe 2011, 399.

<sup>66</sup> Since the late nineteenth century, a standard approach to temporal experience is to characterize it as a unified present experience, the constituents of which are simultaneous, but which nonetheless has temporal depth. James expressed this notion by describing the ‘specious present’ as ‘a saddle-back, with a certain breadth of its own’ (1890, 609, 630); Brentano by stating that present sensations have a ‘proteraesthesia’ or ‘original association’ to immediately preceding sensations (1988, 79, 90); and Husserl by proposing that every moment of experience is ‘retentional’ in that it retains immediately preceding moments (1928, 50-51).

present, they fall within the temporal bounds of an experience and thus constitute an experience of change or succession.<sup>67</sup>

This line of explanation might seem harmonious with Hume's theory of temporal experience. Strictly speaking, the specious-present account is inconsistent with Hume's identity thesis in that it maintains that some successions of experiences (namely, those that exceed the specious present) are *not* experiences of succession. Nevertheless, one might argue that Hume's theory can be reconciled to it with only some minor amendments. Specifically, one might distinguish Hume's identity thesis into two prongs: (1) that every impression of succession is a succession of impressions and (2) that every succession of impressions is an impression of succession. Hume need only abandon the *second* of these prongs to reconcile his theory to James' distinction by way of the specious-present proposal.<sup>68</sup> Notwithstanding its appeal, however, the notion of the specious present is not without difficulties—these include the question of what sort of empirical evidence the

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<sup>67</sup> Many versions of the specious-present account (e.g. James' version) postulate mental unity in addition to temporal limits. Since there are also versions of it do *not* appeal to mental unity, however, I here treat the specious-present account as distinct from the mental-unity account (see, e.g. Broad 1923, 352; Russell 1927, 205; Hoerl 2013, 387-388; Dainton 2017[a], 114-115).

<sup>68</sup> A possible complication is that for Hume durations are always successions (as per the first prong of the identity thesis) and, moreover, successions always involve change. Thus, for two impressions to be separated by any duration, they must be separated by a succession of *different* impressions. It might be thought that the changes in the hour hand are *not* separated by a succession of different impressions; hence, the duration between one change in the hour hand and the next is always the same as that between one change in the second hand and the next—namely, *no* duration. This complication can be addressed by arguing that for Hume objects like the hour hand are always experienced against a changing background (see previous section and note 7); in this way, changes in the hour hand would in fact be separated by a succession of different impressions. It can then be argued, using the specious-present approach, that this succession exceeds the bounds of the specious present, and hence we do not experience the hour hand changing.

notion admits of, as well as the question of how experiences occupying different specious presents combine to form continuous streams of experiences (see Dainton 2017[b]).

Locke's account of the clock-hands phenomenon has received little attention.<sup>69</sup> Yet, at least from a Humean perspective, it offers a compelling alternative to the standard contemporary accounts. In particular, Locke's account seems to presuppose less by way of metaphysical or transcendental laws; it postulates neither a unity of consciousness nor a specious present to experience. In this respect, it is the kind of minimalist explanation that Hume would be inclined to endorse.

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<sup>69</sup> Discussions of Locke's account include Odegard (1978), Yaffe (2011), and Benovsky (2012). Odegard argues that Locke is committed to the notion of the specious present (141-142). While I cannot properly address his argument here, however, it is worth noting that Odegard gives no textual evidence of the commitment, but, for reasons that can be questioned, takes the commitment to be implicit in Locke's references to 'experiences of succession.' Yaffe claims that Locke rejects 'our capacity to get the idea of succession from the sensory perception of motion' (392); he also attributes to Locke the view that 'our sensory ideas are not capable of representing succession' (398). I believe both these claims are lacking in textual evidence. In the passage that Yaffe cites in support of the first claim (II.XIV.6), what Locke denies is that motion (as opposed to succession more generally) is the *ultimate* source of our idea of succession; Locke explicitly states that 'motion produces...an idea of succession,' only it does not do so qua motion but in virtue of being a kind of succession. In support of the second claim, Yaffe refers to Locke's view that the speed of the succession of our perceptions has certain bounds, which he interprets to mean that for Locke sensation is 'halting' in that it consists of static snapshots. This interpretation can be questioned (for an alternative interpretation, see below); indeed, Locke states that 'in the impressions made upon any of our senses, we can but to a certain degree perceive any succession; which, if exceeding quick, the sense of Succession is lost' (II.XIV.184); the very contrast Locke depicts between cases in which we *do* sense succession and cases in which we do not implies a capacity for the sensation of succession. My interpretation of Locke here has more affinities with Benovsky's reading. I follow Benovsky in holding that for Locke an experience of motion (as in the case of a second hand) is essentially an experience the parts of which are 'appropriately linked,' where the appropriate link is temporal proximity or contiguity (98-99, 104). However, while Benovsky interprets this link as a condition for an experience of *succession*, I interpret it as a condition for an experience of *motion*. As I note below, Locke clearly states that an experience can be an experience of succession even when its parts are not thus linked.

As we saw earlier, Locke, like Hume, takes the idea of time to derive from the succession of perceptions in a mind. In advancing this view, Locke considers and rejects the possibility that the idea of time derives instead from ‘our observation of motion by our senses’ (II.xiv.183).<sup>70</sup> Locke argues against this possibility by examining the nature of our experience of motion. He characterizes the experience of motion as the experience of a ‘*constant* succession’ (II.xiv.7; my emphasis). The experience of motion always involves successive perceptions; more specifically, it involves perceptions that succeed one another *constantly*. Locke further observes that those successions of perceptions that are *not* experiences of motion still convey the idea of time. He concludes that succession, not motion, is the ultimate source of that idea. Motion occasions the idea of time only in virtue of being one kind of succession.

Locke supports his characterization of the experience of motion by discussing a number of examples. The examples fall into two categories: (1) cases in which one has no successive perceptions and (2) cases in which one has no *constantly* successive perceptions. In both kinds of cases, it seems an experience of motion *would* have obtained *but for* the lack of successive or constantly successive perceptions. As an example of (1), Locke discusses the experience of an object moving rapidly along a circular path—so rapidly that we see a static circle rather than a moving object (II.xiv.8). He also discusses the experience of a bullet passing through the opposite walls of a room (II.xiv.10).<sup>71</sup> The reason we do not

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<sup>70</sup> The target of Locke’s argument is the Aristotelian view that time is the measurement of motion.

<sup>71</sup> Each of these examples is relevant for Locke’s argument in that each concerns an object that fails to produce successive perceptions. The examples are different in other ways, however. A perplexing feature of the circular-motion example is that, in addition to seeing a static object in

experience motion in these cases, Locke claims, is that the motion in the external world is too fast to register successive perceptions in the mind.

As an example of (2), Locke discusses the experience of being ‘becalmed at sea, out of sight of land, in a fair day’—so ‘becalmed’ that the sea, the sun, and the ship appear at rest. In addition, he discusses none other than the experience of ‘the hands of clocks, and shadows of sun-dials’ (II.xiv.11). In these cases, the motion in the external world is ‘so slow, as not to supply a *constant* train of fresh ideas to the senses’ (II.xiv.11; my emphasis). While the object *does* register qualitatively different successive perceptions, the different perceptions are not continuous, but take place ‘a good while one after another’ (II.xiv.7). Locke’s analysis here draws on his view that perceptions in the mind are always changing. Even when our sensations are not changing, the ideas ‘of our own thoughts’ are. Locke stipulates that the experience of a slowly moving object is one where the changing ideas of our own thoughts ‘come into our minds, *between* those offered to our senses by the moving body’ (II.xiv.11; my emphasis). In other words, while the object registers qualitatively different successive perceptions, these perceptions are *interrupted* by other non-sensory perceptions; between one sensory perception and the next *different* sensory perception, there is a perception which is qualitatively indistinguishable from either one, but which is marked by a change in our thoughts. It is only when the different sensory perceptions succeed one another *constantly*—that is, without the kind of interruption just described—that an experience of motion obtains.

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place of a moving object, we see an object that does not exist (namely, a circle). For a discussion of the history of the example, see Larivier and Lennon (2002).

It is worth noting that, even though Locke focuses on the experience of motion, the distinction between succession and constant succession is broader. Consider, instead of a slowly changing visual object like an hour hand, a slowly changing sound. Locke would say that, unlike the experience of a *rapidly* changing sound, the experience of the slowly changing sound is *not* a constant succession. Thus, even though he focuses on the experience of motion, he is in fact highlighting a broader distinction that we can observe across many different sense modalities.

Much of Locke's discussion of the experience of motion concerns the relationship between perceptions in the mind and external objects. Locke claims that external objects can succeed one another at faster or slower speeds than perceptions succeed one another in the mind. His statement that 'there seem to be certain bounds to the quickness and slowness of the succession of those ideas one to another in our minds' concerns the speed of our perceptions *relative to the speed of external objects* (II.xiv.184-185). Objects that succeed one another at a speed *above* a certain limit will not register successive perceptions (as the examples of (1) show), while objects that succeed one another at a speed *below* a certain limit will not register *constantly* successive perceptions (as per the examples of (2)). Incidentally, Locke's talk of 'bounds' might evoke the notion of the specious present; however, Locke's 'bounds' are limits to the *speed* of perceptions, not to the duration of an experience. This dimension of Locke's discussion does not concern us here. What is crucial is that for Locke the experience of motion requires *constantly successive perceptions*. This characterization of the experience of motion is independent of his more metaphysically-fraught claims on the relative speeds of perceptions and external objects.

I propose that Locke's account of the experience of motion can be Hume's response to James' challenge. The difference between the experience of the second hand and that of the hour hand is that the different perceptions of the second hand succeed one another *constantly*, while those of the hour hand do so with interruptions; only the former comprise an experience of motion. A striking feature of Locke's account is that, unlike most other explanations of the phenomenon, it does not introduce a distinction between successions of perceptions and perceptions of succession. Locke states clearly that the experience of a slowly moving object is still an experience of succession—albeit of *interrupted* succession (II.xiv.12). In this way, Locke's account affords Hume a way to maintain the identity thesis against the alleged counterevidence: what is at stake in the phenomenon of the clock hands is not the experience of succession, but the experience of motion. The phenomenon proves that a succession of feelings is not always a feeling of *motion*, but not that it is not always a feeling of *succession*.

In §3.2.1, I discussed the example of listening to a musical melody—Hume's own choice of example (T 1.2.3.10 SBN 36)—to illustrate Hume's view that time is the successive arrangement of perceptions. The experience of the melody is an experience of time because it is made up of successive parts. Time is an aspect of the experience, namely, its successiveness. Locke's analysis clarifies an important circumstance in this example: experiences like that of a melody can manifest not only time, but motion as well; they do so when they are made up of *constantly* successive parts. In other words, time and motion are two distinct aspects of the experience. It seems to me that discussions of experiences like that of a melody or of watching a *second* hand often fail to disambiguate on which of



these two aspects is in question, that is, on whether the experience is being discussed as an experience of time or of motion.<sup>72</sup> Once we appreciate that the two are distinct, it becomes clear that what is missing in the experience of the *hour* hand is the experience of motion, not the experience of time.

It might seem that, in fact, Hume explicitly endorses Locke's account. In the course of presenting his theory of temporal experience, Hume refers to the example of circular motion and cites Locke's view that 'perceptions have certain bounds ... beyond which no influence of external objects on the senses is ever able to hasten or retard our thought' (T 1.2.3.7 SBN 35). As Larivier and Lennon have argued, however, Hume mentions Locke in this passage not in order to explain the experience of motion, but in order to corroborate his thesis that time is made up of temporal minima (Larivier and Lennon 2002, 515, 520). It is thus not obvious (at least not on the basis of this passage) that Hume endorses Locke's view. My proposal is only that he *could* endorse it.

### 3.3. Simultaneity

#### 3.3.1. The impression and idea of simultaneity

I interpret Hume's term 'co-existence' to be equivalent to 'simultaneity.' 'Simultaneity,' as we commonly understand it, denotes *existence at the same time*.<sup>73</sup> Hume's uses of 'co-

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<sup>72</sup> Broad, for instance, fails to distinguish between experiences of motion and experiences of change (i.e. succession) in his discussion of the clock-hands phenomenon. He discusses the experience of the second hand as an experience of something '*moving or changing*' (1923, 351). My point here is that the experience of the second hand is an experience of something changing insofar as it is successive, and an experience of something moving insofar as it changes *continuously*. The fact that the experience of the *hour* hand is not an experience of motion (because it does not change continuously) does not entail that it is not an experience of change.

<sup>73</sup> See the Oxford English Dictionary's entry for 'simultaneity.'

existence' throughout the *Treatise* clearly indicate a reference to the same notion; since Hume never uses 'simultaneity' or its cognates, it is most natural to assume that he does not assign 'co-existence' a separate meaning. In addition, Johnson's dictionary (1755) assigns 'co-existent' and 'simultaneous' the same meaning: *existing at the same time*.<sup>74</sup>

'Simultaneity' or 'existence at the same time' is clearly a *relation* between two or more objects; yet, upon closer inspection, it is not clear what this relation amounts to exactly in Hume's theory of time. Specifically, there seem to be at least two ways that we might interpret the nature of simultaneity.

First, we might understand simultaneity to be the relation of existing at the same *moment* or *part of time*. Since for Hume time is identical to a succession of objects, moments or parts of time can be nothing other than the objects making up the succession (Baxter 2008, 22). If moments are the objects making up a succession, for two objects to exist *at the same moment* is for them to co-constitute a complex object that is a member of a succession and that comprises them both. Here, it is important to realize that for Hume objects cannot exist at the same moment by being located in some moment or part of time extrinsic to themselves: time is the manner in which objects are disposed (T 1.2.3.7); there are no parts of time extrinsic to objects and in which they can be located, but rather, objects

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<sup>74</sup> See the dictionary's entries for 'co-existent' and 'simultaneous.' Baxter (2008) suggests that 'co-existence' refers to a *rough* coordination in time while 'simultaneity' refers to a *precise* coordination (41). However, in light of the considerations raised above, it is not clear that interpreting the terms as different in meaning is warranted. Baxter's distinction between rough and precise coordination in time is legitimate; however, this distinction only warrants a distinction between two kinds of simultaneity/co-existence: rough and precise simultaneity/co-existence. It does not warrant interpreting the terms to have different meanings, especially when the terms are most naturally used and read as equivalent.

themselves *are* the parts of time. Thus, for instance, the segments of a lightning stroke *exist at the same moment* in virtue of co-constituting a complex object (the lightning stroke) that is successive with other objects. If simultaneity is the relation of existing at the same moment, then, it is the relation of co-constituting a complex object in a succession of objects.

This interpretation requires further refinement to account for the fact that moments can be temporally complex or temporally simple. Moments can be temporally complex in that they can be made up of successive parts. However, Hume argues that no moment is *infinitely* divisible. Every succession is ultimately made up of temporally simple moments: moments that are not composites of successive parts (T 1.2.2.4). A temporally simple moment might still be divisible, but only into non-temporal parts. A lightning stroke, for example, might divide into spatial parts—the various segments of the stroke—even if it does not divide into temporal parts. If we interpret simultaneity as *existence at the same moment*, simultaneity requires not only that the simultaneous objects co-constitute a complex object in a succession: they must co-constitute a *temporally simple* object. Suppose that two objects—two successive notes in a melody, for instance—co-constitute a temporally divisible object, but not a temporally indivisible one. Insofar as each object belongs to a distinct *moment* of the complex object, the two do not ultimately exist *at the same moment of time*. Hence, the two are not simultaneous. Simultaneity would thus require not only the co-constitution of an object, but the co-constitution of a *temporally simple* object.

On this interpretation of the nature of simultaneity, simultaneity is reducible to a mereological relation—the relation of comprising a member of a succession. This characterization of simultaneity is consonant with the contemporary notion that simultaneous objects belong together in a ‘simultaneity plane.’ In contrast, the second alternative is to understand simultaneity as an *irreducible* relation. Rather than understand simultaneity in terms of the composition of moments, we might understand it as a temporal relation of its own—a relation that experience simply manifests and that is not definable in terms of other relations or properties. When we perceive the branches of a lightning stroke to be simultaneous, their simultaneity is simply the way they appear, in the same way that distance and contiguity are ways in which objects appear. Simultaneity, contiguity, and distance are *temporal* relations in that time, as a manner of disposition, comprehends these various relations; yet, they are not reducible to more basic properties of time.<sup>75</sup>

The second of these interpretations is ultimately more consistent with Hume’s theory. We can appreciate why by examining Hume’s criticism of the geometrical standard of equality. Hume criticizes geometrical standards in the course of rejecting the argument that geometrical demonstrations entail the infinite divisibility of space; insofar as these demonstrations rely on notions like perfect equality, which are only fictions, according to Hume, they cannot establish that space is infinitely divisible (T 1.2.4.17 SBN 44-45). In this discussion, Hume considers two ways of understanding the nature of geometric equality (equality being a relation between two figures, such as two lines). On the first

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<sup>75</sup> Baxter seems to propose a similar interpretation in construing co-existence as a *primitive* relation (2008, 37).

characterization, equality consists in *having the same number of points* (T 1.2.4.19 SBN 45). Recall that for Hume space is ultimately made up of indivisible points (§3.2.3); we might then understand two lines to be equal when the numbers of such points in each are equal. Hume rejects this characterization of equality:

But tho' this answer [i.e. that equality consists in having the same number of points] be *just*, as well as obvious; yet I may affirm, that this standard of equality is entirely *useless*, and that it never is from such a comparison we determine objects to be equal or unequal with respect to each other. For as the points, which enter into the composition of any line or surface, whether perceiv'd by the sight or touch, are so minute and so confounded with each other, that 'tis utterly impossible for the mind to compute their number, such a computation will never afford us a standard, by which we may judge of proportions. No one will ever be able to determine by an exact numeration, that an inch has fewer points than a foot, or a foot fewer than an ell or any greater measure; for which reason we seldom or never consider this as the standard of equality or inequality (T 1.2.4.19 SBN 45).

Hume argues that the perception of equality is never a comparison between *the number of points in two lines*. We would not be able to compute the numbers of points in two lines in order to compare them. Even if the lines *are* made up of a determinate number of points, these points are too 'minute' and 'confounded with one another' for us to be able to enumerate them. Thus, even though 'having the same number of points' is a '*just*' definition of equality, this definition does not correspond to the way we perceive and determine equality in practice.<sup>76</sup> Instead, Hume argues that the perception of equality is the perception of a certain 'appearance.'

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<sup>76</sup> Hume also considers a characterization of equality as *congruence*, but he argues that this characterization is at bottom the same as the number-of-points characterization (T 1.2.4.21 SBN 46-7).

There are many philosophers, who refuse to assign any standard of *equality*, but assert, that 'tis sufficient to present two objects, that are equal, in order to give us a just notion of this proportion. All definitions, say they, are fruitless, without the perception of such objects; and where we perceive such objects, we no longer stand in need of any definition. To this reasoning I entirely agree; and assert, that the only useful notion of equality, or inequality, is deriv'd from the whole united appearance and the comparison of particular objects. For 'tis evident, that the eye, or rather the mind is often able at one view to determine the proportions of bodies, and pronounce them equal to, or greater or less than each other, without examining or comparing the number of their minute parts. (T 1.2.4.22 SBN 47).

Hume here suggests that equality is not analyzable in terms of other relations or properties—especially not mereological properties like *having the same number of points*—but is simply an ‘appearance that spatial figures have in the eye’ (T 1.2.4.24 SBN 47). Equality is something we just notice upon comparing two figures.

This analysis of equality suggests that Hume would likewise resist a characterization of simultaneity as *existing at the same moment* (that is, as comprising a temporally indivisible object in a succession). The indivisible moments that make up a succession are just as ‘minute’ and ‘confounded with one another’ as the indivisible points that make up a line (T 1.2.4.24 SBN 28-29). We are not capable of discriminating temporally indivisible moments; hence, when we perceive two objects to be simultaneous, we do not do so by determining that they both belong to the same such moment. Instead, their simultaneity is their ‘appearance to the eye’—an appearance that is not reducible to other relations or properties. In short, the nature of simultaneity is analogous to that of spatial equality.

The analogy further suggests that, just as the mereological characterization of equality is *'just'* in Hume's lights, the mereological characterization of simultaneity is *also* just—it is problematic only in that it does not correspond to the way we actually perceive simultaneity. In addition, just as equality (as an appearance) is never exact, so simultaneity (as an appearance) is never exact (T 1.2.4.23-24 SBN 47-48). The reason that equality is never exact, according to Hume, is that any two lines that appear equal can always be found to be *unequal* upon a more rigorous comparison: for instance, we might find that one line is 1mm longer than the other upon measuring the lines with a ruler; if we then measure the ruler itself with a more exact instrument, we might find that the difference is of 0.9mm; if we then test this estimate with an even more exact instrument, we might find the difference to be 0.89mm; and so on. In the same way, simultaneity as an appearance is never exact, but always admits of subsequent corrections. Just as the notion of *exact equality* is a 'mere fiction' for Hume (T 1.2.4.24 SBN 47-49), the notion of *exact simultaneity* is also a fiction. Hume argues that we *imagine* a perfect standard of equality (i.e. exact equality) because the process of correcting our perceptions of equality time after time leads the mind to imagine an end to these corrections: a perfect standard that establishes definitively that two lengths are equal. Similarly, the process of correcting our perceptions of simultaneity also leads the mind to imagine a perfect standard of simultaneity.

If simultaneity is an 'appearance,' impressions of simultaneity are impressions that manifest that appearance, such as the impression of the branches of a lightning stroke, or the joint impressions of a lightning stroke and of the sound of rain. Ideas of simultaneity are ideas that copy and (as a result) mirror these impressions. Abstract ideas of simultaneity

are ideas that are attached to terms like ‘simultaneity,’ ‘co-existence,’ or ‘existing at the same time,’ and which thereby represent simultaneity as an aspect or point of resemblance across many different sets of objects.

### **3.3.2. Enduring objects: the co-existence thesis**

Hume’s theory of time implies that, because time can be neither experienced nor conceived as anything other than a succession of different objects (§3.2.1-2), an unchangeable object cannot be temporal—it can only be *temporally simple*. Hume recognizes that this implication is counterintuitive: we tend to think that objects like the lamppost outside my window endure, even if they are not successions of different objects. Hume explains the intuition that such objects are temporal as a *fiction* of the imagination: the streetlight does not endure, but our minds feign or make up the notion that it does (T 1.2.5.29 SBN 65; T 1.4.2.29 SBN 200-201).

I will offer an interpretation of how this fiction arises in the next section (§3.3.3). Before doing so, I want to address an existing interpretation by Baxter (2008). A critical component of Baxter’s interpretation is the suggestion that, on Hume’s view, a temporally simple object can co-exist with a succession of objects. As evidence that Hume holds this thesis, Baxter cites the following passages:

... when we consider a stedfast object at five-a-clock, and regard the same at six; we are apt to apply to it that idea [the idea of time] in the same manner as if every moment were distinguish’d by a different position, or an alteration of the object. The first and second appearances of the object, being compar’d with the succession of our perceptions, seem equally remov’d as if the object had really chang’d. To which we may add, what experience shews us, that the object was susceptible of such a number of changes betwixt these appearances... (T 1.2.5.29)



I have already observ'd [in the above passage], that time, in a strict sense, implies succession, and that when we apply its idea to any unchangeable object, 'tis only by a fiction of the imagination, by which the unchangeable object is suppos'd to participate of the changes of the co-existent objects, and in particular of that of our perceptions. (T 1.4.2.29)

Baxter reads the above passages as stating that an unchangeable object, though temporally simple, can nevertheless coexist with a changing object that does have temporal parts (2008, 31-32). An unchangeable lamppost can coexist with a succession of thoughts, or with a clock as it changes from 5:00 to 6:00. Baxter then argues that the reason the mind feigns temporally simple objects to be temporal is that, because such objects tend to be *co-existent with successions* (even if they are not themselves successions), it is easy for the mind to confound their co-existence with succession with actual succession (Baxter 2008, 31-41).

For brevity, I will refer to the thesis that a temporal simple can co-exist with a succession as the 'co-existence thesis' (CT). CT might seem paradoxical: if an object like the lamppost has no temporal breadth, how can it co-exist with a succession of different objects? Baxter argues that, despite initial appearances, CT is internally consistent. His argument relies on a nuanced interpretation of 'co-existence.' He implies 'co-existence' to be opposite to 'succession:' for instance, in his statement 'temporal parts are *successive, not co-existent*' (31) and in his formal definition of the term as the negation of any *earlier- or later-than* relation between two or more objects (39). At the same time, he implies co-existence to be distinct from 'an equivalence relation of simultaneity' (41). Unlike the latter type of relation, co-existence consists in a 'rough coordination' between the relata, rather than in a precise one (41). In other words, co-existence is distinct from the sort of perfect

standard of simultaneity discussed in §3.3.1. Using this notion of coexistence, Baxter presents a formal proof to show that CT is internally consistent (38-41).

As Falkenstein (2017[b], unpublished) notes, a problem with Baxter's defense of the plausibility of CT is that the formal definition of co-existence is purely negative; it postulates objects to be co-existent just as long as they are *not* disposed in succession. It would follow that temporally unrelated objects—an event in a fictional book and a historical event, for instance—are co-existent. Falkenstein proposes an alternative definition of co-existence as containment within a simultaneity plane (the first characterization considered in the previous section), and notes that this definition entails that CT is inconsistent. He argues that Baxter's argument is ultimately inconclusive in that it relies on a seemingly arbitrary definition of co-existence.

My analysis of simultaneity (i.e. co-existence) yields a middle position on the question of the plausibility of CT. If simultaneity is an 'appearance' analogous to equality, it is metaphysically and phenomenologically plausible that *some* temporal simples can co-exist with *some* temporal complexes. For example, a temporal simple like a lightning stroke might be simultaneous with two successive sounds if the sounds are such that they *seem* to happen in an instant: the lightning stroke would be related to the two sounds by the sort of appearance that constitutes simultaneity. Yet, my analysis also suggests that it is phenomenologically inaccurate to suppose that a temporal simple can co-exist with a succession of objects if the succession exceeds a certain length. When the succession exceeds a certain length, the temporally simple object no longer seems related to the *entire* succession by an appearance of simultaneity. The experience of a lamppost from 5:00 to

6:00 does not manifest the appearance of a temporally *simple* object co-existing with *all* of the movements in the changing clock. Instead, it manifests the appearance of a temporally *complex* lamppost, the temporal parts of which are simultaneous with different movements in the clock. I conclude that, although the co-existence thesis *is* plausible, which temporal simples co-exist with which temporal complexes is an empirical matter; more specifically, it would be contrary to experience to suppose that a temporal simple can co-exist with a succession *regardless of the succession's length*.

In contrast to Falkenstein's view, my view is that CT is plausible because co-existence consists in an 'appearance' (not in a relation of containment in a simultaneity plane) and because a temporal simple can be related to a (short) succession by this appearance. In contrast to Baxter's view, however, I hold that the relation described in T 1.2.5.29 (i.e. the relation between a temporally simple object and a clock's movements from 5:00 to 6:00) is *not* a relation of co-existence, because it does not manifest the sort of appearance characteristic of co-existence.

I noted earlier that Baxter gives evidence that Hume held CT. Indeed, the passages Baxter cites suggest that Hume held the *unqualified* version of CT—that a temporal simple can co-exist with a succession even when the succession is as long as the succession from 5:00 to 6:00. This evidence can be reassessed, however.<sup>77</sup> Of the passages Baxter cites, the passage that most strongly suggests the unqualified version of CT is T 1.4.2.29, where Hume states, '... 'tis only by a fiction of the imagination, by which the unchangeable object

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<sup>77</sup> Rocknak (2013, 130-137) also challenges the evidence for the CT reading in arguing that Hume rejects the possibility of perceiving constant or invariable objects.

is supposed to participate of the changes of the co-existent objects [i.e. the changes from 5:00 to 6:00].’ That Hume asserts CT in this sentence is not as clear as Baxter supposes. Hume could be referring to co-existence between the unchangeable object and the changes as part of the ‘fiction of the imagination,’ that is, as part of what ‘is supposed.’ In other words, it is ambiguous whether Hume is proposing that the objects co-exist or whether he is instead proposing that we *feign* that they co-exist. The other passages that Baxter cites in support of his reading (i.e. T 1.2.5.29, T 1.2.3.7, and T 1.4.2.33) do not explicitly mention a relation of co-existence between temporal simples and temporal complexes.

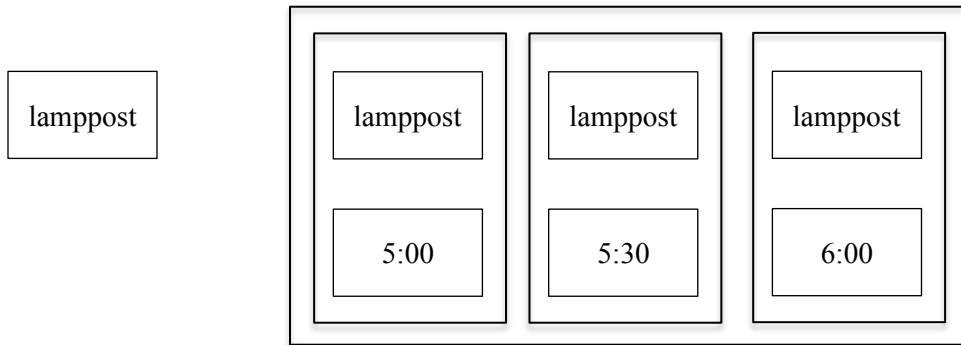
More importantly, even if Baxter were correct in interpreting Hume to hold the unqualified version of CT, it is not clear that the thesis is essential to Hume’s account of the fiction of endurance (or to his theory of time more generally). In §3.3.3, I offer an interpretation of the formation of the fiction of endurance that does not rely on CT. Thus, if we assume that Baxter’s reading of the foregoing passages is correct, I hope to have shown at the very least that the unqualified version of CT is neither a thesis that Hume *should* have held nor one that he *needed* to hold for the purposes of explaining the fiction of endurance.

### **3.3.3. Enduring objects: the formation of the fiction**

On Baxter’s interpretation of Hume’s account of how we form the fiction of an enduring unchangeable object, CT (unqualified) plays a crucial role in the account. My denial that Hume holds CT (unqualified) thus raises a need for an alternative interpretation of the fiction.

Hume uses ‘fiction’ to refer to an idea that the imagination feigns or invents, specifically, the idea of an object having some feature or aspect even though the object cannot be experienced as having that aspect (Traiger 1987, 386; Ainslie 2015, 66; Cottrell 2016, 49-50). He regards the notion of an enduring steadfast object as a fiction because steadfast objects cannot be experienced as having duration. Hume explains that fictions arise from our imagination *confounding* two resembling (or otherwise closely associated) ideas: when two ideas, X and Y, resemble each other, the imagination, confounding them, feigns that an aspect of X applies to Y, even if Y is incompatible with that aspect (Traiger 1987, 385-6; Baxter 2008, 44; Ainslie 2015, 79-80; Cottrell 2016, 52). On this explanatory model, our imagination feigns that an unchangeable object has duration because the idea of it somehow resembles and is easily confounded with that of a succession of objects. Baxter explains the relevant resemblance as the resemblance between the following ideas: the idea of an unchangeable object coexisting with a succession (even a lengthy succession) and the idea of several qualitatively identical objects each coexisting with each member of a succession (45). On a rejection of CT (unqualified), these ideas and their resemblance cannot be the source of the fiction because we would not have the first idea (or, if we have it, the idea is part and parcel with the fiction, rather than its source). What resemblance, then, induces the imagination to confound an unchangeable object with a succession?

I propose that the resembling ideas giving rise to the fiction are, first, the idea of an unchangeable object, and, second, the idea of a series of *qualitatively* unchangeable but numerically distinct objects against a background of changes in a clock.



Idea 1

Idea 2

In the lamppost case, we form an idea of the lamppost as a single unity (Idea 1), and a second idea of it as a series of qualitatively identical, but numerically distinct parts, each of which co-exists with movements of the clock (Idea 2). We form Idea 1 by abstraction: insofar as an experience of an array of objects can be distinguished into discrete parts, we can form ideas of those parts as single unities. We form Idea 2 by abstraction as well—by distinguishing between the various parts that constitute the experience of the lamppost against a changing background. Idea 1’s lamppost is unchangeable and temporally simple. Idea 2’s lamppost is made up of successive parts. The ideas’ resemblance induces the imagination to feign that the lamppost as a single unity is also successive. In this way, we come to imagine the lamppost as unchangeable yet enduring. Thus, Hume can account for the origin of the fiction of endurance in two resembling ways of thinking of an object: as a single unity, on the one hand, and as a succession of qualitatively identical objects against a changing background, on the other.

### 3.4. Tense

#### 3.4.1. The idea of tense

By the ‘idea of tense,’ I refer to the idea of what J. Ellis McTaggart calls the ‘A series.’ McTaggart distinguishes between two ways of conceiving of time. We might conceive of time as a series of positions that are related to each other by earlier- and later-than relations; he calls this series the ‘B series.’ We might instead conceive of time as a series where, in addition to earlier- and later-than relations, positions have the characteristics of being past, present, or future—the ‘A series.’ The concept of the B series is a concept of *tenseless* time; on the A series concept, in contrast, time is essentially divided into past, present, and future (1908, 458).

For present purposes, I assume only (and uncontroversially) that we have an idea of the A series. I do not assume any position on the vexed issue of whether this idea corresponds to reality, or on the similarly vexed issue of which of the two conceptions of time best captures the essence of time.

Hume’s theory of time explains only the idea of a B series—it explains the idea of a series of successive objects, but not that of a series of past, present, or future objects. Given the prominent role the idea of the A series plays in our mental lives, however, a complete theory of the psychology of time must account for its nature and origins. Moreover, given how puzzling the empirical origins of this idea seem to be, accounting for the idea is especially crucial for content empiricists.

The Treatise section that most closely broaches the subject of tense is T 2.3.7, ‘Of contiguity and distance in space and time.’ In that section, Hume aims to explain *not* the

content or origin of ideas of past, present, and future, but their *effects* on the imagination and the passions—for instance, why ideas are fainter the further their objects are into the past or the future, and why ideas of past objects are fainter than ideas of equally removed future objects. In what follows, I propose a specification of the content of the idea of the A series that is harmonious with Hume’s discussion in that section. In the next section, I propose a theory of the origin of the idea. My aim is to dispel doubts about the feasibility of a Humean theory of the idea of tense.

Before turning to the content of the idea of the A series, it is important to distinguish the idea of the A series from the idea of time’s *directionality*. We represent time as directional or anisotropic in that we represent it as having a beginning-to-end order. A succession like ‘do re mi fa sol’ cannot be replicated by the same notes ordered in the reverse because the order is significant. In contrast, our idea of space is isotropic in that we do not think of space’s parts as ordered from first to last; we do not think of the North American continent as beginning in the Atlantic and ending in the Pacific, or vice versa. While our notion of time as directional *influences* our notion of tense—it leads us to represent past, present, and future as a beginning-to-end sequence—the two notions are distinct. We can represent time as directional *without* representing it as divided into past, present, and future—and vice versa.

In the course of explaining why ideas of future objects have stronger emotional effects than ideas of past objects, Hume posits as a feature of the imagination that ‘from the consideration of any object [we] pass more easily to that, which follows immediately after it, than to that which went before it’ (T 2.3.7.7 SBN 430). In other words, the idea of



a member of a succession transitions much more easily to the idea of the subsequent member than to that of the precedent. Having heard five successive notes, for instance, the first five notes of Mozart's 'Turkish March,' a representation of the second of these notes leads immediately to a representation of the third, yet we can only follow it with a representation of the first by exerting some effort. In this respect, time is unlike space: the idea of a member of a spatial arrangement leads just as easily to the idea of the member to the left as to the idea of the one to the right. Hume does not explain *why* the imagination functions in this order; a possible explanation is that causation, one of the most extensive principles of association, is asymmetrical. While more explanation is required, this feature of the imagination seems a likely source of the idea of time as directional (even if the feature itself has a source in more basic features).<sup>78</sup>

I propose that the Humean idea of the A series is the idea of a succession of objects where one object is salient in degree of liveliness. Such an idea represents a succession as divided into the salient object (the present), the objects earlier to the salient object (the past), and the objects later to the salient object (the future). Thus, my idea of a succession of musical notes is an idea of an A series when, in addition to representing the succession, the idea represents a note in the succession as salient, or as especially lively.

Thus, the idea of a present object is the idea of the salient member in a succession; that of a past object the idea of an object *earlier to* the salient object; that of a future object the idea of an object *later to* the salient object. I represent sitting at my desk as present by

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<sup>78</sup> Note that, on this proposal, the idea of time's directionality derives not from the ease of transitioning from one impression to another, but from the ease of transitioning from an *idea* representing a member of a succession to the idea representing the subsequent member.

representing it, first, as part of a succession involving various events like waking up and going outside, and second, as salient (that is, *livelier*) relative to those other events. I represent going to kindergarten as past by representing it as earlier to a salient event like sitting at my desk. I represent travelling on a self-driving car as future by representing it as later to sitting at my desk.

T 2.3.7 lends support to this specification of the idea of the A series:

There is an easy reason, why every thing contiguous to us, either in space or time, shou'd be conceiv'd with a peculiar force and vivacity, and excel every other object, in its influence on the imagination. Ourself is intimately present to us, and whatever is related to self must partake of that quality. But where an object is so far remov'd as to have lost the advantage of this relation, why, as it is farther remov'd, its idea becomes still fainter and more obscure, wou'd, perhaps, require a more particular examination.

'Tis obvious, that the imagination can never totally forget the points of space and time, in which we are existent; but receives such frequent advertisements of them from the passions and senses, that however it may turn its attention to foreign and remote objects, it is necessitated every moment to reflect on the present. 'Tis also remarkable, that in the conception of those objects, which we regard as real and existent, we take them in their proper order and situation, and never leap from one object to another, which is distant from it, without running over, at least in a cursory manner, all those objects, which are interpos'd betwixt them. When we reflect, therefore, on any object distant from ourselves, we are oblig'd not only to reach it at first by passing thro' all the intermediate space betwixt ourselves and the object, but also to renew our progress every moment; being every moment recall'd to the consideration of ourselves and our present situation. 'Tis easily conceiv'd, that this interruption must weaken the idea by breaking the action of the mind, and hindering the conception from being so intense and continu'd, as when we reflect on a nearer object. The *fewer* steps we make to arrive at the object, and the *smoother* the road is, this diminution of vivacity is less sensibly felt, but still may be observ'd more or less in proportion to the degrees of distance and difficulty. (T 2.3.7.1-2 SBN 427-428)

This passage might suggest that Hume defines the present by reference to the self—or, more precisely, that for Hume something is present by being ‘contiguous to us,’ or contiguous to the self. However, insofar as the self can be past or future (T 1.4.6.20 SBN 262), contiguity to the self cannot be what makes an object present. Going to kindergarten and traveling on an electric car can be contiguous to my self—that is, to past and future parts of my self—yet not be present.

I read the passage, instead, not as defining the present or the idea of the present, but as *already presupposing* a notion of tense—specifically, a notion of a present-tense (in contrast to a past or future) self. The passage needs to be interpreted alongside a similar passage in Hume’s discussion of sympathy:

’Tis evident, that the idea, or rather impression of ourselves is always intimately present with us, and that our consciousness gives us so lively a conception of our own person, that ’tis not possible to imagine, that any thing can in this particular go beyond it. (T 2.1.11.4 SBN 317)

Hume restates two crucial points from this earlier passage in T 2.3.7: first, the observation that ‘ourself’ (the impression or idea of ourselves) is ‘intimately present to us;’ second, the observation that this ‘impression or idea of ourselves’ is highly lively. In observing that the self is ‘intimately present to us,’ Hume means that an idea of a *present-tense* self is always intimately present (i.e. *immediate*) to us.<sup>79</sup> While we sometimes represent the self

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<sup>79</sup> The adjective ‘present’ is often used ambiguously to refer either to *present-tense* or to a quality of *immediacy*. Hume seems to use it in the second sense when describing the self as ‘intimately present;’ however, as I argue above, what he is describing as ‘intimately present’ is the idea of a *present-tense* self. Unless otherwise noted, throughout this chapter I use the term ‘present’ to refer to *present-tense*.

as past or future, we always have an idea of it *as present-tense*. It is the idea of the self *as present-tense* that is highly lively: as T 2.3.7.2 explains, ideas of past and future selves are fainter in proportion as they are removed from ‘our present situation,’ so that, presumably, ideas of very distant selves or parts of the self cannot be said to be ‘highly lively.’ It is also the idea of the self *as present* that transfers liveliness to ideas of contiguous objects but not to ideas of objects that are removed from this *present* self in space or time. Note that, were Hume *not* referring specifically to an idea of a present-tense self in these passages, it would not be clear how the idea of the self would be highly lively, or, even if it were lively, how it would transfer liveliness to ideas of present objects but not to ideas of remotely past or future objects.<sup>80</sup> Hence, a notion of tense (of a present-tense self) already informs Hume’s explanation of the effects of ideas of tense on the imagination and the passions. Given these considerations, I interpret T 2.3.7.1-2 as follows:

There is an easy reason, why every thing contiguous to us [i.e. *to what we regard as our present-tense selves*], either in space or time, shou’d be conceiv’d with a peculiar force and vivacity, and excel every other object, in its influence on the imagination. Ourself is intimately present to us [i.e. *we always have an idea of the self as present-tense*] and whatever is related to self [i.e. *the self we represent as present-tense*] must partake of that quality [i.e. *liveliness*] ...

’Tis obvious, that the imagination can never totally forget the points of space and time, in which we [*our present-tense selves*] are existent ...

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<sup>80</sup> The locution ‘the consideration of ourselves and our present situation’ at T 2.3.7.2 clearly suggests that the idea of self at work in enlivening ideas of present but not future or past objects is an idea of a *present-tense* self. The first sentence of T 2.3.7.2 treats ‘the points of space and time, in which we are existent’ as semantically equivalent to ‘the present;’ since the self can exist in the past and the future, by ‘we’ Hume refers specifically to we-in-the-present.

It is beyond the scope of my present aims to unravel the many interpretive ambiguities in these passages, or to address well-known puzzles about Hume's account of the self. For the purposes of explaining the idea of the A series, I limit my reading of the passages to the conclusion that they already presuppose a notion of tense.

While T 2.3.7 does not provide an account of the idea of tense, some of Hume's observations corroborate the account I have proposed. The notion that 'we take [objects that we regard as real and existent] *in their proper order and situation*' is consonant with my specification that ideas of objects as past, present, or future represent them as members of a succession. Moreover, the notion that the idea of our present-tense self, as well as the ideas of objects contiguous to it, are 'conceiv'd with a peculiar force and vivacity' dovetails with my suggestion that when we represent an object as present we represent it as salient in degree of vivacity. To be sure, T 2.3.7 does not assert that the ideas of present-tense objects represent *the objects* as peculiarly lively—it asserts only that *the ideas themselves* are peculiarly lively. Yet, as noted in §1.3.2, there is a close affinity between an idea's properties and the properties of the objects it represents, since having certain properties better enables an idea to mirror objects that have those properties. Thus, the notion that ideas of present-tense objects are peculiarly lively seems harmonious with my specification of the *content* of those ideas as peculiarly lively objects.

#### **3.4.2. The origin of the idea of tense**

Provided that the foregoing specification of the idea of tense is plausible, we have yet to determine its origin. It might seem that T 2.3.7 offers the following explanation: the idea of the self enlivens the ideas of the objects contiguous to the self; as a result, the ideas of a

certain set of objects are especially lively; this liveliness, in turn, results in the ideas mirroring especially lively objects (i.e. in their assuming the objects' causal or functional role), and hence representing especially lively objects. However, as I observed above, T 2.3.7 *already* presupposes that the mind has a notion of tense in that the idea of the self that it appeals to is the idea of a *present-tense* self. We still need an explanation of how we form the idea of a present-tense self in the first place. If so, it is simpler to look for the origin of ideas of tense in a place other than the idea of the self—that is, in a principle that explains *both* how we form ideas of the self as past, present or future *and* how we form ideas of any other object as past, present, or future.

Unlike time and simultaneity, tense is not an aspect that impressions instantiate. Impressions are never disposed as members of a succession where one member is especially lively with respect to the rest. Phenomenologically, every member of every succession of impressions seems indistinguishable from the rest in its degree of liveliness. In listening to a melody, for instance, each note impression seems to 'strike upon the mind' with just as much liveliness as the rest. It might be tempting to suggest that each impression in the succession is especially lively *at a different time*. However, insofar as this suggestion requires a time extrinsic to the impressions, it is incompatible with Hume's theory of time. Moreover, as McTaggart famously argues, this suggestion would be paradoxical in that it would imply an infinite regress of times: a time in which the impression is present, then a time in which *the time the impression is present* is present, then a time in which *the time in*

*which the time [the impression is present] is present* is present, and so on (McTaggart 1908, 468-469).<sup>81</sup>

Since impressions do not instantiate tense, the causes of the representation of tense cannot be straightforwardly attributed to an idea's *copying* an impression that instantiates tense (§1.3.2). In his account of *relative ideas*, Hume suggests that ideas can represent objects as related as a result of the imagination combining ideas of the objects with ideas of relations (T 1.2.6.9 SBN 68). For instance, by combining the idea of a prime number with the idea of the relation 'larger than all other prime numbers,' the imagination forms an idea of 'the largest prime number,' which is not a copy of the largest prime number (Garrett 2006, 305). I propose that the imagination forms the idea of an object as past, present, or future in the same way: by combining the idea of the object with ideas of relations like 'successive with,' 'earlier than,' 'later than,' 'livelier than,' or 'less lively than.'

What processes induce the mind to form ideas of tense, or to attribute ideas of the aforementioned relations to objects? A viable general principle as to the causes of ideas of tense is the following: *when an idea of a succession is itself simultaneous with an impression of a member of the succession, the idea represents that member as especially lively*. I will refer to this principle as the 'tense principle' (TP).

Suppose I have an idea of a succession a member of which is of sitting at my desk. This idea might have originated from a corresponding impression of succession (i.e. as a

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<sup>81</sup> More specifically, McTaggart argues that, if we account for an object's changeable tense properties by positing times in which it has those properties, we would then need to explain how those 'times' themselves have changeable tense properties; doing so would then require us to posit second-removed 'times,' which would in turn require us to explain how *those* 'times' have changeable tense properties, which would require us to posit third-removed 'times,' and so on.

memory), from an inferential process, or even from a non-inferential imaginative process. TP prescribes that, if the idea is simultaneous with an impression of sitting at my desk, the idea attributes a salient degree of liveliness to sitting at my desk as opposed to the earlier and later members of the succession. The idea thus represents sitting at my desk as present, the preceding objects as past, and the succeeding objects as future.

Some clarificatory remarks about TP are in order. First, TP does not posit a condition for an idea's *being present*, but only for its *representing tense*. An idea might represent a succession and be simultaneous with an impression of one of the objects in the succession, yet not itself be present (or represented as present by another idea)—for instance, an idea I had as a child. TP prescribes that such an idea represents its object as present, but not that the idea is itself present.

Second, TP posits a *sufficient* but not a necessary condition for the representation of tense. An idea can represent tense without meeting the condition specified by TP. An idea of an event in a distant place might represent it as present without being simultaneous with an impression of the event. I propose TP as an account of the basic process that *generates* the idea of the A series. Higher-order processes can apply the concept of the A series to produce further representations without involving the TP process.

Third, in keeping with my argument in §3.3.1, the simultaneity in question consists in an 'appearance' analogous to equality, *not* in a relation of existing at the same moment. Because the idea of a succession is itself made up of temporal parts (§3.1.2), it cannot be confined to a temporally indivisible moment, and hence cannot be simultaneous with an impression of a member of the succession in the sense of existing at the same moment. As



I have shown, however, simultaneity is best understood as an appearance. The idea of a succession and the impression of a member of the succession *can* be simultaneous in the sense of manifesting this appearance.

Fifth and last, TP might be an ‘original quality’ alongside the principles of association (§1.3.1). An explanation might be demanded as to *why* simultaneity with an impression causes an idea to represent the impression’s object as especially lively. Hume’s methodological dictum that some features of the mind do not admit of further explanation suggests that such a demand might be misplaced. Just as ideas’ association on the basis of resemblance does not admit of explanation, ideas’ representation of presentness on the basis of simultaneity with impressions could be a regularity we observe but whose roots are beyond the scope of scientific investigation.

Even though Hume himself does not advance TP or any comparable principle, and even though I have not here evaluated TP’s merits against those of alternative explanations, TP is at the very least an indication of the potential of Hume’s psychology to encompass an account of the origin of the idea of tense.

### **3.5. Conclusion**

Hume’s view that experiences of time do not just *represent* time, but are themselves *instances* of time, anticipates contemporary *extensionalist* approaches to temporal experience—approaches that view experience as temporally extended (Dainton 2011, 2017[a], 2017[b]). Hume’s own extensionalism is integrated with content empiricism: it is motivated by, and it lends support to, Hume’s commitment to tracing the contents of all mental representations to experience. Given that impressions instantiate time, the contents

of our temporal concepts are grounded in impressions that instantiate those contents. In this respect, a reassessment of Hume's theory like the one I have offered presents an especially sharp counterpoint to the Reidian-Kantian assumption—common among both contemporary philosophers and Hume scholars—that temporal concepts cannot be understood in terms of experience alone.

As a step in grounding temporal concepts in experience, Hume argues that time is identical to succession. In this chapter I have argued that this thesis is not as crude as it might initially appear. Hume can account for the most often-noted counterexample—the difference between slowly and rapidly changing objects—by invoking Locke's distinction between constant and interrupted successions. He can also characterize simultaneity as an appearance analogous to geometric equality. Furthermore, he can explain how we imagine unchanging non-successive objects as temporal by observing our propensity to confound two resembling ways of viewing objects—as unities or as parts of temporal complexes. Finally, he can explain the idea of tense as the idea of a succession a member of which is salient in degree of liveliness, and, in addition, formulate a general principle regulating the causes of ideas of tense—what I have called the 'tense principle.' As we will see in the next chapter, when Hume's theories of belief and epistemic value are also taken into account, a more extensive theory of knowledge of the past comes into view.

## CHAPTER 4: KNOWLEDGE OF THE PAST

### 4.1. Introduction

My aim in this chapter is to explain how Hume's theories of memory and time, as clarified in the previous chapters, fit within Hume's theories of belief and knowledge. I show that Hume's views on these various subjects in fact comprise a cohesive epistemology. In the first part of the chapter, I show that Hume's theories of memory and belief, together with the 'tense principle' (§3.3), imply that for Hume memories are beliefs about the past (§4.1.1). I also show that Hume's theory of causal inference can be applied to explain non-mnemonic belief about the past (§4.2.2). In the second part of the chapter (§4.3), I address the question of the epistemic status of these beliefs—whether Hume can account for their epistemic value. Hume's views on epistemic normativity are notoriously difficult to interpret and continue to be at the center of many scholarly debates. I aim to show that, as I have explained them, beliefs about the past and the processes giving rise to them raise no *unique* skeptical challenges. The numerous theoretical resources that interpreters have unveiled for explaining the epistemic merit of other beliefs can be applied to beliefs about the past as well. Thus, while it is beyond the scope of this dissertation to develop an interpretation of Hume's theory of epistemic normativity, I show that the theory of belief about the past here developed can be consolidated with existing interpretive approaches. Hume's theories of memory, time, and belief about the past cohere with and reinforce the positive naturalistic epistemology for which Hume is currently recognized.

## 4.2. Belief about the past

### 4.2.1. Belief

Hume uses ‘belief’ to refer primarily to belief in *matters of fact*. Matters of fact are facts ‘concerning the existence of objects or of their qualities,’ which can be discovered only through empirical observation (T 1.3.7.2 SBN 94), in contrast to ‘demonstrative facts,’ which are facts about objects that ‘depend entirely on the ideas’ and can be discovered by simply contemplating ideas (T 1.3.1.1 SBN 69). It is not clear whether Hume regards demonstrative facts as objects of belief, or instead of a distinct state of ‘knowledge’ or ‘assurance’ (T 1.3.1.2 SBN 70). He suggests that belief in demonstrative facts consists in an inability to conceive the contrary of the fact (T 1.3.7.3 SBN 95). For example, the belief that all triangles have three sides consists in the impossibility of thinking of a triangle without three sides. This kind of belief will not concern us here. Most of our beliefs about the past are beliefs in matters of fact. Although demonstrative facts can concern the past, our belief in them does not help to explain what is distinctive about beliefs about the past (as opposed to beliefs with other contents). Henceforth, I restrict ‘belief’ to belief in matters of fact.

Hume suggests that sensations and memories are always attended with belief (T 1.3.5.7 SBN 86). He spends much of Book I, Part III explaining the conditions under which an idea of the imagination is attended with belief (T 1.3.7-13). While the details of Hume’s theory of belief have been interpreted differently, a clear theme of the theory is the assimilation of belief in ideas of the imagination (including belief in the conclusions of inductive inferences) to the belief that attends sensations and memories: ‘all probable

reasoning is nothing but a species of sensation' (T 1.3.8.12 SBN 103). Belief in one case seems to have a *common nature* with belief in the other. More specifically, Hume suggests that belief in all these cases consists in the *liveliness* of a perception:

...the *belief* or *assent*, which always attends the memory and senses, is nothing but the vivacity of those perceptions they present (T 1.3.5.7 SBN 86)

An opinion, therefore, or belief may be most accurately defin'd, a lively idea related to or associated with a present impression (T 1.3.7.5 SBN 96).

This assimilation of belief to a sensory quality is in fact one of Hume's most important innovations (see, e.g. Kemp Smith 1941, 43-44, 210-211; Owen 2003; Marusic 2017). Hume consciously breaks with the scholastic notion that belief consists in predicating, or in combining ideas (T 1.3.7.n20 SBN 96), as well as with the Cartesian notion that belief consists in an act of the will (T Appendix 20 SBN 623-4).

Since my aim is to examine the nature, causes, and justification of *belief about the past* in particular, I will here sidestep much of the scholarly debate on how to interpret Hume's views on the nature of *belief in general*. One debate, for instance, is whether belief should be interpreted as an *occurrent* or *dispositional* feature of the mind: as a feature of the way a mind *is* at a given moment, or as a feature of how it is *prone* to be over time.<sup>82</sup> My analysis will remain neutral between the different positions in this debate. I will assume only: (1) that memories are always attended with belief (as per Hume's statement above);

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<sup>82</sup> The occurrent interpretation is the standard interpretation. The most in-depth defense of the dispositional interpretation is Loeb (2002), but see also Everson (1988), MacNabb (1951, 69-81), Price (1969, 186-8), Armstrong (1973, 70-72), and Stroud (1977, 74). For a defense of the occurrent interpretation against Loeb's arguments, see Marusic (2010).

(2) that a suitable association to an impression or memory causes an idea of the imagination to be attended with belief (as per Hume's observations in T 1.3.8). These assumptions are compatible with belief being either an occurrent or dispositional feature.

In what follows, I use 'belief' as shorthand for 'a perception that is attended with belief.' I discuss two kinds of belief about the past: mnemonic and non-mnemonic. Since for Hume memory is always attended with belief, a memory that represents the past—as most memories do—constitutes a belief about the past. The challenge to explaining these mnemonic beliefs is not explaining how memories come to be attended with belief—for Hume, memories' belief (i.e. their liveliness) is a brute fact about them—but explaining how they come to represent the past. Recall that memories do not represent the past as a matter of brute fact (§2.4); an explanation of how they do so is required (§4.2.2). Non-mnemonic beliefs about the past are ideas of the imagination that represent the past and are attended with belief. The primary cause of these beliefs is causal reasoning. I will discuss the main kinds of causal inferences that result in non-mnemonic beliefs about the past (§4.1.2). I here assume (uncontroversially) that sensations do not represent the past; hence, I do not discuss sensory belief about the past.

#### **4.2.2. Mnemonic belief about the past**

In Chapter 3, I proposed that the *content* of an idea of tense is a succession of objects where one object is salient. In addition, I proposed that what *causes* an idea to represent an object as salient is its simultaneity with an impression of that object. Thus, when an idea of a succession of objects is simultaneous with an impression of a member of the succession, the idea represents that member as salient. I referred to this principle as the 'tense principle'

(TP). In representing an object as salient, other objects as *earlier* to the salient object, and other objects as *later*, the idea represents present, past, and future, respectively (§3.4).

We can explain why most (if not all) memories represent objects as past by understanding them to be ideas that represent successions and that are themselves simultaneous with impressions of members of those successions. My memory of walking to my desk recently, for instance, represents it as past by representing it as part of a succession of events (such as walking to the desk, sitting down, and typing this sentence) and being itself simultaneous with an impression of a member of the succession (i.e. typing this sentence). Similarly, my memory of going to kindergarten represents it as past by representing it as a member of a succession (a succession culminating with typing this sentence) and being simultaneous with an impression of a member of the succession (i.e. typing this sentence). TP prescribes that, thus understood, memories represent their objects as past (i.e. as earlier to typing this sentence, which they represent as present).

It seems *prima facie* plausible to understand the representational contents of memories in this way. In Chapter 1, we saw that impressions generally give rise to ideas that represent the objects or states of affairs that they (the impressions) present (§1.2.4). Since impressions in fact present the successions described above, the mind naturally has ideas of these successions. These ideas are memories in virtue of their isomorphism to the impressions and their liveliness. In addition, as Hume observes in T 2.3.7.2, the representation of matters of fact is always holistic in that it encompasses objects' spatiotemporal locations:

'Tis obvious, that the imagination can never totally forget the points of space and time, in which we are existent; but receives such frequent

advertisements of them from the passions and senses, that however it may turn its attention to foreign and remote objects, it is necessitated every moment to reflect on the present. 'Tis also remarkable, that in the conception of those objects, which we regard as real and existent, we take them in their proper order and situation, and never leap from one object to another, which is distant from it, without running over, at least in a cursory manner, all those objects, which are interpos'd betwixt them. When we reflect, therefore, on any object distant from ourselves, we are oblig'd not only to reach it at first by passing thro' all the intermediate space betwixt ourselves and the object, but also to renew our progress every moment; being every moment recall'd to the consideration of ourselves and our present situation.

Ideas never represent matters of fact in isolation, but always represent them 'in their proper order and situation' by representing their temporal and spatial relations to other objects. A similar point is suggested in the 'systems of realities' passage in T 1.3.9.3. In particular, ideas seem to always represent matters of fact in relation to the present point of time, by representing them as members of a succession leading to or starting from that point. Memories are no different in this respect.

It might be objected that this account over-intellectualizes the representational capacities of ideas. While it would be unproblematic to suggest that ideas represent successions that span certain limits (such as walking to the desk, sitting down, and typing this sentence) it seems like an exaggeration of our intellectual capacities to suggest that ideas represent successions spanning many years in a person's life (like a succession from going to kindergarten to typing this sentence). It is important to recognize, however, that in representing objects as members of long-ranging successions ideas need not *depict* these successions in their entirety, but need only 'run over them *in a cursory manner*.' In his account of abstract ideas, Hume observes that ideas can represent many more objects than



they depict by means of a ‘power’ or ‘readiness’ to elicit depictions of those objects (T 1.1.7.7 SBN 20-21). An idea can represent the class of all triangles, even though it depicts only a particular triangle, by being associated with the term ‘triangle,’ and thereby being disposed to elicit a depiction of any other particular triangle as the situation requires it; in virtue of being so disposed, the idea plays the causal-functional role of the class of all triangles, and thus represents it (§1.3.2). Hume describes this representational capacity as representation by ‘abridgment:’ an idea abridges the depiction of many objects to the depiction of one or a few, since it can represent the remaining objects by a disposition to depict them. The same abridgment occurs in our mental representation of large numbers, long sequences of words, or highly complex ideas like those of government, church, or negotiation (T 1.1.7.12-14). As Hume observes, we find ‘but few inconveniences to arise’ from representing objects in this way (T 1.1.7.7 SBN 20-1).

Thus, my memory of going to kindergarten might depict only going to kindergarten, typing this sentence, and a few connecting events, but still represent the entire succession by being disposed to elicit depictions of any other event in it as the situation requires it; in virtue of this disposition, the idea plays the causal-functional role of the succession, and thus represents it (§1.3.2). What distinguishes this memory from the memory of a more recent event is that the former is disposed to elicit depictions of a greater number of connecting events: for instance, were one to claim that the creation of Google was prior to my going to kindergarten, my memory of kindergarten would immediately raise a depiction

of the correct sequence, while a memory of a more recent event might not.<sup>83</sup> Thus, we need not over-intellectualize our representational capacities in suggesting that ideas routinely represent long-ranging successions: in the same way ideas represent general kinds and large numbers, ideas represent long-ranging successions by abridgment—by depicting *some* members of the succession and representing the rest by a disposition to depict them.

In sum, mnemonic beliefs about the past are the product of three circumstances: first, an idea's representation of a succession of objects (this idea itself arises from impressions that *present* the succession of objects); second, the idea's liveliness; and third, the idea's simultaneity with an impression of an object in the succession (as per TP, this simultaneity entails the idea's representation of that object as present and of the preceding objects as past).

As we saw in Chapter 2, Hume's theory of memory raises the question of how we can know that some ideas are isomorphic with past impressions (§2.3.2). Our analysis of mnemonic belief here suggests that, when we believe that a memory is isomorphic with a past impression, we often entertain a mnemonic belief. Indeed, Hume explicitly mentions that some of our ideas represent other ideas (T 1.1.1.11 SBN 6-7; 1.3.8.16 SBN 106). He labels the idea of an idea a *secondary* idea, and the idea that is its object a *primary* idea (T 1.1.1.11 SBN 6-7). He also observes that secondary ideas can be *memories* of primary ideas: they can have superior degrees of liveliness and be isomorphic with the primary idea (T 1.3.8.16 SBN 106). (Note that, while ideas are typically lively as a result of an

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<sup>83</sup> See T 1.1.7.8 for an analogous explanation of how the abstract idea of a triangle represents the correct range of the set (i.e. all triangles), as opposed to representing only a subset (e.g. all equilateral triangles).

association to an impression, Hume takes pains to explain that a connection to a *primary* idea can be a source of liveliness for a *secondary* idea [T 1.3.8.15-16]). When the primary idea is itself a memory, the secondary idea is a *memory of a memory*. As per T 2.3.7.2, secondary memories represent primary memories not in isolation, but ‘in their proper order and situation,’ that is, as members of successions leading to the present point of time. In representing these successions, secondary memories can, and often do, represent impressions that are earlier to the primary memories in the succession and isomorphic with them. Given its liveliness, the secondary memory constitutes a *mnemonic belief* in the primary memory’s isomorphism with the past impression. Thus, our beliefs about memories’ isomorphism with past impressions have epistemic standing *qua* mnemonic beliefs; I discuss the epistemic justification of mnemonic beliefs in §4.2.

Note that, although a *tertiary* idea is required for the mind to know that the *secondary* idea is a memory (i.e. that it is isomorphic to a past idea), it is *not* required for knowing that the *primary* idea is a memory. The secondary idea is sufficient as a basis for belief in the primary idea’s isomorphism (whether or not we realize that the secondary idea is itself isomorphic). This belief has epistemic value, and is thus an instance of knowledge, in accordance with the considerations in §4.2.2. In other words, knowing that a primary idea is isomorphic does not imply an infinite regress of higher-order ideas.

#### **4.2.3. Non-mnemonic belief about the past**

Hume holds causal inference to be the primary cause of non-mnemonic beliefs about matters of fact: ‘of this nature [causal inference] are all our reasonings in the conduct of life: on this is founded all our belief in history: and from hence is derived all philosophy,

excepting only geometry and arithmetic' (A 10 SBN 650). Most non-mnemonic beliefs about the past can be attributed to causal inference.

In a causal inference, the mind transitions from an impression or memory to the idea of an object not present to the memory or senses; the mind would, for instance, transition from an impression of fire to an idea of heat, even though it has no impression of heat. Hume famously observes that this inference depends on a *constant conjunction* between experiences of a certain type of object and experiences of another type of object: it is only insofar as our impressions of objects resembling fire have been constantly followed by impressions of objects resembling heat that, upon an impression of fire, the mind transitions to an idea of heat (T 1.3.6.2-T 1.3.6.3 SBN 87-88). Hume argues, even more significantly, that this transition is not itself the result of reasoning, but of an associative act of the imagination, of 'a wonderful and unintelligible instinct' (T 1.3.16.9 SBN 178-9). The transition results not only in an idea, but also in an enlivening of that idea—that is, in the idea's being attended with belief (T 1.3.8.2 SBN 98-99).

This generic account of causal inference explains many ordinary non-mnemonic beliefs about the past. We might, for instance, form the belief that it rained upon seeing puddles in the street. Since impressions of puddles have been constantly preceded by impressions of rain, an impression of a puddle naturally raises an idea of rain. The idea of rain represents its object (i.e. the rain) 'in its proper order and situation,' that is, as part of a succession where the rain is earlier to the puddle. If the idea of the rain is itself simultaneous with an impression of the puddle (or with an impression of another object later in the succession), then, as per TP, the idea represents the rain as past. The idea is a

belief on account of being enlivened through its association with the impression of the puddle. In sum, a causal inference from an impression or memory often results in an idea that (a) represents the usual concomitant of the object given in the impression or memory, (b) represents it as part of a succession, (c) is simultaneous with an impression of an object in that succession, and (d) is a belief. This idea constitutes a non-mnemonic belief about the past.

Hume argues that inference from testimony—forming a belief in an object or event on the basis of a human report of it—is a type of causal inference:

It being a general maxim, that no objects have any discoverable connexion together, and that all the inferences, which we can draw from one to another, are founded merely on our experience of their constant conjunction; it is evident, that we ought not to make an exception to this maxim in favour of human testimony, whose connexion with any event seems, in itself, as little necessary as any other. (E 10.5 SBN 111-112)

He notes that inferences from testimony involve a transition from the impression/memory of an object (namely, a report) to the idea of a second object (namely, the event reported), where there is no ‘discoverable’ connection between the two (i.e. we cannot find a connection by inspecting the objects alone). Following the Newtonian directive to ‘explain all effects from the simplest and fewest causes,’ Hume maintains that the same explanation for other inferences of this sort applies to the inference from testimony: namely, the inference is the product of an experienced regularity and of an associative act of the imagination. Hume’s account has been interpreted as requiring that each of us repeatedly confirm the truth of reports we encounter before we are able to believe in the truth of a new

report (e.g. Coady 1992, 82; Lipton 1998, 15).<sup>84</sup> As it has been noted, however, this characterization of Hume's view oversimplifies much of what he says (e.g. Traiger 1993, Welbourne 2002, Gelfert 2010). Hume *does* observe that we are accustomed to find a 'conformity between testimony and reality' or between 'reports and facts,' and that this experienced regularity conditions our inferences from testimony (E 10.5 SBN 111-112; E 10.8 SBN 113); however, he emphasizes that our experiences with human nature and social conventions are also crucial to the conditioning at the root of the inferences:

Were not the memory tenacious to a certain degree; had not men commonly an inclination to truth and a principle of probity; were they not sensible to shame, when detected in a falsehood: Were not these, I say, discovered by *experience* to be qualities, inherent in human nature, we should never repose the least confidence in human testimony. (E 10.5 SBN 111-2)

The links ... that connect any fact with a present impression [i.e. of a historical report]... are all of the same kind, and depend on the fidelity of Printers and Copists. (T 1.3.13.6 SBN 146)

When we receive any matter of fact upon human testimony, our faith arises from the very same origin as our inferences from causes to effects, and from effects to causes; nor is there any thing but our experience of *the governing principles of human nature*, which can give us any assurance of the veracity of men. (THN 1.3.9.12, 78; my emphasis)

These passages suggest that for Hume inferences from testimony draw on a wealth of experiences—experiences not only of the truth of individual reports, but of common human

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<sup>84</sup> A variation of this reading is that Hume requires that each of us repeatedly confirm the truth of certain *types* of report before we can believe in the truth of a report of that type. Another variation is that this repeated confirmation is required for the *justification* of the belief in the report. In any event, the different versions of the reading see Hume as positing a sort of 'enumerative induction' as the basis of belief (or justified belief) in testimony.

character traits, linguistic practices, and social norms. Human subjects are immersed in these experiences from early childhood (we ought not attribute to Hume the view that we collect these experiences like data!). Indeed, as it has been suggested, these experiences form the basis *both* of our trust in testimony and of our language acquisition and development (Welbourne 2002, 415; Shogenji 2006, 340). Moreover, these experiences dispose us to infer a report's truth instinctively, rather than explicitly, much as the person coming across a river instinctively infers the danger of drowning, without any conscious reflection on past experiences: as Hume puts it, 'experience may produce a belief and a judgment of causes and effects by a secret operation, and without being once thought of' (T 1.3.8.13 SBN 103-4).<sup>85</sup> <sup>86</sup>

Inferences from testimony, together with linguistic representations of time and time-keeping conventions, are responsible for a large stock of our non-mnemonic beliefs about the past. They are responsible for most of our beliefs about history. Hume credits these inferences with 'peopling the world' (T 1.3.9.4 SBN 108); without them, given how limited our individual experiences are, we 'should be for ever children in understanding' ('Of the Study of History,' 1741/1987, 566). An inference from a report to an idea of an

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<sup>85</sup> As this passage suggests, Hume uses 'inference' and 'reasoning' to refer to any mental transition from the perception of an object to that of another, where the the second object is not present to the memory or senses. The process need not involve conscious reflection.

<sup>86</sup> Hume also mentions sympathy as a mechanism that aids the inference from reports to their truth: my sympathy for another person 'gives an authority to that opinion, which is recommended to me by his assent and approbation' (T 3.3.2.2 SBN 592). Note that Hume is not claiming that sympathy *alone* is responsible for our acceptance of testimony (a claim that would conflict with his account in the foregoing passages from the *Enquiry* and Book I of the *Treatise*); he is only claiming that sympathy *aids* the acceptance by 'drawing along the judgment' and 'giving authority' to the testimony.

event in the past might proceed in the following manner. Upon reading a newspaper article with a 1945 date, for instance, the mind transitions from the impression of the article to an idea of the events it reports. The idea is a belief owing to its association with the impression. In addition, in associating the events with the term ‘1945,’ the idea represents the events along with the temporal situation that the term signifies—that is, it represents them as earlier to the present and to events from the 50’s, 60’s, and subsequent decades, and as temporally proximate to events from the end of World War II. The idea represents this temporal situation through depictions of some of the particular temporal relations as well as a readiness to depict other such relations.

Consider now the following beliefs: the belief that events in other planets are temporally related to events in the Earth, the belief that perceptions in other minds are temporally related to our own, and the belief that particle-level events are temporally related to observable events. These beliefs cannot be straightforwardly attributed to either memory or causal inference. We have no impressions of events in other planets, perceptions in other minds, or particle-level events; hence, we cannot automatically represent them as present (as TP would indicate) or infer their temporal situation on the basis of an experience of constant conjunction (since we have no experiences of them). These beliefs seem to be symptoms of a more general tendency to believe that time is all-encompassing—that all existing objects or events are temporally related to one another, or, in other words, that all existing objects are arranged along a successive series or ‘stream of time.’ This tendency, in turn, can be attributed to a process of imagining patterns to be maximally complete and uniform.



Hume appeals to this process—which I will call ‘pattern extension,’ or PE—twice in the *Treatise*. He first mentions it in accounting for the source of our ideas of geometrical notions like perfect equality, a perfectly straight line, or a perfectly flat surface. As we saw previously (§3.3.1), our perceptions of equality—where equality is an ‘appearance’ or aspect in objects—exhibit a pattern of admitting of corrections: the perception that two lengths are equal might be followed by the perception that one is 1mm longer than the other after inspecting them more closely or measuring them with a ruler; this latter perception, in turn, might be followed by another perception that the difference is of 0.9mm after measuring the ruler itself with a more exact instrument; this latter perception might itself be followed by another perception; and so on. While we ultimately lack perceptions of two lengths as *exactly* or *perfectly* equal, or of the exact difference between them, the imagination extends the corrective pattern just noted beyond the corrections that we actually *do* or *can* execute and formulates the notion of a final corrective standard—perfect equality—as a completion of that pattern. In the same way, it formulates notions of other geometrical standards, like perfect straightness and flatness (T 1.2.4.23-25 SBN 47-49). Hume also sees the process as playing a role in the formation of the idea of continued existence. He observes that, seeing as our sensory impressions exhibit a pattern of coherence, and seeing as their continued existence would render that pattern much more complete and uniform, the imagination naturally inclines towards that notion. He compares

this imaginative amplification of mental patterns to the way in which ‘a galley put in motion by the oars, carries on its motion without any new impulse’ (T 1.4.2.22 SBN 198).<sup>87</sup>

Perceptions—both impressions and ideas—clearly exhibit a pattern of successiveness. A perception never appears as a single, a-temporal perception: it always succeeds and precedes other perceptions. As Hume remarks, ‘[perceptions are in a perpetual flux and movement. Our eyes cannot turn in their sockets without varying our perceptions. Our thought is still more variable than our sight’ (T 1.4.6.4 SBN 252-3). Moreover, as we have seen, memories and beliefs resulting from causal inference always represent objects as spatiotemporally related to a host of other objects. Given the imaginative process just described, a possible explanation for the tendency to believe that time is all-encompassing is that the mind extends the pattern of successiveness and temporal relationality to encompass *all* existing objects, even objects for which we have no impressions, like events in other planets.

### **4.3. Knowledge of the past**

#### **4.3.1. Epistemic value**

In both philosophical and ordinary parlance, ‘knowledge’ refers to beliefs that possess a certain type of value: *epistemic* value. Hume follows Locke in assigning to ‘knowledge’ a different, more technical sense: the representation of a relation between ideas, where the relation ‘depends entirely on the ideas’ and can be intuited or demonstrated (T 1.3.1.1-2

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<sup>87</sup> Hume takes pains to differentiate PE from causal reasoning. In causal reasoning, we form a belief in the existence of an object (e.g. the rain) on the basis of, *and in conformity with*, a certain degree of regularity (e.g. rain followed by puddles). In PE, we form a belief that bestows a maximum degree of regularity upon objects on the basis of a *lesser* degree of regularity (T 1.4.2.21 SBN 197-8).

SBN 69-70; T 1.3.11.2 SBN 124; Locke *Essay* IV.i.2).<sup>88</sup> Despite this assignation, Hume often seems to revert to the everyday sense of the term (e.g., T 1.3.8.13 SBN 103-4; T 1.4.7.14 SBN 272-3; T 3.2.5.11 SBN 522-523; E 1.8 SBN 9-10). His frequent references to knowledge as a laudable personal quality are also more consistent with the everyday sense of ‘knowledge’ than with the technical (e.g. T 2.2.1.4 SBN 330; T 3.3.6.6 SBN 620; P 2.11). Hume explicitly notes that the technical senses of ‘knowledge’ and ‘probability’ are detached from ordinary usage (T 1.3.11.2 SBN 124). The sense of ‘knowledge’ in the title of this dissertation is the ordinary one: Hume has a theory of knowledge of the past in that he has a theory of beliefs about the past and of their epistemic value.

As previously noted (§4.1), I will not here undertake the enormous task of reinterpreting Hume’s views on epistemic value. Instead, I will argue that if many current interpretations of Hume’s epistemology are correct then Hume can in fact explain the epistemic value of beliefs about the past. My discussion in the next sections is informed by a number of assumptions.

First, I will assume that, although the epistemic value of *beliefs* is distinct from the epistemic value of *sources of belief*, the key to providing a theory of the former is to provide a theory of the latter. A theory of the epistemic value of beliefs must be general: it must allow us to distinguish between epistemically good and bad beliefs across a broad range of situations. The most fitting approach to establishing general principles about the epistemic value of beliefs is to establish principles about the value of their sources (i.e. the mental

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<sup>88</sup> Unlike Locke, however, Hume does not regard belief in the external world as ‘knowledge’ in the technical sense of the term (Locke, IV.II.14).

processes that generate them). We can generalize beliefs to be epistemically good (at least prima facie or defeasibly) when they stem from epistemically good sources. Thus, it has been standard for theories of epistemic value to focus on belief-producing processes rather than individual beliefs. Historically, for instance, the epistemic value of sense-based beliefs has generally been assessed by reference to the senses as a faculty. Hume's views take this focus as well. For example, when Hume questions the epistemic value of inductive beliefs and beliefs in the external world in T 1.4.7, he does so on the grounds that the *mental processes* that generate them do not yield consistent beliefs on the whole (T 1.4.7.4 SBN 265-266). Similarly, he distinguishes between good and bad inductive beliefs in T 1.3.13, T 1.3.15, and E 10 by explaining good and bad *ways* of forming them.

Second, as is already apparent, I will assume that Hume does in fact have views on the *value* of various beliefs and belief-producing processes. He implies that his epistemology is not purely descriptive, but aims to answer questions about how we *ought* to reason and what we *ought* to believe. Hume explicitly announces a normative aim of this sort in T 1.3.13 and T 1.3.15: the aim of establishing 'rules by which we *ought* to regulate our judgment concerning causes and effects' (T 1.3.13.11 SBN 149, my emphasis). The primary aim of E 10 ('Of Miracles') is also a normative one: to put 'an everlasting check to all kinds of superstitious delusion [i.e. belief in miracles]' (E 10.2 SBN 110). In both these places, Hume seems to be working towards a principled distinction between good and bad inductive beliefs. The subject matter of T 1.4.7 and E 12 is *skepticism* about our basic cognitive processes. Although Hume's approach to this subject is far from clear, there is evidence that he is interested not simply in the psychological

underpinnings of skepticism, but also in its content—that is, in the very question of whether our cognitive processes are in fact devoid of epistemic value. Hume motivates the question at length by outlining multiple arguments in favor of skepticism (T 1.4.7.1-8 SBN 263-269; E 12.1-22 SBN 149-159). He also recommends ‘mitigated skepticism’ and a certain ‘careless’ way of doing philosophy as ‘reasonable’ and as conducive to ‘a system of opinions that might stand the test of the most critical examination’ (E 12.24-26 SBN 161-163; T 1.4.7.14 SBN 272-3). He thus seems invested in addressing the normative epistemological challenges skepticism raises, even if his answers are ambiguous.

It is worth stressing that, even though we can distinguish between a naturalistic project of explaining how judgments about value are rooted in our psychology and a normative project of identifying which beliefs and belief-producing processes are in fact good or bad, these projects are not mutually exclusive. I here follow other scholars in the view that, while Hume is certainly engaged in the naturalistic project, he is not engaged in it to the exclusion of all normative aims (e.g. Falkenstein 1997[a]; Loeb 2006; Qu 2015). In addition, it is worth noting that Hume’s normative aims are consistent with anti-realism about value. It is standard to read Hume as an anti-realist about moral value—as someone who denies that moral properties like vice and virtue exist independently of our minds (specifically, of our sentimental responses). It may be that Hume is also an anti-realist about *epistemic* value. Even then, as Cohon (2008) emphasizes, anti-realism would be consistent with there being facts about value (only these facts are mind-dependent) and with making true and false statements about them (96-125).

Third, I will assume that in the above-noted sections Hume is concerned with the *epistemic* value of beliefs and belief-producing processes, and not (or at least *not only*) with other kinds of value. Hume characterizes the ‘truth’ of ideas about matters of fact as their ‘correspondence to the real existence of their objects’ (T 2.3.10.2 SBN 448-9). His account of curiosity, or the ‘love of truth,’ as well as many other remarks throughout his writings, imply that truth is a human value—at least when it concerns matters of enough importance to us that being in doubt about them would make us uneasy (T 2.3.10.11-12 SBN 452-453).<sup>89</sup> In the above-noted sections, Hume is concerned with the truth of beliefs and the truth-conduciveness of belief-producing processes. For instance, he describes the rules in T 1.3.15 as ‘rules by which we may *know* when objects *really are* causes or effects to each other’ (T 1.3.15.2 SBN 173, my emphasis); in E 10, the likelihood of *falsehood* in a piece of testimony is the crucial factor for assessing whether or not one should believe it (E 10.13 SBN 115-6); and in T 1.4.7, the skeptical challenge is characterized by a lack of adequate criteria for distinguishing *truth* (T 1.4.7.3 SBN 265). It is also worth adding that, as Qu (2014) argues, Hume distinguishes between different kinds of normativity, for example, when he writes:

A person may be affected with passion, by supposing a pain or pleasure to lie in an object, which has no tendency to produce either of these sensations, or which produces the contrary to what is imagin’d. A person may also take false measures for the attaining his end, and may retard, by his foolish conduct, instead of forwarding the execution of any project. These false judgments may be thought to affect the passions and actions, which are connected with them, and may be said to render them unreasonable, in a figurative and improper way of speaking. But tho’ this be acknowledg’d,

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<sup>89</sup> For elaboration on why truth is an epistemic value for Hume, see Schafer (2014) and Garrett (2015, 152-164).

'tis easy to observe, that these errors are so far from being the source of all immorality, that they are commonly very innocent, and draw no manner of guilt upon the person who is so unfortunate as to fall into them ... No one can ever regard such errors as a defect in my moral character (T 3.1.1.12 SBN 459-60).

Here, Hume suggests that we can condemn something in two distinct ways: for being an 'error' or being 'foolish,' on the one hand, and for being blameable or immoral, on the other. He thus implies two distinct kinds of normativity and two distinct kinds of value. Moreover, 'foolish' and 'erroneous,' like 'true' and 'false,' clearly fall under the category of *epistemically* normative assessments (part of what makes the person's conduct 'foolish' is its origin in 'false judgments'). Given that Hume *does* have a notion of epistemic value as a distinct kind of value, and given his concern with truth in the sections noted, it is most natural to interpret his assessments in those sections as *epistemically* normative.

Fourth, in interpreting Hume's views on the epistemic value of the various mental processes that generate beliefs, it helps to note a type-token distinction. It is one thing to ask whether memory and causal inference are epistemically good as *types* of processes—that is, whether *typical* instances of them are epistemically good. It is a different thing to ask whether particular instances (*tokens*) of these processes are. Even if memory and causal inference are epistemically good as types, clearly, some particular instances of memory (faint memories, for instance) or causal inference (such as inferences based on unreliable testimony) would still be epistemically questionable. Thus, supposing one developed a theory of the epistemic value of memory and causal inference as *types*, one might still need a theory of what distinguishes good and bad *tokens* of these types. Hume does not draw this distinction himself. However, the distinction clarifies the different ways in which

Hume discusses epistemic value. Some of Hume's discussions, such as T 1.4.7 and E 12, address the epistemic value of *types* of processes—the skeptical challenges discussed in these sections concern 'our very faculties' (E 12.3 SBN 149-50; also E 12.5 SBN 150-151 and T 1.4.7.1-3 SBN 263-265). At the same time, T 1.3.13, T 1.3.15, and E 10 address the epistemic value of *tokens* of inductive inference. Hume's focus there is on distinguishing between good and bad instances of inductive inference; he does not even raise the question of whether inductive inference is epistemically good by its very nature (i.e. qua type).

The type-token distinction can be expressed in Humean terms. A type of process is a set of individual processes that resemble each other in some respect (e.g. in being causal inferences); to use previous terminology, the type is the *revival set* of the term 'causal inference.' The mind can represent types via an idea of a token and a disposition to form ideas of other tokens (it achieves this disposition by associating the token with the term 'causal inference'). Even though the mind needs an idea of a token to represent the type, it can nonetheless discover facts about the type (including facts about the value of the type) via this general representation, in the same way that it can discover facts about triangles in general (T 1.1.7.8 SBN 21).

An important interpretive question is whether Hume could consistently deny that a type of process has epistemic value yet consistently go on to distinguish between epistemically better and worse tokens of the type. Scholars who read Hume as a skeptic about the value of inductive inference as a *type* must reconcile the skepticism with Hume's distinctions between the value of *token* inductive inferences (i.e. with his viewing some token inferences as better than others). As Winkler (1999) observes, 'inductive skepticism



seems to be inconsistent with inductive discrimination' (1999, 201). Since I will not here adopt the reading of Hume as skeptic, I will not explore the answer to this question in depth. It is worth noting, however, that the answer depends on how one interprets the nature of epistemic value in Hume. Some scholars have proposed that a criterion of *consistency* or *coherence* among tokens can allow Hume to distinguish between better and worse tokens of inductive inference, even if inductive inference by its own nature has no epistemic value.<sup>90</sup> On the other hand, however, epistemologists have traditionally understood epistemic value not as consistency per se, but as some kind of positive relation to *truth*: as a feature of belief or belief-producing processes that is conducive to truth. On this view of epistemic value, consistency in and of itself (i.e. independently of considerations about truth) cannot endow *tokens* of inductive inference with epistemic value. It is also not clear what factors *would* endow tokens with varying degrees of epistemic value (i.e. more and less positive relations to truth) in the event that inductive inference as a type had no epistemic value. Given that, as we have seen, Hume's normative assessments of *both* type

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<sup>90</sup> Specifically, the proposal is to emphasize, first, that the types of processes under consideration are, as Hume puts it, 'natural instincts, which no reasoning or process of the thought and understanding is able, either to produce, or to prevent' (E 5.8 SBN 46-47). That is, the processes are unavoidable. Second, the processes can operate more or less consistently. For example, as Hume explains in his account of general rules, inductive inference can generate *both* lower-level beliefs (a belief in the occurrence of a miracle, for instance) *and* higher-level beliefs about the reliability of the inferences yielding the lower-level beliefs. The second kind of belief can condemn the first: inductive inferences at higher and lower levels can be, and often are, 'set in opposition to each other' (T 1.3.13.12 SBN 149-150). One might then propose that tokens of inductive inference are epistemically better or worse depending on their consistency with other higher-order or more regular tokens of inductive inference. Moreover, since inductive inference is unavoidable, the distinction between epistemically better and worse tokens of it would be legitimate (rather than arbitrary or speculative) even for a skeptic about its type epistemic value (for proposals that approximate this broad description, see Millican 2002, Winkler 1999, and Falkenstein 1997[a]).

*and* token processes are at least partly based on considerations about truth, a reconciliation between type-level skepticism and token-level value distinctions appears doubtful.<sup>91</sup>

At the same time, even if a theory of token-level value distinctions presupposes the view that the type has epistemic value, the *token* theory can be independent of the *type* theory from a meta-theoretical perspective—independent in the sense that no *specific* theory of type value is required (beyond the general thesis that the type *is* valuable) to develop a theory of token-level value distinctions. One can develop the token theory from a perspective that *assumes* the epistemic value of the type, without first having any particular view on what accounts for the value of the type. To ponder the nature of type epistemic value is to entertain the possibility of skepticism about our basic mental processes: it is to ask whether memory and causal inference have epistemic value by their very natures. Few people ponder this question, yet most people nonetheless discriminate between good and bad *token* processes. Statisticians develop models for good inductive inferences without first developing an account of why induction itself is epistemically good. Were a statistician to develop an account of the value of induction itself, the *adequacy* of that account would not compromise the adequacy of his token-level theories. Analogously, a film critic might have a good theory of what makes particular films aesthetically good without first having a good theory of what makes film *as a type of medium* aesthetically good. I propose that we regard Hume's views on type and token epistemic value as independent of each other in this sense: the adequacy of his token

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<sup>91</sup> Another approach to this potential tension is to read Hume as shifting between skeptical and non-skeptical perspectives in his writing, even though these perspectives are ultimately incompatible (e.g. Fogelin 1998; Strawson 1985, 12-13; Popkin 1966, 98).

theories is contingent only on a broad understanding of the relevant type as valuable—not on the specific content of his type theories or on how adequate those theories are.

#### 4.3.2. Type epistemic value

Our discussion in 4.1. suggests four main types of processes responsible for belief about the past: memory, causal inference, PE (the process of imagining patterns to be maximally complete and uniform), and, finally, TP (the process whereby simultaneity with an impression causes an idea to represent the impression's object as salient). Although these processes normally operate in conjunction, they are responsible for different aspects of the ensuing beliefs. For example, memory, causal inference, and PE on their own would generate only representations of *tenseless* successions; it is only in virtue of the influence of TP that they generate representations of tense.

I see the task of explaining the epistemic value of these types of processes as the task of responding to the possibility of skepticism about them. Hume addresses skepticism about basic processes most directly in T 1.4.7 and E 12. My analysis in what follows draws from both these texts indiscriminately. Although it is a matter of debate whether Hume's views on skepticism change between these texts, my reading is limited to what is common or consistent between them; it is thus neutral with respect to the alleged dissimilarities.<sup>92</sup>

Hume's distinction between 'antecedent' and 'consequent' skepticism in E 12 indicates two approaches to explaining the epistemic value of basic belief-producing processes. The first approach (that of Descartes in *Meditations*) is to begin from a default

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<sup>92</sup> It has been common in the literature to read T 1.4.7 and EHU 12 as equivalent in content (e.g. Wilbanks 1968, 89; Fogelin 1992, 117; McCormick 1999). More recently, Qu (2016, 2018) argues that Hume's views change with respect to the 'Title Principle' (see below).

position of doubt about the value of the processes (antecedent skepticism), and establish their value against this doubt by ‘deducing it from some original principle, which cannot possibly be fallacious or deceitful’ (E 12.3 SBN 149-50). In other words, the approach is to prove the epistemic value of the processes *from scratch*. Hume criticizes this approach on the following grounds:

Neither is there any such original principle, which has a prerogative above others, that are self-evident and convincing: Or if there were, could we advance a step beyond it, but by the use of those very faculties, of which we are supposed to be already diffident. The Cartesian doubt, therefore, were it ever possible to be attained by any human creature (as it plainly is not) would be entirely incurable; and no reasoning could ever bring us to a state of assurance and conviction upon any subject. (E 12.3 SBN 149-50).

Hume observes that, were we to doubt the epistemic value of our basic cognitive processes, there would not be anything that we could not doubt (i.e. an ‘original principle’), and even if there were, we would have no epistemically trustworthy means of drawing further conclusions on its basis (since our cognitive processes are assumed to be untrustworthy). Thus, the Cartesian approach leads to an ‘incurable’ skepticism about our cognitive processes. Hume then notes that a moderate version of this approach (one that prescribes not doubt but *caution* about our processes) would be ‘reasonable’—a comment that implies that for him the original Cartesian version is *not* reasonable (E 12.4 SBN 150). In rejecting the Cartesian approach, Hume implies that our basic cognitive processes have epistemic value *prima facie*: their value can reasonably be impugned upon further inquiry (in fact, Hume proceeds to present strong philosophical reasons for impugning it) but it cannot reasonably be impugned as a default starting position (Garrett 2007, 5; 2015, 243-244). Hume’s view is not that the Cartesian approach would be ‘unreasonable’ only for the vulgar

or the philosophically un-inclined. Rather, it would be unreasonable for ‘any human creature,’ because no human creature could sustain a default universal doubt on the epistemic value of her cognitive processes, and even if she could, she could not overcome that doubt.

Hume’s rejection of the Cartesian approach in this brief paragraph might seem too quick. Hume seems to be offering a *reductio* in favor of rejecting the Cartesian approach and attributing prima facie epistemic value to our cognitive processes: unless we do so, we cannot avoid skepticism. One might wonder, however, whether skepticism is really absurd enough of a result to invalidate an approach. Fortunately, Hume’s position can be buttressed in light of recent arguments in epistemology that defend the prima facie epistemic value of beliefs that result from basic cognitive processes.<sup>93</sup> Michael Huemer, for example, defends the principle of ‘phenomenal conservatism,’ which grants prima facie justification to many of our beliefs:

If it seems to *S* as if *P*, then *S* thereby has at least prima facie justification for believing that *P* (2001, 99).

While the details of Huemer’s view and his full defense of it cannot be explored here, the following line of defense seems compelling:

If my goal is to have true beliefs and avoid having false ones, and if *P* seems to me to be true, while I have no evidence against *P*, then from my own point of view, it would make sense to accept *P*. Obviously, believing *P* in this situation will appear to satisfy my epistemic goals of believing truths and avoiding error better than either denying *P* or suspending judgment (2001, 104).

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<sup>93</sup> Other arguments fitting this general description include Chisholm’s defense of foundationalism (1980), Pryor’s (2000) defense of ‘dogmatism,’ and Wright’s (2004) defense of ‘entitlement.’

We can offer a similar defense of Hume's view that our basic cognitive processes have prima facie epistemic value. From a starting position where we have no positive evidence either for or against the processes' value, trusting the processes is a more reasonable outlook to adopt than mistrusting them or suspending trust. At the very least, intuitively, the processes *seem* epistemically sound; moreover, trusting them is 'attainable,' whereas the alternatives are not.

Hume's rejection of the Cartesian approach has important implications for his stance on the epistemic value of memory. Specifically, Hume would reject a requirement that we must prove the veridicality or epistemic value of memory from scratch (i.e. without relying on memory or other processes whose value is not certain). A lack of positive, memory-independent evidence for the veridicality of memory is not in and of itself a reason to suspend belief in the epistemic value of memory. Instead, for the reasons just noted, Hume would adopt the view that memory has epistemic value prima facie. Accordingly, mnemonic beliefs (including beliefs about particular memories corresponding to their source impressions) have epistemic value prima facie.

Hume engages more thoroughly with the second approach to explaining the epistemic value of belief-producing processes. This approach consists in establishing epistemic value not against a default position of doubt, but against doubt that arises out of an investigation on the nature of the processes ('consequent skepticism') (E 12.5 SBN 150-151). Hume's own investigation throughout the *Treatise* and *Enquiry* generates what have seemed to many of his readers (and to Hume himself, at times) to be devastating doubts about the epistemic value of these processes. The main result of the investigation, as Hume

summarizes it, is that ‘the memory, senses, and understanding are, therefore, all of them founded on the imagination, or the vivacity of our ideas’ (T 1.4.7.3 SBN 265). As the sentences leading up to this statement indicate, ‘the understanding’ here refers specifically to causal inference, ‘the senses’ to the processes responsible for belief in external objects, and ‘memory’ to the processes responsible for belief about the past. Hume’s investigation has shown, more precisely, that causal inference consists in the imagination enlivening some ideas on the basis of habit. The process responsible for belief in external objects, in turn, consists in the imagination enlivening some ideas on the basis of a series of ‘fictions’ (as per T 1.4.2). While Hume does not elaborate on the process responsible for belief about the past, he clearly conceives of it as a similar imaginative process: ‘those lively images, with which the memory presents us’ cannot be ‘received as true pictures of past perceptions’ without the involvement of the imagination (T 1.4.7.3 SBN 265). I have proposed that TP is the imaginative process that explains belief about the past (§3.4.2). Hume describes the imaginative nature of each of these processes as ‘trivial’ (T 1.4.7.3 SBN 265). He also notes that the connection between these processes and truth is unclear (the paragraph begins with the remark, ‘by what criterion shall I distinguish [truth]?’). Indeed, at least at first blush, the result that these processes are imaginative in the way Hume describes seems to deflate their epistemic value.

What is more, Hume’s investigation has revealed specific evidence of the ‘fallaciousness’ of these imaginative processes (T 1.4.7.4 SBN 265-266; E 12.5 SBN 150-1). Some of the most fundamental beliefs they generate are directly contrary to reason. The belief that we are in immediate contact with external objects—that our very perceptions

are external objects—is contrary to the reasoning that our perceptions are sense-dependent, whereas external objects are not, and hence we cannot be in immediate contact with the latter (T 1.4.2.44-5 SBN 210-211; E 12.8-9 SBN 151-2). In addition, the belief that external objects exist is contrary to a causal inference to the conclusion that the ‘secondary qualities’ of objects (i.e. colors, sounds, tastes, and smells) are *not* external, a conclusion that in turn implies that *none* of their qualities (not even ‘primary qualities’ like extension and solidity) are external (T 1.4.4.15 SBN 231; E 12.15 SBN 154-5). This conflict raises the problem of how to reconcile the epistemic value of the two imaginative processes involved—causal inference and the fiction of the external world (T 1.4.7.4 SBN 265-6). Furthermore, Hume’s analysis of the idea of necessary connection has shown that, contrary to what we imagine, necessary connection is never a property of an object, but only a feeling of determination in the mind (T 1.4.7.5 SBN 266-7).

While Hume does not mention them in the sections on skepticism, his investigation has revealed still further cases where imaginative mechanisms produce false or otherwise unreasonable beliefs. PE produces the geometrical notion of perfect equality, but this notion is ‘a *mere* fiction of the imagination, and useless as well as incomprehensible’ (T 1.2.4.24 SBN 48; my emphasis). Imaginative fictions lead us to ‘falsly imagine’ we have an idea of a vacuum (T 1.2.5.14 SBN 58); similarly, they lead us to ‘fancy we have’ an idea of successionless time when we have no such idea (T 1.2.5.29 SBN 65).

Faced with the evidence against the epistemic value of imaginative processes, Hume considers, as a possible solution, whether we can distinguish between ‘the trivial suggestions of the fancy’ and ‘the general and more established properties of the



imagination,’ and endorse only the latter (T 1.4.7.7 SBN 267-268). Of all imaginative processes, inductive reasoning is among the most ‘general and established.’ Hume deems the solution unsatisfactory. He had earlier argued that, when we apply inductive reasoning to our own cognitive processes to determine the probability that they will yield true beliefs, the application generates an indefinite number of subsequent applications, and these in turn entirely annihilate the original beliefs (i.e. the outputs of our cognitive processes) (T 1.4.1.6 SBN 182-3). Inductive reasoning thus implies a ‘total scepticism’ (T 1.4.7.7 SBN 267-268). What counters this result is not any ‘general’ or ‘established’ process, but the difficulty of executing the successive applications—a difficulty that is only a ‘trivial’ property of the imagination (T 1.4.1.10 SBN 185; T 1.4.7.7 SBN 267-8). Thus, rejecting trivial processes in favor of general and established ones would commit us to skepticism. Because endorsing the trivial processes uniformly would also carry grave consequences—these processes are responsible for many ‘errors, absurdities, and obscurities’—Hume describes the choice between endorsing them and rejecting them as a ‘dangerous dilemma’ and as a choice between ‘a false reason and none at all’ (T 1.4.7.7 SBN 267-8). For these reasons, the ‘trivial’-‘established’ distinction does not offer a satisfactory approach to epistemic value.

How Hume can establish the epistemic value of our basic belief-producing processes in the face of these doubts remains one of the most contested issues in the scholarship. One point on which many scholars agree, however, is that Hume *can* ultimately escape the threat of skepticism. Indeed, even though individual interpretations of how this escape is achieved can be challenged, the sheer volume of interpretations to

this end suggests that Hume has many theoretical resources at his disposal to avoid a skeptical scenario. And Hume, like most philosophers, is eager to avoid such a scenario—a scenario that he explicitly deplores in T 1.4.7 and that would terminate his scientific pursuits. My aim in what follows is a modest one: rather than offer a new interpretation of Hume’s answer to these doubts, I will argue that the resources that have been unearthed by existing interpretations can be applied to the processes that produce belief about the past; these resources allow Hume to maintain the processes’ epistemic value against the foregoing doubts.

For simplicity of exposition, we might sort interpretations of Hume’s theory of epistemic value into three broad categories: *empirical-foundation* interpretations, *systematicity* interpretations, and *psychological-character* interpretations. Note, however, that the boundaries between these categories are not precise, and that some individual interpretations might properly be included in more than one category.

The best recent example of an *empirical-foundation* interpretation is Boehm’s (2013).<sup>94</sup> Boehm proposes that experience is a foundation of epistemic value for Hume: it has ‘normative authority’ (205). What gives it this status is the quality of force and vivacity; Boehm identifies force and vivacity with a ‘sense of presentness’ and a ‘sense of reality’ (213). Boehm then observes that, on Hume’s account of causal inference, the inferential

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<sup>94</sup> Boehm credits Kemp Smith’s interpretation as a precursor to her own; according to Kemp Smith, ‘it is experience—and custom only in so far as it conforms to and is the outcome of experience—which is, and ought to be, the ultimate court of appeal’ (1941, 382). However, in contrast to Kemp Smith, Boehm explains the authority of experience by its liveliness or ‘sense of presentness,’ whereas Kemp Smith explains it by its naturalness (defined as inevitability, irresistibility, and indispensability) (1941, 87, 486).

mechanism is such that experience plays an essential role in determining the belief it produces: the mind transitions from the impression or memory of an object to the idea of a second object *in conformity with past experience of the conjunction of the two objects*; moreover, the source of the idea's vivacity (and hence of its belief-quality) is also experience (namely, the impression or memory) (206, 219). Boehm then argues that, given that experience has normative authority, and given the role it plays in determining the products of causal inference, beliefs resulting from causal inference have epistemic value. While Boehm focuses on causal inference, her analysis suggests a more general criterion for the epistemic value of a belief-producing process: that the process be constrained by experience to produce a predetermined belief.

Boehm's interpretation can be applied to explain the epistemic value of memory and TP, in addition to causal inference. Since the category of 'experience' encompasses memory, memory has the same kind of foundational epistemic value as sense experience (214-215).<sup>95</sup> TP, in turn, meets the criterion of being constrained by experience in the way Boehm describes: what an idea represents as present is determined by experience, specifically, by the impression with which it is simultaneous.<sup>96</sup>

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<sup>95</sup> Even if we were to resist the notion that memory belongs in the same epistemic category as sense experience, Boehm's interpretation would still account for its epistemic value: memory meets the criterion of being constrained by experience, since memory produces ideas that are isomorphic with antecedent impressions.

<sup>96</sup> One possible objection to Boehm's interpretation is that it cannot account for the epistemic value of some basic belief-producing processes. PE, for instance, since it consists in imagining patterns to be *more* complete than we have observed them to be, does not seem to be governed by experience in the same way as causal inference. More significantly, the processes responsible for belief in external objects also seem governed by experience to a lesser extent.

*Systematicity* interpretations propose that the epistemic value of a process, on Hume's view, has to do with its ability to promote systematicity and orderliness in the mind. More specifically, Morris (2006) argues that *consistency* or *coherence* is not only a criterion for the epistemic value of *token* processes (a proposal I noted earlier in §4.2); it is also a criterion for the epistemic value of *types* (89-91). The reason causal inference has epistemic value, while superstition or repetition do not, is that the products of the former, unlike those of the latter, tend to 'fit into a coherent and stable system of realities,' a system that encompasses impressions, memories, and other coherent and well-confirmed beliefs (90). Another criterion that has been proposed under this head is *reliability*. Schmitt (1992) proposes that a process has epistemic value when it is reliable; a process' reliability, in turn, consists in its tendency to produce true beliefs (54, 71). Since, according to Schmitt, we assess reliability from the vantage point of our other beliefs (including sensory, inductive, and imaginary beliefs), the processes we judge to be reliable are ultimately those whose outputs are consistent with our other beliefs (73-75, 83). Similar reliabilist interpretations have been proposed by Beebe (2006, 71-74) and Qu (2015, 193-228). A third criterion related to systematicity is *reflexivity*. Baier (1991) proposes that a process has epistemic value when it can 'successfully turn on itself' or 'bear its own survey:' that is, when it generates beliefs of its own epistemic value. Causal inference, specifically, has epistemic value in virtue of the fact that it can be used to understand how causal inference works and to approve of some of its tokens and disapprove of others—Hume uses causal

inference in precisely this way in developing his ‘rules by which to judge of causes and effects’ (90-100). A similar interpretation is proposed by Korsgaard (1996, 62-63).<sup>97</sup>

Memory, TP, and PE are sufficiently systematic to have epistemic value under these criteria. Not only is memory highly regular and reliable—mnemonic beliefs tend to cohere with each other as well as with non-mnemonic beliefs—it also generates beliefs about its own veracity (in the form of memories of other memories corresponding to past impressions). Thus, memory meets the criterion of reflexivity. The same can be said of TP. It not only generates coherent beliefs; it also generates beliefs about its own operations occurring over a tensed sequence of time: in reflecting on our beliefs about tense, we form second-order beliefs about the pastness, presentness, and futureness of the first-order beliefs. TP endorses itself in that it applies the same tense properties to its own operations. Finally, the beliefs PE generates (such as beliefs in perfect geometrical standards and the belief in the comprehensiveness of space and time) seem coherent. Insofar as we imagine PE itself to operate in a maximally uniform way—we imagine that our mental processes respond in the same way to *all* patterns—PE also meets the criterion of reflexivity.

On *psychological-character* interpretations, Hume’s criterion for the epistemic value of a process consists in a psychological quality.<sup>98</sup> Thus, Garrett proposes that the *liveliness* or *belief-quality* of ideas is a criterion of epistemic value because the mind

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<sup>97</sup> Korsgaard reads Hume as a skeptic—she attributes to him the view that the understanding fails the criterion of reflexivity (1996, 62-63). Baier, in contrast, holds that for Hume causal inference meets the criterion; it is only ‘solitary intellectualist reason’ that does not (1991, 96-97, 284-285).

<sup>98</sup> Kemp Smith’s interpretation can also be included under this head. Kemp Smith sees the *naturalness* of a process (its inevitability, irresistibility, and indispensability) as the basis of its epistemic value (1941, 87, 486).

naturally judges lively ideas to be true, and thus approves of them, when reflecting on them (2015, 152-159). Cognitive processes that produce such ideas have a default claim to epistemic value, although additional reflection on the processes (including the skeptical reflections of T 1.4.7 and E 12) can weigh against their claim (2015, 230, 236-7). The epistemic value of reasoning processes in particular is ultimately decided by Hume's 'Title Principle:' 'Where reason is lively, and mixes itself with some propensity, it ought to be assented to. Where it does not, it never can have any title to operate on us' (T 1.4.7.11 SBN 270; Garrett 1997, 234-235; 2015, 227-231). Garrett interprets 'propensity' as any 'inclination or tendency,' including tendencies of the imagination, such as causal inference, as well as desires and aversions, such as curiosity (2015, 228-229). The Title Principle indicates that the inductive reasoning that would lead to a 'total scepticism' through the indefinite application onto itself lacks epistemic value because it is neither lively nor linked to human propensities; in contrast, and for the corresponding reason, positive philosophical or scientific reasoning has epistemic value (2015, 229-231). Along similar lines, Loeb proposes that Hume's criterion for epistemic value is *stability*: a belief-producing process has epistemic value to the extent that it produces beliefs that are *stable* within the cognitive system in which it operates (2002, 33, 60-98). Loeb characterizes beliefs as *dispositions*; more precisely, he argues that beliefs are 'stable' or 'settled' dispositions in that they are *not* volatile, or not likely to change abruptly (5, 33, 65-74). He adds, however, that an otherwise stable belief can become unstable by coming into conflict with other beliefs (88-89). Thus, depending on the cognitive system in which it operates, a belief-producing process might generate beliefs that are stable or unstable in that system; when these beliefs

are stable, according to Loeb, the process has epistemic value. Loeb observes that, although our basic belief-producing processes generate beliefs that would be unstable in a fully reflective cognitive system (such as a system conscious of all the aforementioned skeptical doubts), Hume did not regard fully reflective systems as superior to less-than-fully reflective ones, and that for him processes can have epistemic value even if their outputs are stable only in *unreflective* systems (91-98).<sup>99</sup>

Memory, causal inference, TP, and PE seem paradigmatic of the psychological character that these interpretations describe: lively, rooted in universal propensities, and producing (at least for the most part) stable beliefs. Psychological-character interpretations thus provide another way forward in avoiding skepticism and in accounting for these processes as sources of knowledge.

I have not stopped to analyze how, on each of these interpretations, Hume overcomes the specific skeptical doubts aforementioned—a task that would require significant exegesis. It has commonly been suggested, however, that, rather than answer the doubts, Hume would preempt the need to answer them by questioning the epistemic value of the processes giving rise to them. Loeb, as we saw, suggests that Hume does not regard the fully reflective systems in which the doubts arise as epistemically preferable to less reflective ones. Similarly, Schmitt notes,

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<sup>99</sup> A different kind of ‘psychological-character’ criterion is Owen’s (1999): Belief-producing processes have normative authority when they can be considered *virtues*—when we morally approve of them because they are ‘pleasant and useful to ourselves and others’ (1221-222). This criterion allows Hume to prefer the belief-producing processes characteristic of philosophy to those characteristic of superstition or radical skepticism. However, because Owen does not use the term ‘epistemic value’—instead, he presents his criterion as a criterion of ‘justification’—his interpretation might not account for *epistemic* value as distinct from other kinds of value.

Even if, relying on our science, we reach consequent skepticism, it does not follow that our operations are in fact unreliable. All that follows is that certain beliefs that result from our operations tell us that it is unreliable. These beliefs may be quite mistaken consistently with the reliability of these operations. (1992, 78-79)

More recently, Ainslie (2015) draws attention to Hume's concern with 'reflective interference:' a phenomenon where deliberate reflection on one's cognitive processes *disrupts* the operation of those processes (14). Reflective interference means that our doubts about the epistemic value of our cognitive processes might not accurately represent the normal operation of those processes. Ainslie proposes that, in light of this phenomenon, Hume rightly refrains from acquiescing in the skeptical implications of these doubts (15). These insights are in keeping with Hume's remark that 'a true sceptic will be diffident of his philosophical doubts, as well as of his philosophical conviction' (T 1.4.7.14 SBN 272-3).

#### **4.3.3. Token epistemic value**

One way we might interpret Hume's approach to *token* epistemic value is as relying on the same criteria discussed above (criteria for the epistemic value of *types*) to explain the value of token processes as well. Indeed, scholars often interpret Hume's criteria for epistemic value without distinguishing between type and token value. This interpretive strategy is corroborated by Hume's discussion of the epistemic value of token inductive inferences in T 1.3.13, T 1.3.15, and E 10. One can interpret these sections as proposing considerations related to *empirical foundation*, *systematicity*, and *psychological character* as criteria for token epistemic value as well as type. Hume seems to suggest that specific tokens of inductive inference may or may not meet these criteria, or may meet them to greater and



lesser extents. Specifically, inductive inferences that are swayed by prejudice (T 1.3.13.7-12 SBN 146-150), by the passion of surprise and wonder (E 10.16 SBN 117), or more generally by a failure to consider all the relevant evidence (E 10.4 SBN 110-111) can be said to have weaker empirical foundations, to be less reliable, and to produce less coherent and stable beliefs; scholars have thus interpreted Hume's discussion of these cases as applications of the aforementioned criteria (e.g. Boehm 2013, 221; Morris 2006, 90; Loeb 2002, 106). The same criteria can be used to distinguish epistemically good and bad tokens of memory. Memories induced by wishful thinking, for instance, may be considered epistemically bad on account of weak empirical foundations, coherence, reliability, and stability.

Another way we might interpret Hume's approach to token epistemic value is as positing a criterion of *authenticity*. Hume suggests this criterion in his discussion of prejudice. It is paradigmatic of inductive inference that the mind transitions from the impression of an object to an idea of a *constant* concomitant. In a prejudiced inductive inference, the mind transitions from the impression of an object to an idea of only an *accidental* (i.e. not constant) concomitant. To use Hume's example, a prejudiced person might continue to expect lack of wit from Irishmen on the basis of an accidental conjunction between the two, even after she has had experiences of witty Irishmen and knows the connection to be accidental (T 1.3.13.7 SBN 146-7). Similarly, a man suspended from an iron cage expects to fall even though he knows the impression of height is only accidentally connected to falling (T 1.3.13.10 SBN 148-9). Prejudiced inductive inferences

are inauthentic in that they diverge from the mechanism that is paradigmatic of inductive inference:

When we take a review of this act of the mind [prejudice], and compare it with the more general and authentic operations of the understanding, we find it to be of an irregular nature, and destructive of all the most establish'd principles of reasonings; which is the cause of our rejecting it. (T 1.3.13.12 SBN 149-150)

Hume hints at a similar criterion in his discussion of testimony. He there observes that experience is ‘our only guide in reasoning concerning matters of fact [i.e. causal inference]’ and that experience can be more or less regular (E 10.3 SBN 110). His dictum that we should ‘proportion our belief to experience’ (E 10.4 SBN 110-111) seems motivated by the consideration that, given the nature of causal inference as guided *only* by experience, inferences that are proportional to experience are more authentic—they better exemplify the mechanism at the root of inductive inference. We might thus attribute to Hume the view that the epistemic value of token processes is a matter of their authenticity to the type. When applied to memory, the criterion implies that memories have epistemic value depending on how well they exemplify the mechanisms that are paradigmatic of memory—namely, retention of liveliness and isomorphism with past impressions.

The criterion of authenticity needs some refinement. It might be argued that authenticity is not a sufficient criterion for token epistemic value, insofar as tokens of epistemically *bad* types of processes would not have epistemic value even if authentic to the type. Another criterion (i.e. that the type of process be epistemically good) is needed. A second difficulty is the possibility that some processes might be inauthentic to the type yet meet the criteria that account for type epistemic value (empirical foundation, reliability,

etc.). Since it is not clear what processes would fit this description (or if they even exist), however, I will defer the task of refining the authenticity criterion in light of this possibility to another discussion.

#### **4.4. Conclusion**

This chapter has brought into focus the fact that for Hume ideas always represent existing objects ‘in their proper order and situation’—that is, as located spatially and temporally in relation to other objects. More specifically, ideas represent existing objects in relation to the present point of time. Memories and inductive beliefs both represent objects as located in successions leading to or starting from a present object. Thus, representations of time and tense are ubiquitous in our mental lives. While this account renders our ordinary mental representations highly complex, this complexity is both accurate and consistent with Hume’s basic principles about the mind; Hume’s notion of ‘representation by abridgment,’ in particular, explains how this complexity is possible.

The chapter has also presented grounds to conclude that for Hume the types of processes responsible for belief about the past (including memory, causal inference, TP, and PE) have epistemic value and thus produce knowledge, rather than mere belief. In particular, Hume holds that the processes have epistemic value *prima facie*: their value is not contingent on a Cartesian proof of their veridicality. In addition, Hume can avail himself of the epistemically normative notions that his texts often adumbrate (such as empirical foundation, reliability, reflexivity, and stability, among others) to account for the *ultima facie* merit of these processes: their ability to withstand specific skeptical doubts. In

this way, knowledge of the past fits squarely within the positive naturalistic epistemology that many scholars have aptly attributed to Hume.

## CONCLUSION

Hume's theory of knowledge of the past comprises theories of mental representation, memory, temporal experience, temporal concepts, belief, and epistemic value. One of its distinctive themes is a stripped-down characterization of memory in terms of two simple criteria—the phenomenal character of an idea and its correspondence to the impression from which it derived. In contrast to standard approaches to memory, Hume does not posit representation of the past as a constitutive feature of memory, but instead views memory as an explanatorily basic scientific category. A second distinctive theme is the theory's commitment to content empiricism: the principle that ideas represent only objects or aspects that impressions instantiate. In keeping with this principle, Hume ultimately traces the contents of our temporal concepts to aspects instantiated in impressions. Content empiricism motivates and is reinforced by a third theme: the identification of time with succession. Hume understands impressions as mental entities that are disposed or arranged in spatial and successive manners. Temporal experiences are complex impressions made up of successive parts. All our temporal notions reduce to (or can be understood in terms of) the successiveness we find in experience. Finally, a fourth theme of Hume's theory is its assigning what might seem like a surprisingly extensive scope to the contents of our ordinary representations of time and the past. Whenever we represent an object in the past or future we represent the entire succession from that object to what we regard as the present. Thus, our ideas' contents commonly span long successions—as long as a year, a decade, and even many decades. While this capacity might seem mysterious, Hume can explain it as an instance of 'representation by abridgement,' the same mechanism that

accounts for our ability to represent entire classes of objects (the class of all humans, for instance) and highly complex objects, like a nation or the universe.

Consider, again, Reid's challenge that the 'theory of ideas' cannot produce an argument of 'real weight' for the veridicality of our ideas of the past (1785/2002, 290). Hume's discussion of antecedent skepticism indicates that, if an argument of 'real weight' is one that does not presuppose the epistemic value of basic cognitive processes like memory and causal inference, the demand for such an argument is misplaced in the first place: it is more reasonable to regard these processes as *prima facie* epistemically valuable, and to evaluate them only upon subsequent reflection, than to attempt to prove their epistemic value against Cartesian doubts (in this respect, Hume's view is much closer to Reid's own defense of 'common sense' than Reid supposes). While subsequent reflection on these processes in fact generates powerful skeptical doubts, it is far from clear that Hume ultimately *endorses* these doubts, especially considering that he seems to endorse epistemically normative criteria that would support the epistemic value of the processes, like reliability, reflexivity, and stability. Ultimately, Hume's support of scientific methods, his disavowal of skepticism, and his praise of historical knowledge as 'extending our experience to all past ages' should be seen as reflective of his epistemology, not only of his 'vulgar' or unphilosophical moments ('Of the Study of History,' 1741/1987, 566)

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