

Overview of *Treatise* Book 1 Part 3, Sections 1-8

Book 1 Part 3 of Hume's *Treatise of Human Nature* is entitled "Of knowledge and probability", but the title is rather misleading, because only the short first section is devoted to "knowledge" (here used in the strict sense of *certain* knowledge). Moreover the bulk of Part 3 focuses not so much on *probability* as on *causation*, and the relationship between these is not made clear for some time.¹

Section 1.3.1 "Of knowledge" launches immediately into a dichotomy within the "seven different kinds of philosophical relation", picking up from the discussion of relations in *T* 1.1.5. Four of these relations (*resemblance*, *contrariety*, *degrees in quality*, *proportions in quantity or number*) "depend entirely on the ideas" that are related together, and hence can be the basis of *knowledge* in the strict sense.² Of these four, the first three, Hume says, "are discoverable at first sight, and fall more properly under the province of intuition than demonstration" (1.3.1.2). Only *proportions in quantity or number* remains as a relation capable of grounding complex demonstrative reasoning, and hence Hume takes the view that useful demonstration is generally confined to mathematics.³ The remaining three kinds of relations are *identity*, *relations in time and place*, and *causation*. These can all, Hume says, "be chang'd without any change in the ideas" (1.3.1.1), a claim which is perhaps best interpreted as meaning that truths about these relations cannot be settled *a priori* just by consulting our (perceived or remembered) ideas of the relevant objects.⁴

Section 1.3.2 "Of probability; and of the idea of cause and effect" starts with a discussion of *reasoning*, which Hume takes to involve *comparison* of "objects" and discovery of their relations.⁵ A comparison between objects that are present to the senses, however, is a matter of *perception* rather than reasoning, and this covers "any of the observations we may make concerning *identity*, and the *relations of time and place*; since in none of them the mind can go beyond what is immediately present

¹ Indeed apart from an inconspicuous use of the word "probably" at *T* 1.3.2.2, the word "probability" and its cognates do not appear in the main text (leaving aside the Part 3 and Section 2 headings) until *T* 1.3.6.4. Only at that point, in the heart of his argument concerning induction, does Hume get close to spelling out the intimate relationship – almost amounting to an identity – between causal and probable reasoning, though this is implicit in the "key result" at 1.3.2.3.

² In the *Enquiry*, Hume describes propositions known in this sort of way as "relations of ideas" (4.1), and it is broadly equivalent to *analyticity* in the modern sense of "truth in virtue of meaning". Note, however, that Hume takes non-trivial relations of ideas to be confined to mathematics (which is in contrast with modern views on analyticity, and raises difficult questions about the status of his own philosophical reasonings).

³ This view is preserved in the *Enquiry*: "the only objects of the abstract sciences or of demonstration are quantity and number" (*E* 12.27), though the two works differ significantly regarding the status of geometry. *Treatise* 1.3.1.4 says that geometry "never attains a perfect precision and exactness", because geometrical ideas are derived from the senses. But in the *Enquiry*, geometry is included alongside algebra and arithmetic as a "science" whose affirmations can be "intuitively or demonstratively certain" (*E* 4.1).

⁴ This seems most questionable in the case of identity, where Hume gives only the perfunctory argument "Two objects, tho' perfectly resembling each other, and even appearing in the same place at different times, may be numerically different" (*T* 1.3.1.1). Bear in mind here that by "identity" Hume means *identity over time*, "as apply'd ... to constant and unchangeable objects" (*T* 1.1.5.2).

⁵ Hume often uses the noun "object" to mean anything that is sensed or thought about; it does not necessarily imply an external or physical object.

to the senses, either to discover the real existence or the relations of objects.” (1.3.2.2) Only *causation* can go beyond what we perceive in this way, and any judgements that we make about the identity or spatio-temporal relationships of things beyond our perception are always based on causation.

“Here then it appears, that of those three relations, which depend not upon the mere ideas, the only one, that can be trac’d beyond our senses, and informs us of existences and objects, which we do not see or feel, is *causation*.” (1.3.2.3).

This is the key result that implies that all reasoning from experience (and hence – in Hume’s view – all “probable reasoning”, though he does not mention this here) must be founded on the relation of causation. Hume therefore focuses on this vital idea of causation, with the aim of “tracing it up to its origin, and examining that primary impression, from which it arises” (1.3.2.4). Examining objects that we take to be causes and effects doesn’t reveal any particular *qualities* that are common to all of them (1.3.2.5), so Hume concludes that “The idea ... of causation must be deriv’d from some *relation* among objects” (1.3.2.6). He then remarks that “whatever objects are consider’d as causes or effects, are *contiguous*”, and where distant objects causally interact, we find that they are “link’d by a chain of causes, which are contiguous among themselves”. “We may therefore consider the relation of CONTIGUITY as essential to that of causation; ...”.⁶ Next Hume goes on claim that “PRIORITY of time in the cause before the effect” is “essential to causes and effects” (1.3.2.7). He supports this claim with a rather weak argument, that if a cause could be “perfectly co-temporary with its effect ... they must all of them be so”, which would lead to the “utter annihilation of time” in which “all objects must be co-existent”.⁷

Contiguity and *priority* are not enough to distinguish a cause and effect relationship, but it’s not clear yet what else is required. Trying to define a cause as “something productive of another” is useless, because *production* is synonymous with *causation* and gets us no further forward (1.3.2.10).

“Shall we then rest contented with these two relations of contiguity and succession, as affording a compleat idea of causation? By no means. An object may be contiguous and prior to another, without being consider’d as its cause.⁸ There is a NECESSARY CONNEXION to be taken into consideration; and that relation is of much greater importance, than any of the other two above-mention’d.” (1.3.2.11)

None of the known qualities of objects, or their relations, seem to reveal any such necessary connexion. Yet it would be premature to give up the search for an impression from which that idea could be derived, since the Copy Principle has been fairly “firmly establish’d” (1.3.2.12). What to do?

⁶ However this sentence continues: “at least may suppose it such, according to the general opinion, till we can find a more proper occasion [footnote to 1.4.5] to clear up this matter, by examining what objects are or are not susceptible of juxta-position and conjunction”. In section 1.4.5, Hume will explain that some of our perceptions (e.g. impressions of smell, or taste, or sentiments) are not spatially located, and hence cannot be spatially contiguous, though this does not prevent their being causes or effects. In most of his discussion in *Treatise* 1.3, however, this remains a “loose end” that is not properly tied up; in the *Enquiry*, Hume drops the requirement of contiguity altogether.

⁷ Again Hume seems aware that his discussion is less than rigorous: “If this argument appear satisfactory, ’tis well. If not, I beg the reader ... [to suppose] it such. For he shall find, that the affair is of no great importance.” (1.3.2.8)

⁸ Note that this means *single instance* contiguity and priority; *constant conjunction* hasn’t yet made an entrance.

“We must, therefore, proceed like those, who being in search of any thing ... and not finding it in the place they expected, beat about all the neighbouring fields, without any certain view or design, in hopes their good fortune will at last guide them to what they search for.” (1.3.2.13)

Hume chooses two “neighbouring fields” to explore, both of which apparently involve “that *necessary connexion*, which enters into our idea of cause and effect”:

“*First*, For what reason we pronounce it *necessary*, that every thing whose existence has a beginning, shou’d also have a cause?

Secondly, Why we conclude that such particular causes must *necessarily* have such particular effects; and what is the nature of that *inference* we draw from the one to the other, and of the *belief* we repose in it?” (1.3.2.14-15)

This sets the agenda for Sections 1.3.3 (on the *Causal Maxim*) and 1.3.4-6 (on *causal inference*), the last of which leads on to an extended discussion of *belief* (1.3.7-10). and *probability* (1.3.11-13). It is not until Section 1.3.14 that Hume will return to the issue he is setting aside here: the origin of the idea of necessary connexion.

Section 1.3.3 “Why a cause is always necessary” discusses the “general maxim in philosophy, that *whatever begins to exist, must have a cause of existence*”, which “is commonly taken for granted in all reasonings, without any proof given or demanded.” (1.3.3.1). Many philosophers take it to be “founded on intuition” (i.e. self-evident), but Hume opposes this by appealing to his analysis of knowledge from *T* 1.3.1:

“All certainty arises from the comparison of ideas, and from the discovery of such relations as are unalterable, so long as the ideas continue the same. These relations are *resemblance, proportions in quantity and number, degrees of any quality, and contrariety*; none of which are imply’d in this proposition, *whatever has a beginning has also a cause of existence*. That proposition therefore is not intuitively certain.” (1.3.3.2)

He then proposes “an argument, which proves at once, that the [Maxim] is neither intuitively nor demonstratively certain”, based on what are known as his Separability and Conceivability Principles:⁹

“as all distinct ideas are separable from each other, and as the ideas of cause and effect are evidently distinct, ’twill be easy for us to conceive any object to be non-existent this moment, and existent the next, without conjoining to it the distinct idea of a cause ... The separation, therefore, of the idea of a cause from that of a beginning of existence, is plainly possible for the imagination; and consequently the actual separation of these objects is so far possible, that it implies no contradiction nor absurdity; and is therefore incapable of being refuted by any reasoning from mere ideas; without which ’tis impossible to demonstrate the necessity of a cause.” (1.3.3.3)

Most of the rest of the section is devoted to refuting various attempted demonstrations of the Causal Maxim, namely those of Hobbes (1.3.3.4), Clarke (1.3.3.5), Locke (1.3.3.6-7) and one that appeals to

⁹ The Separability Principle (as explicitly stated at *T* 1.1.7.3) is that “whatever objects are different are distinguishable, and that whatever objects are distinguishable are separable by the thought and imagination”. See also the discussion of *T* 1.1.3.4, above. The Conceivability Principle, introduced at *T* 1.2.2.8, is “*that whatever the mind clearly conceives includes the idea of possible existence, or, in other words, that nothing we imagine is absolutely impossible.*” In the argument at *T* 1.3.3.3, the Separability Principle shows that any object can be conceived as coming into existence separately from its having a cause, after which the Conceivability Principle is (implicitly) invoked to infer that this is a genuine possibility, implying no contradiction.

the correlative ideas of cause and effect (1.3.3.8). The final paragraph, like the “neighbouring fields” passage in the previous section, provides a rather artificial link to a change of topic:

“Since it is not from knowledge or any scientific reasoning, that we derive the opinion of the necessity of a cause to every new production, that opinion must necessarily arise from observation and experience. The next question, then, shou’d naturally be, *How experience gives rise to such a principle?* But as I find it will be more convenient to sink this question in the following, *Why we conclude, that such particular causes must necessarily have such particular effects, and why we form an inference from one to another?* we shall make that the subject of our future enquiry. ’Twill, perhaps, be found in the end, that the same answer will serve for both questions.” (1.3.3.9)

In fact Hume never returns explicitly to the question of why we believe the Causal Maxim! However there is further textual evidence beyond the *Treatise* corroborating the suggestion made here, that he intended to ground it in “observation and experience”.¹⁰

Section 1.3.4 “Of the component parts of our reasonings concerning cause and effect” is the first of two preliminary sections leading up to Hume’s famous discussion of causal or inductive reasoning in *T* 1.3.6. Here he argues that any causal reasoning, if it is to result in real belief in the object inferred, must ultimately start from something perceived or remembered (though as he points out at 1.3.4.3, the memory might be vague and general rather than distinct and particular). Without a perceptual impression to start from, or a memory, any causal reasoning would be entirely hypothetical “and consequently there wou’d be no belief nor evidence” (1.3.4.2).

Section 1.3.5 “Of the impressions of the senses and memory” follows on from the previous section, with the corollary that “this kind of reasoning ... from causation” starts from “an impression of the memory or senses” and leads to an *idea* of the relevant cause or effect (1.3.5.1).

“Here therefore we have three things to explain, viz. *First*, The original impression. *Secondly*, The transition to the idea of the connected cause or effect. *Thirdly*, The nature and qualities of that idea.”

The remainder of the current section is devoted, as the title suggests, to the first of these three things: “the impressions of the senses and memory”, while *T* 1.3.6 considers “the inference from the impression to the idea” and *T* 1.3.7 turns to “the nature of the idea or belief”. So Hume’s discussion here is pleasingly systematic, in contrast with some of the route he has followed hitherto in this part of the *Treatise*.

The main conclusion of Section 1.3.5 is that the distinction between the ideas of the memory and those of the imagination lies in “the different *feeling* ... the ideas of the memory are more *strong* and *lively* than those of the fancy” (1.3.5.5).¹¹ And we see an anticipation of Hume’s theory of belief:

“And 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

¹⁰ Hume’s discussion “Of the Probability of Causes” will later give hints as to why “philosophers” believe in determinism generally (*T* 1.3.12.5), and perhaps this is a pointer to what Hume planned to say on the Causal Maxim.

¹¹ The quoted passage is taken from a section of text that Hume added in 1740, through the Appendix that was published with Book III.

such a force and vivacity, as to pass for an idea of the memory, and counterfeit its effects on the belief and judgment. This is noted in the case of liars; who by the frequent repetition of their lies, come at last to believe and remember them, as realities ...

Thus it appears, that the *belief* or *assent*, which always attends the memory and senses, is nothing but the vivacity of those perceptions they present; and that this alone distinguishes them from the imagination. To believe is in this case to feel an immediate impression of the senses, or a repetition of that impression in the memory. 'Tis merely the force and liveliness of the perception, which constitutes the first act of the judgment, and lays the foundation of that reasoning, which we build upon it, when we trace the relation of cause and effect." (1.3.5.6-7)

Hume's theory – as will be revealed in *T* 1.3.7-8 – is that causal inference involves the associative transfer of force and vivacity from the perceived or remembered impression to the inferred idea. This enhanced vivacity thus automatically converts that idea into a belief.

The title of this section of the *Treatise* – “Of the impressions of the senses and memory” – is rather surprising, given Hume has earlier (in *T* 1.1.2 “Division of the subject” and *T* 1.1.3 “Of the ideas of the memory and imagination”) made clear that the memory deals in *ideas* rather than *impressions*. Hume seems to think of the ideas of the memory as “somewhat intermediate betwixt an impression and an idea” (*T* 1.1.3.1) because they are sufficiently firm and vivid – sufficiently impression-like – to establish copy-ideas in the imagination: “The impressions of the memory never change in any considerable degree; and each impression draws along with it a precise idea, which takes its place in the imagination, as something solid and real, certain and invariable.” (THN 1.3.9.7). If this is right, then all the ideas that are actually involved in *thinking* lie within the imagination, and the role of the senses and memory is to supply the “impressions” from which those ideas derive.

Hume's view of *the imagination* is also rather confusing, and we shall see later in the *Treatise* that he uses the term ambiguously. For the present, however, note that it is a direct consequence of Hume's empiricism – his Copy Principle – that all the ideas we think with are quasi-sensory, since all are copied from impressions of sensation or reflection (i.e. outer or sense). Hume denies, therefore, any separate faculty that can take a “pure and intellectual view” of “refin'd and spiritual” ideas (*T* 1.3.1.7), unsullied by sensory input, as Descartes and other rationalists supposed. Hence it is almost inevitable for Hume that our main thinking faculty will be the *imagination* (the faculty that deals with mental *images*). In this sense, we can think of the imagination as something like a multi-layered or multi-dimensional virtual canvas on which sense-copied ideas appear, with different degrees of “force and vivacity” and “in a perpetual flux and movement” (*T* 1.4.6.4).¹²

¹² The model of a canvas is obviously most appropriate to visual ideas, which indeed seem to dominate Hume's thought, although ideas may correspond to any of the senses—including internal “reflection” – and only the ideas of sight and touch will be spatially arranged (not necessarily within a single space).

Section 1.3.6 “Of the inference from the impression to the idea” continues the agenda announced at 1.3.5.1, explaining “The transition to the idea of the connected cause or effect” which constitutes causal inference. In the paradigm cases Hume is discussing here, we have previously observed a conjunction between two types of event *A* and *B*, and if we now come to observe – i.e. have an impression of – another such event (say *A*), we accordingly infer the other – i.e. we come to believe that the other (here *B*) will occur or have occurred. Most of Hume’s discussion takes for granted that we are observing the cause and inferring the effect, so the inference is from past to future, but more generally it is inference from *observed* (i.e. from the impression of one thing) to *unobserved* (i.e. to an expectation – or lively idea – of the other thing).

The bulk of Section 1.3.6 – up to paragraph 11 – constitutes the first version of Hume’s famous argument concerning induction, which is analysed in detail in a companion document. When introducing this argument, however, Hume makes some moves that will be of considerable importance beyond it:

1.3.6.1: Causal inferences cannot be based purely on observation of the “objects” concerned.

1.3.6.2: Hence such inferences must be founded on *experience*, and the relevant experience is of *constant conjunction* between two types of thing (e.g. flame and heat).

1.3.6.3: Hume now announces (with an unconvincing show of surprise) that

“we have insensibly discover’d a new relation, betwixt cause and effect, when we least expected it ... This relation is their CONSTANT CONJUNCTION. Contiguity and succession are not sufficient to make us pronounce any two objects to be cause and effect, unless we perceive, that these two relations are preserv’d in several instances.”

This plays a key role in his search for the “elusive impression of necessary connexion” which began back at 1.3.2.11 (when he stated that “There is a NECESSARY CONNEXION to be taken into consideration ... of much greater importance” than “contiguity and succession”). The paragraph ends by hinting that much later (in Section 1.3.14), it will be inference from constant conjunction – as discussed in 1.3.6 – that will turn out to be the key:

“Perhaps ’twill appear in the end, that the necessary connexion depends on the inference, instead of the inference’s depending on the necessary connexion.”

1.3.6.4: How does *experience* give rise to causal inference? Here Hume contrasts two hypotheses, that the inference – from the “impression” of the cause to the “idea” of the effect – is *either* produced by (i) “the understanding” = “reason” *or* (ii) “the imagination” = “a certain association and relation of perceptions” (thus associational processes are, in this context at least, implicitly assigned to the imagination rather than reason). The faculty language is potentially confusing here, partly because Hume loves so-called “elegant variation” in which he alternates between different names of the same thing (just as he will soon, in 1.3.6.12, refer the imagination as “the fancy”).

The main core of Hume's argument concerning induction now proceeds to rule out the hypothesis that causal inference is produced by "reason" or "the understanding", a conclusion that is announced in paragraph 11:

"Thus not only our reason fails us in the discovery of the *ultimate connexion* of causes and effects, but even after experience has inform'd us of their constant conjunction, 'tis impossible for us to satisfy ourselves by our reason, why we shou'd extend that experience beyond those particular instances, which have fallen under our observation. We suppose, but are never able to prove, that there must be a resemblance betwixt those objects, of which we have had experience, and those which lie beyond the reach of our discovery." (1.3.6.11)

This has seemed to many to be a sceptical result, but in context, the role of the famous argument seems to be simply to show that *reason* is not responsible for causal inference. Hume accordingly goes on to ascribe causal inference to associational processes in the mind:

"We have already taken notice of certain relations, which make us pass from one object to another, even tho' there be no reason to determine us to that transition; ... When the mind ... passes from the idea or impression of one object to the idea or belief of another, it is not determin'd by reason, but by certain principles, which associate together the ideas of these objects, and unite them in the imagination. ... The inference, therefore, depends solely on the union of ideas." (1.3.6.12)

Is this the same as the association of ideas as earlier described in *Treatise* 1.1.4? Hume's answer is a bit equivocal:

1.3.6.13: Hume has previously "reduc'd" the "principles of union among ideas" to "three general ones", namely *resemblance*, *contiguity*, and *causation*. But these are "neither the *infallible* nor the *sole* causes" of the sequence of our thoughts, which can be "very irregular".

1.3.6.14: His newly-discovered principle of causal inference, based on observed constant conjunction, "at first sight may be esteem'd different" from the three principles of association, "but will be found at the bottom to depend on the same origin".¹³

1.3.6.15: Indeed this inferential principle is, Hume says,

"the very same with that betwixt the ideas of cause and effect, ... We have no other notion of cause and effect, but that of certain objects, which have been *always conjoin'd* together, and which in all past instances have been found inseparable. ... When the impression of one becomes present to us, we immediately form an idea of its usual attendant; and consequently we may establish this as one part of the definition of an opinion or belief, that 'tis *an idea related to or associated with a present impression*." (1.3.6.15)

This identification seems, however, to be a mistake. Mere association of ideas by *causation* has the same irregularity as by *resemblance* and *contiguity*. So, for example, a painting of Salisbury Cathedral might lead me to think about the Cathedral itself (owing to *resemblance*), and then about the nearby river Avon (owing to *contiguity*), but equally it might lead me to think about the artist John Constable (owing to his *causal* relation to the painting). This is all quite different from *causal inference*, which is far more compulsive and specific, where I see *A* and then, owing to the associational relation generated from observed constant conjunction, *irresistibly* and *inevitably* find myself expecting *B*.

¹³ Hume also in this paragraph draws a connection with his discussion of abstract ideas, which we can ignore here.

Hume makes the same mistake later in the *Treatise*, for example at 1.3.8.6-7, where he fails to distinguish clearly between *causation* as just one of the three associational relations (alongside *resemblance* and *contiguity*) as opposed to *causal inference* (which he will later call *custom*). In the first *Enquiry*, however, Hume corrects it, clearly distinguishing between mere association by *resemblance* (E 5.15-16), *contiguity* (E 5.17) and *causation* (E 5.18) on the one hand – in which, he says, “the belief of the correlative object is always presupposed” (E 5.20) – and *causal inference* on the other hand, in which “belief ... reaches beyond the memory or senses”. Such inference, he says, “is of a similar nature, and arises from similar causes” to the association of ideas, thus providing “some analogies, by which it may be explained” (E 5.20). But it is a distinct phenomenon.

1.3.6.16: Immediately after the passage from 1.3.6.15 quoted above, Hume ends the section with a somewhat puzzling single sentence:

“Thus tho’ causation be a *philosophical* relation, as implying contiguity, succession, and constant conjunction, yet ’tis only so far as it is a *natural* relation, and produces an union among our ideas, that we are able to reason upon it, or draw any inference from it.” (1.3.6.16)

This is the first time that the natural/philosophical distinction has featured since it was introduced in Section 1.1.5, and it will feature just once more (at T 1.3.14.31, in connection with the two definitions of cause). Its significance is controversial, so we pass over these complications here.¹⁴

Section 1.3.7 “Of the nature of the idea or belief” completes the agenda of 1.3.5.1, explaining “The nature and qualities of [the inferred] idea”. Hume’s aim is to explain what it is that distinguishes between the “The idea of an object” and “the belief of it” (1.3.7.1). Belief seems to *add* something over and above mere *conception* of an idea, but Hume denies that it involves addition of some further idea, such as that of existence:

“’Tis ... evident, that the idea of existence is nothing different from the idea of any object, and that when after the simple conception of any thing we wou’d conceive it as existent, we in reality make no addition to or alteration on our first idea. Thus when we affirm, that God is existent, we simply form the idea of such a being, as he is represented to us; nor is the existence, which we attribute to him, conceiv’d by a particular idea, which we join to the idea of his other qualities, and can again separate and distinguish from them.¹⁵ ... I likewise maintain, that the belief of the existence joins no new ideas to those, which compose the idea of the object. ... But as ’tis certain there is a great difference betwixt the simple conception of the existence of an object, and the belief of it, and as this difference lies not in the parts or composition of the idea, which we conceive; it follows, that it must lie in the *manner*, in which we conceive it.” (1.3.7.2, reiterated at 1.3.7.5 n. 20)

He goes on to emphasise a difference between propositions whose falsehood is inconceivable – which we can see *must* be true (either because they are “intuitive”, i.e. self-evident, or demonstratively provable) – and those we infer by causal reasoning, whose falsehood is *always* conceivable:

¹⁴ I discuss this in detail in §1 of https://davidhume.org/scholarship/papers/millican/2017_Hume's_Fork.pdf.

¹⁵ This point implicitly attacks Descartes’s Ontological Argument in *Meditation 5*, which crucially depends on existence being a perfection (and hence one of God’s defined qualities). Likewise, when discussing the origin of ideas at E 2.6, Hume instances the idea of God as a complex idea created by the mind: “The idea of God, as meaning an infinitely intelligent, wise, and good Being, arises from reflecting on the operations of our own mind, and augmenting, without limit, those qualities of goodness and wisdom.” This implicitly attacks Descartes’s argument in *Meditation 3* that our idea of God is of such a nature that it has to be innate, ultimately with a divine origin.

“Wherein consists the difference betwixt believing and disbelieving any proposition? The answer is easy with regard to propositions, that are prov’d by intuition or demonstration. In that case, the person, who assents, not only conceives the ideas according to the proposition, but is necessarily determin’d to conceive them in that particular manner, either immediately or by the interposition of other ideas. Whatever is absurd is unintelligible; nor is it possible for the imagination to conceive any thing contrary to a demonstration. But as in reasonings from causation, and concerning matters of fact, this absolute necessity cannot take place,¹⁶ and the imagination is free to conceive both sides of the question, I still ask, *Wherein consists the difference betwixt incredulity and belief?* since in both cases the conception of the idea is equally possible and requisite.” (1.3.7.3)

So it seems that in the case of propositions that we see to be “absolutely necessary”, the relevant “manner of conception” involves our inability to conceive the contrary, which Hume takes to provide an “easy” answer.¹⁷ But the same answer can’t apply to beliefs in contingent matters of fact.

T 1.3.7.4 hints at the point that when two people disagree, they conceive *the same proposition* – else they would not be disagreeing about a single thing – but there is still a difference in the way they conceive it. They must be forming the proposition from ideas that represent *the same impressions*, and the only difference of conception that is possible without representing “a different object or impression” is to “encrease or diminish [the idea’s] force and vivacity” (1.3.7.5).¹⁸ Hence,

“as belief does nothing but vary the manner, in which we conceive any object, it can only bestow on our ideas an additional force and vivacity. An opinion, therefore, or belief may be most accurately defin’d, A LIVELY IDEA RELATED TO OR ASSOCIATED WITH A PRESENT IMPRESSION.” (1.3.7.5)

There is an important footnote at the end of this quotation, objecting to “the vulgar division of the acts of the understanding, into *conception, judgment* and *reasoning*”, and insisting that “these three .. all resolve themselves into the first, and are nothing but particular ways of conceiving our objects”. Here he reiterates his point that the “proposition, *God is*, or indeed any other, which regards existence” does not involve a distinct “idea of existence”, and hence it is possible for a belief to involve only a single vivid idea. He goes on to point out that his analysis of causal inference involves no third *intermediate* idea between observation of the cause and belief in the effect: “We infer a cause immediately from its effect; and this inference is not only a true species of reasoning, but the strongest of all others, and more convincing than when we interpose another idea to connect the two extremes” (1.3.7.5 n. 20).¹⁹

T 1.3.7.6 briskly sums the main points argued in Sections 1.3.4, 1.3.6 and 1.3.7 respectively:

¹⁶ Note, for future reference, that Hume here clearly distinguishes between *causal necessity* – whose impression-source he is seeking through most of *Treatise* 1.3 – and the *absolute necessity* that characterises propositions whose falsehood is inconceivable. See https://davidhume.org/scholarship/papers/millican/2021_Hume_on_Modality.pdf for detailed comparison between Hume’s treatment of the two kinds of modality.

¹⁷ There is scope for further consideration here, because it’s not obvious that my inability to conceive *not(P)* will inevitably affect my conception of *P*, unless I make the effort both ways. And any feeling of compulsion that may be involved in these cases could perhaps impact on the interpretation of Hume’s “impression of necessary connexion”.

¹⁸ Hume here gives an analogy: “The case is the same as in colours. A particular shade of any colour may acquire a new degree of liveliness or brightness without any other variation. But when you produce any other variation, ’tis no longer the same shade or colour.” (T 1.3.7.5).

¹⁹ It’s not clear that this is entirely consistent with Hume’s later treatment of causal judgement, which puts considerable emphasis on careful weighing up of relevant factors, rather than immediate inference.

“When we infer the existence of an object from that of others, some object must always be present either to the memory or senses, in order to be the foundation of our reasoning; ...

Reason can never satisfy us that the existence of any one object does ever imply that of another; so that when we pass from the impression of one to the idea or belief of another, we are not determin'd by reason, but by custom or a principle of association.²⁰

But belief is ... a particular manner of forming an idea: And as the same idea can only be vary'd by a variation of its degrees of force and vivacity; it follows upon the whole, that belief is a lively idea produc'd by a relation to a present impression, according to the foregoing definition.” (T 1.3.7.6)

The next paragraph was not present in the original 1739 edition, but added in 1740 as part of the *Appendix*. It appears to suggest that Hume is not entirely satisfied with his definition of belief:

“I am at a loss for terms to express my meaning. I conclude, ... that an opinion or belief is nothing but an idea, that is different from a fiction, not in the nature, or the order of its parts, but in the *manner* of its being conceiv'd. But when I wou'd explain this *manner*, I scarce find any word that fully answers the case, but am oblig'd to have recourse to every one's feeling, in order to give him a perfect notion of this operation of the mind. An idea assented to *feels* different from a fictitious idea, that the fancy alone presents to us: And this different feeling I endeavour to explain by calling it a superior *force*, or *vivacity*, or *solidity*, or *firmness*, or *steadiness*. This variety of terms, which may seem so unphilosophical, is intended only to express that act of the mind, which renders realities more present to us than fictions, causes them to weigh more in the thought, and gives them a superior influence on the passions and imagination. Provided we agree about the thing, 'tis needless to dispute about the terms. The imagination has the command over all its ideas, and can join, and mix, and vary them ... But as it is impossible, that that faculty can ever, of itself, reach belief, 'tis evident, that belief consists not in the nature and order of our ideas, but in the manner of their conception, and in their feeling to the mind. I confess, that 'tis impossible to explain perfectly this feeling or manner of conception. We may make use of words, that express something near it. But its true and proper name is *belief*, which is a term that every one sufficiently understands in common life. And in philosophy we can go no farther, than assert, that it is something *felt* by the mind, which distinguishes the ideas of the judgment from the fictions of the imagination. It gives them more force and influence; makes them appear of greater importance; infixes them in the mind; and renders them the governing principles of all our actions.” (T 1.3.7.7)

It might be that Hume inserted this paragraph here to pre-empt a natural objection to an unconvincing claim in the very next paragraph:

“If one person sits down to read a book as a romance, and another as a true history, they plainly receive the same ideas, and in the same order; ... tho' ... The latter has a more lively conception of all the incidents. He enters deeper into the concerns of the persons: represents to himself their actions, and characters, [etc.] ... While the former, who gives no credit to the testimony of the author, has a more faint and languid conception of all these particulars; ...” (T 1.3.7.8)

This hypothesis seems plausible because three sections later, another inserted paragraph seems to concede that, on the contrary, poetical fiction can be more vivid to us than history:

“A poetical description may have a more sensible effect on the fancy, than an historical narration. ... It may seem to set the object before us in more lively colours. But still the ideas it presents are different to the feeling from those, which arise from the memory and the judgment. There is something weak and imperfect amidst all that seeming vehemence of thought and sentiment, which attends the fictions of poetry.” (T 1.3.10.10).

Hume now has doubts about characterising belief in terms of *force and vivacity*. He still wants to say that it involves some distinctive *feeling*, but cannot find words to describe that feeling except to say that “its true and proper name is *belief*, which is a term that every one sufficiently understands”.

²⁰ This appears to mean that *custom* is a *principle of association* (rather than an alternative source of determination).

Section 1.3.8 “Of the causes of belief” aspires to

“establish ... as a general maxim in the science of human nature, *that when any impression becomes present to us, it not only transports the mind to such ideas as are related to it, but likewise communicates to them a share of its force and vivacity.*” (T 1.3.8.2)

In other words, *association of ideas has the power – when we experience some relevant impression – not only to bring associated ideas to mind, but also to make them forceful and vivid.* To support this maxim, Hume now introduces a number of observational “experiments”, in line with his ambition expressed in the subtitle of the *Treatise* “to introduce the experimental method of reasoning into moral subjects”.²¹ His first two examples involve association by *resemblance*:

- A picture of an absent friend enlivens our idea of him (1.3.8.3).
- “Mummeries” involving sensory images (presumably of Jesus, Mary, saints, the Stations of the Cross etc.) enliven the devotion of Roman Catholics (1.3.8.4).

His next two examples introduce association by *contiguity* and *causation* respectively:

- When we get closer to our home (for example), thoughts of it become more vivid (1.3.8.5).
- Relics of saints enliven the devotion of religious believers, because of the supposed causal connection between the saint and the relic (1.3.8.6).

In 1.3.8.7, Hume suggests that the very phenomenon he has been investigating – of causal reasoning – “will alone suffice” “to prove, that a present impression with a relation or transition of the fancy may enliven any idea”.²² He goes on to:

“consider it as a question in natural philosophy, which we must determine by experience and observation. I suppose there is an object presented, from which I draw a certain conclusion, and form to myself ideas, which I am said to believe or assent to. Here ’tis evident ... as the phaenomenon of belief ... is merely internal [to the mind, it must be] the present impression [rather than any unknown qualities of the object], which is to be consider’d as the true and real cause of the idea, and of the belief which attends it. We must therefore endeavour to discover by experiments the particular qualities, by which ’tis enabled to produce so extraordinary an effect.” (1.3.8.8)

It’s clear that the impression alone has no such power (1.3.8.9), and because the belief is produced – after repeated observed conjunctions – “immediately, without any new operation of the reason or imagination”, we can reasonably call the process *custom*, “as we call every thing CUSTOM, which proceeds from a past repetition, without any new reasoning or conclusion” (1.3.8.10).

He now considers another “experiment”, observing that no such customary transition can produce belief when it begins from a mere idea rather than an impression, and drawing the conclusion that it must be the additional *vivacity* of an impression that makes the crucial difference:

“A present impression, then, is absolutely requisite to this whole operation; and when after this I compare an impression with an idea, and find that their only difference consists in their different degrees of force and vivacity, I conclude upon the whole, that belief is a more vivid and intense conception of an idea, proceeding from its relation to a present impression.” (1.3.8.11)

²¹ We shall see later that Section 1.3.12 is also replete with “experiments” (as is Section 2.2.2 in Book 2).

²² Recall that “the fancy” is just another term for “the imagination”.

Hume's next paragraph famously sums up the discussion in a way that stresses – indeed, as we shall see, *over-stresses* – the extent to which his theory of causal reasoning is based on immediate *feeling* rather than any sort of thoughtful or reflective process:

“Thus all probable reasoning is nothing but a species of sensation. 'Tis not solely in poetry and music, we must follow our taste and sentiment, but likewise in philosophy. When I am convinc'd of any principle, 'tis only an idea, which strikes more strongly upon me. When I give the preference to one set of arguments above another, I do nothing but decide from my feeling concerning the superiority of their influence. Objects have no discoverable connexion together; nor is it from any other principle but custom operating upon the imagination, that we can draw any inference from the appearance of one to the existence of another.” (1.3.8.12)

Hume now gives an apt illustration to make the important point that typical everyday inductive inferences involve no explicit reflection on past cases, let alone on any principle of uniformity:

“A person, who stops short in his journey upon meeting a river in his way, foresees the consequences of his proceeding forward; and his knowledge of these consequences is convey'd to him by past experience... But can we think, that on this occasion he reflects on any past experience, and calls to remembrance instances, that he has seen or heard of, in order to discover the effects of water on animal bodies? No surely; ... The idea of sinking is so closely connected with that of water, and the idea of suffocating with that of sinking, that the mind makes the transition without the assistance of the memory. The custom operates before we have time for reflection. The objects seem so inseparable, that we interpose not a moment's delay in passing from the one to the other. But as this transition proceeds from experience, and not from any primary connexion betwixt the ideas, we must necessarily acknowledge, that experience may produce a belief and a judgment of causes and effects by a secret operation, and without being once thought of. This removes all pretext, if there yet remains any, for asserting that the mind is convinc'd by reasoning of that principle, *that instances of which we have no experience, must necessarily resemble those, of which we have.* For we here find, that the understanding or imagination can draw inferences from past experience, without reflecting on it; much more without forming any principle concerning it, or reasoning upon that principle.” (1.3.8.13)

Another important paragraph follows, explaining how we can make inductive inferences “merely by one experiment, provided it be made with judgment, and after a careful removal of all foreign and superfluous circumstances.” The absence of repetitive observations in such cases might seem at odds with Hume's theory that inductive inference is founded on *custom*, but he explains that here “reflection produces the custom in an *oblique* and *artificial* manner” in that although:

“we are here suppos'd to have had only one experiment of a particular effect, yet we have many millions to convince us of this principle; *that like objects, plac'd in like circumstances, will always produce like effects;*²³ and as this principle has establish'd itself by a sufficient custom, it bestows an evidence and firmness on any opinion, to which it can be apply'd. The connexion of the ideas is not habitual after one experiment; but this connexion is comprehended under another principle, that is habitual”. (1.3.8.14)

The section draws to a close with three paragraphs in which Hume addresses a phenomenon that might seem to contradict T 1.3.8.11, in allowing causal inference from an idea rather than an impression. For suppose I have a distinctive idea, and then conclude from the Copy Principle “that such an impression did once exist” – this seems to be a causal inference resulting in a belief, yet without an originating

²³ Notice that this italicised principle is not the same as the uniformity principle italicised in the previous paragraph. The uniformity principle – which Hume seems to consider as presupposed by inductive inference – concerns the *evidential relevance* of observed to unobserved, whereas this new principle concerns the *consistency* of events within our experience. If our experience had been radically inconsistent or chaotic, then this principle would not apply, but we could still use the uniformity principle to infer *continuing* inconsistency or chaos.

impression to provide the force and vivacity that is supposedly needed to generate belief. Hume's answer is to say that "*the present idea*" is able to provide the requisite force and vivacity:

"For as this idea is not here consider'd, as the representation of any absent object, but as a real perception in the mind, of which we are intimately conscious, it must be able to bestow on whatever is related to it the same quality, call it firmness, or solidity, or force, or vivacity, with which the mind reflects upon it, and is assur'd of its present existence." (1.3.8.15).

Likewise in the next paragraph,

"the remembrance of an idea; that is, ... the idea of an idea, [has a] force and vivacity superior to the loose conceptions of the imagination. In thinking of our past thoughts we not only delineate out the objects, of which we were thinking, but also conceive the action of the mind in the meditation, that certain *je-ne-scai-quoi*, of which 'tis impossible to give any definition or description, but which every one sufficiently understands." (1.3.8.16)

"After this", Hume concludes, "any one will understand how we may form the idea of an impression and of an idea, and how we may believe the existence of an impression and of an idea." (1.3.8.17).