

Hume on Modal Projection

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Hume's claim that we project necessity onto objects we take to be causally related has been influential in contemporary discussions of modality, inspiring deflationary accounts of our modal commitments. Hume is commonly understood as holding that modal projection explains our judging that an effect *must* follow its cause. This misunderstands the role of projection in Hume's discussions of causation and causal judgement. Projection is a diagnosis of a distinctively philosophical confusion: the commitment to mind-independent necessary connections. In arguing for this, I provide an account of the psychological process that, in Hume's view, underlies projection. This account resolves problems with Hume's projectivism identified by his commentators.

In §1.3.14 of the *Treatise*, 'Of the idea of necessary connexion', Hume describes his search for the source of the idea of necessity. This search reaches two conclusions. First, the idea of necessity does not have as its source an impression of two objects' being necessarily connected. Second, the concept of necessity is not empty; rather, it has been misunderstood. The source of the idea of necessity is causal inference. If one has observed x to be constantly conjoined with y , when one has an impression of x , one is determined to form a belief in y . This determination is the source of the idea of necessity. The content of the concept of necessity is not a connection between objects but rather a determination of the mind. This has a striking implication for causal judgement. When one judges that x is the cause of y and that, given x , y *must* occur, one may take oneself to attribute a mind-independent necessary connection to x and y . Hume's theory seems to preclude this: the only intelligible idea of necessity is one that is as of a feature of the mind. Hume recognizes that his account of necessity is surprising. He offers this explanation of the surprise:

This contrary bias is easily accounted for. 'Tis a common observation, that the mind has a great propensity to spread itself on external objects, and to conjoin with them any internal impressions, which they occasion, and which always make their appearance at the same time that these objects discover themselves to the

senses ... [T]he same propensity is the reason, why we suppose necessity and power to lie in the objects we consider, not in our mind, that considers them; notwithstanding it is not possible for us to form the most distant idea of that quality, when it is not taken for the determination of the mind, to pass from the idea of an object to that of its usual attendant. (*T* 1.3.14.25; 167)¹

In Hume's view, we find his account of causal necessity surprising because we *project* the impression of necessity onto causally related objects.²

Hume's modal projectivism raises numerous interpretative questions, of which three are central. First, what are the psychological causes, in Hume's view, of our projecting necessity onto objects?³ Second, what is the explanandum of modal projectivism? What mental states does it aim to explain? Third, the above passage suggests that when one makes a causal judgement, one at least sometimes projects necessity onto the objects. What is the relationship between causal judgement and projection? By answering these questions, this paper provides a comprehensive account of Hume's modal projectivism. I use this account to show that the purpose of Hume's projectivism has been misunderstood. In his agenda-setting *The Philosophy of David Hume*, Kemp Smith (1941, p. 395) offered an interpretation according to which Hume uses projection to explain the belief that 'bodies (or other existents) are causally operative on one another'. Many commentators have followed Kemp Smith, understanding modal projectivism as a component of Hume's account of ordinary causal judgement. I defend a radically different account of the role of modal projection in Hume's philosophy, according to which it is offered as a diagnosis of a distinctively *philosophical* confusion. I argue that Hume's projectivism is not an account of the content

¹ Hume's *Treatise* is cited as 'T' by book, part, section and paragraph number in Hume ([1739–40] 2007), followed by the corresponding page number in Hume ([1739–40] 1975).

² Hume does not himself use 'projection' or its cognates. Early uses of the term in this context occur in Stroud (1977) and Grice (1975). Kail (2007) makes an illuminating distinction between explanatory projection and feature projection. Explanatory projection is involved when something in a subject's mind 'explains why the thinker takes the world to be the way she takes it'. By contrast, feature projection involves 'the attribution of what are features of minds to features of something else' (Kail, 2007, p. 3). I use 'projection' to refer to feature projection.

³ Three terminological clarifications. First, Hume provides two definitions of 'necessity'. 'Necessity' is defined either as the 'constant union and conjunction of like objects' or as 'the inference of the mind from the one to the other' (*T* 2.3.2.4; 409). The latter sense of 'necessity' is that which is salient to Hume's projectivism. Second, my uses of causal language are intended to be consistent with Hume's two definitions of 'cause' (*T* 1.3.14.31; 170). Third, unless otherwise noted, I use 'projection' as a synonym for 'modal projection'.

of ordinary thought about causation but rather is a debunking explanation of the philosophical commitment to mind-independent necessary connections.⁴ I rely primarily on the *Treatise*, which contains Hume's only extended discussion of the psychology of modal projection. But I will also appeal to supporting evidence from the first *Enquiry* and the *Natural History of Religion*, both of which are at least consistent with the view developed in the *Treatise*.

I begin by detailing the process that underlies Humean projection (§1). I then argue for an interpretation of the explanandum of Hume's modal projectivism (§2). I criticize the interpretation according to which that explanandum is the phenomenology of causal experience. Next, I use these accounts to provide an interpretation of the relationship between projection and causal judgement according to which Hume's account of causal judgement is not essentially projectivist (§3). This makes space for the primary claim for which I argue: that Hume uses modal projection to explain an error distinctive of philosophers.

1. Process

'What is involved in the mind's "spreading" itself on to external objects and "conjoining" with them, or "transferring" to them, something "borrowed" from internal impressions or sentiments?' This is how [Stroud \(2000, p. 21\)](#) puts the first question above. More simply: what psychological processes are responsible for projection? The above passage from *T* 1.3.14 is the *Treatise's* only discussion of modal projection. I omitted a sentence that occurs in the middle of that passage:

Thus as certain sounds and smells are always found to attend certain visible objects, we naturally imagine a conjunction, even in place, betwixt the objects and qualities, tho' the qualities be of such a nature as to admit of no such conjunction, and really exist no where. But of this more fully hereafter.* (*T* 1.3.14.25; 167)

Hume tells us that just as we 'imagine a conjunction, *even in place*' of sounds, tastes, and smells with their causes, so too with the impression of the necessity and its causes. He hints that the process involved in

⁴ This thesis is inconsistent with the sceptical realist interpretation of Hume, according to which he is committed to mind-independent necessary connections. [Wright \(1983\)](#) and [Kail \(2007\)](#) provide sophisticated defences of this interpretation. The sceptical realist interpretation has been criticized by, for example, [Millican \(2009\)](#) and [Winkler \(1991\)](#). While I do not have space to engage in this debate here, I agree with [Ott \(2011\)](#) and [Ainslie \(2015, p. 157\)](#): the sceptical realist interpretation has been rendered doubtful.

projection is at least similar to the process involved in the conjunction of sounds, tastes, and smells, with objects; the ‘same propensity’ is involved in both (*T* 1.3.14.25.167). Nonetheless, for all this passage says, Hume may hold that the process underlying modal projection is merely analogous to the process underlying the projection of sounds, tastes, and smells.

My “*” in the quotation above marks a footnote in which Hume refers to *T* 1.4.5, ‘Of the immateriality of the soul.’ That section considers ‘what objects are, or are not susceptible of a local conjunction’ (*T* 1.4.5.8; 235). In the course of that discussion, Hume accepts a maxim: ‘an object may exist, and yet be no where’ (*T* 1.4.5.10; 235, emphasis removed). An object exists nowhere when ‘its parts are not so situated with respect to each other, as to form any figure or quantity; nor the whole with respect to other bodies so as to answer to our notions of contiguity or distance’ (*T* 1.4.5.10; 235–6). All non-visual and non-tactile perceptions satisfy these conditions. Hume next turns to explaining why we locate such impressions in bodies despite their being essentially placeless.

Hume’s explanation has two stages. The first stage identifies two relations attributed to non-spatial perceptions and their objects. Take the taste of a fig. First, the taste of the fig is ‘inseparable’ from the ‘colour and tangibility’ of the fig, and hence from the extended fig itself (*T* 1.4.5.12; 237). The fig and its taste are ‘always co-existent’ and are therefore ‘co-temporary’ in their appearing to the mind (*T* 1.4.5.12; 237). Second, we perceive the taste of the fig ‘upon the application of the extended body to our senses’ (*T* 1.4.5.12; 237). The fig and its taste are uniformly observed to be temporally contiguous and causally related. The second stage invokes a psychological principle: ‘[W]hen objects are united by any relation, we have a strong propensity to add some new relation to them, in order to compleat the union’ (*T* 1.4.5.12; 237). In describing this stage, Hume gives a reference to the end of *T* 1.4.2, ‘Of scepticism with regard to the senses.’ *T* 1.4.2 invokes this propensity to explain the commitment to the resemblance of perceptions and the objects that cause them. In that case, the imagination ‘naturally add[s]’ resemblance to ‘compleat the union’ it observes between objects and perceptions (*T* 1.4.2.55; 217). Call this the *union propensity*.⁵

Others have discussed the union propensity in connection with modal projection and the projection of sounds, tastes, and smells (Noonan 1999, p. 144; Loeb 2001, p. 155). But these commentators have missed Hume’s fundamental explanation for both forms of projection.

⁵ The union propensity also appears at *T* 3.2.3.4 n., 3.2.3.10 n., and 3.2.10.10–12.

The union propensity is not fundamental but rather is an instance of a broader propensity: Hume's so-called 'galley'.⁶ In an influential study, Price (1940, p. 54) calls the latter the 'inertia of the imagination'. This is apt but potentially misleading. The propensity makes an appearance in *T* 1.2.4 and 1.4.2. In *T* 1.2.4, Hume invokes it to explain the fiction of a perfect standard of equality (*T* 1.2.4.24; 48). *T* 1.4.2 invokes the galley to explain the belief in continued and distinct existence. Hume says, '[T]he imagination, when set into any train of thinking, is apt to continue, even when its object fails it, and like a galley put in motion by the oars, carries on its course without any new impulse' (*T* 1.4.2.22; 198). In general, the galley involves the mind's continuing on the same course 'even when its object fails it' (*T* 1.4.2.22; 198). When the imagination observes an object to have a certain property to some degree, it is disposed to attribute to the object a higher degree of that property. For example, the imagination observes that its perceptions have a certain degree of coherence and, because of this observation, attributes a higher degree of coherence to those perceptions (*T* 1.4.2.22; 198). Crucially, the imagination may attribute a higher degree of the relevant property to its object by adding an *additional* property or relation to the object. In *T* 1.4.2, the new property of continued existence is attributed to perceptions as a means of increasing their coherence (*T* 1.4.2.22; 198). The galley is therefore analogous not just to inertia but also to *hyperbole*: in virtue of the galley, the imagination attributes to objects a higher degree of a property than they in fact have. Hugh Blair, Hume's friend and Chair of Rhetoric and Belles Lettres at the University of Edinburgh, identifies as a source of hyperbolic speech and thought the imagination's tendency 'to gratify itself, by magnifying its present object, and carrying it to excess' and 'beyond [its] natural proportion' (Blair, [1783] 1787, pp. 401–2). Hume's galley is one form of this hyperbolizing tendency.

The union propensity is the galley applied to the property of unity. In *T* 1.4.2, Hume says that 'as the mind is once in the train of observing an uniformity among objects, it naturally continues, till it renders the uniformity as compleat as possible' (*T* 1.4.2.22; 198). In *T* 1.4.5, the fig and its taste are observed to be *united* in so far as they are temporally contiguous and causally related. Having observed the union of the fig and its taste, the mind continues on this course, adding a new relation to these objects to render them more unified. The added relation is the relation

⁶ I am unaware of any commentator who has made this connection between the galley and the union propensity. Magri (2022, p. 472) lists them as distinct propensities. Cottrell (2015) calls the union propensity 'basic'.

of spatial contiguity. Just as the imagination adds continued existence to perceptions in order to increase their coherence, so too the imagination adds spatial contiguity to the fig and its taste in order to increase their unity. By means of the galley, the mind ‘feigns’ that the fig and its taste are spatially conjoined (*T* 1.4.5.12; 238).⁷

The process underlying modal projection is identical to the process underlying the projection of sounds, tastes, and smells. When one has observed *x* to be constantly conjoined with *y*, one is determined to form an idea of *y* upon seeing *x*. This results in one’s having the impression of necessity: the feeling one has when one is so determined, which feeling is distinct from the perceptions of *x* and *y* (*T* 1.3.14.22; 165–6). Just as, in the first stage above, at least two relations are initially attributed to the fig and its taste, so too at least two relations are initially attributed to the impression of necessity and the causally related objects. First, the determination occurs upon one’s observing *x*: the impression of necessity is temporally contiguous with *x*-causing-*y*. Second, the determination is caused by one’s observing *x*: a causal relation obtains between *x*-causing-*y* and the impression of necessity. Next, as in the fig case, the imagination perceives the impression of necessity and the causally related objects to be united in so far as they are causally related and temporally contiguous. Thus, upon having the impression of necessity and observing its union with the causally related objects, the mind continues on its course: it adds a new relation to *x*-causing-*y* and the impression of necessity so as to render them *more* unified. In cases of projection, this relation is that of spatial contiguity. The same process underlies both modal projection and the projection of sounds, tastes, and smells. The answer to Stroud’s question: the process underlying modal projection is the operation of the galley.

Hume’s explanation faces two important objections. First, many cases of projection involve our locating the impression of necessity in bodies that are themselves spatially located. This occurs when we project onto external objects that are causally related. By contrast, some cases involve our projecting the impression of necessity onto an object that *lacks*

⁷ This may seem problematic. Spatial contiguity is attributed to a non-spatial impression in virtue of that impression’s being observed to stand in a causal relation. But Hume claims that spatial contiguity is ‘essential’ to causation (*T* 1.3.2.6; 75). So Hume’s account of causation implies that in order for spatial location to be attributed to the taste of the fig, one must have *already* observed the taste as being spatially contiguous with the fig, and hence as having spatial location. Hume’s reply is that spatial contiguity is a necessary condition for causation only with respect to objects that are apt for spatial location (*T* 1.3.2.6; 75).

spatial location. Hume notes that some find power in ‘the command which is exercised by will, both over the organs of the body and faculties of the soul’ (*EHU* 7.9; 64).⁸ The will is ‘nothing but the internal impression we feel and are conscious of, when we knowingly give rise to any new motion of our body, or new perception of our mind’ (*T* 2.3.1.2; 399, emphasis removed). Hume accepts that we project necessity onto *volitions* that are causally related with mental or physical actions. Volitions are impressions of reflection. And we have seen that only perceptions of sight and touch have spatial location (*T* 1.4.5.10; 236). Thus the projection of necessity onto a volition involves our attributing spatial contiguity to the impression of necessity and a non-spatial volition. This seems problematic. But it is in accord with Hume’s view that ‘we can feign a new relation, and even an absurd one, in order to compleat any union’ (*T* 3.2.3.4 n; 504). Because the impression of necessity is an impression of reflection, it is itself non-spatial. Thus, in cases of projection onto external objects, Hume allows that we can feign a relation of spatial contiguity between two items one of which is non-spatial. Such cases involve the mistake of attributing spatial location to *one* non-spatial item. In cases of projection onto volitions, the mistake occurs twice over. By virtue of the galley, we attribute spatial contiguity to *two* non-spatial items: the impression of necessity and the volition onto which it is projected.

A second objection concerns whether Hume has fully accounted for the content of projective mental states. Modal projection involves our attributing a relation of spatial contiguity to the impression of necessity and a pair of causally related objects. One might think, however, that projection does not merely involve our locating necessity in bodies; it also involves our taking necessity to be *mind-independent* (Stroud, 2000, pp. 21–3). Can Hume’s projectivism account for this?

Let us consider again *T* 1.4.2. That section is concerned with explaining the causes of belief in continued and distinct existence. An object enjoys *continued* existence when it exists while ‘not present to the senses’, and it enjoys *distinct* existence when it exists external to mind and does not depend on its being perceived for its existence (*T* 1.4.2.2; 188). In Hume’s view, these are mutually entailing: an object has continued existence just in case it has distinct existence. *T* 1.4.2 is primarily concerned to explain how we come to believe that *objects* have continued

⁸ The first *Enquiry* is cited as ‘*EHU*’ by section and paragraph number in Hume ([1748] 2000), followed by the corresponding page number in Hume ([1748] 1975).

and distinct existence. But Hume allows that we attribute continued and distinct existence to *qualities*. Importantly, Hume says that we attribute continued and distinct existence to *sounds* (*T* 1.4.2.12–13; 192–3). Like smells, tastes, and the impression of necessity, sounds are non-spatial impressions to which, according to *T* 1.4.5, we attribute spatial location. Hume seems to hold that his account of the localization of non-spatial perceptions works in complement with his account of belief in continued and distinct existence. How does he intend to combine these accounts?

Hume claims that the ‘most judicious philosophers’ hold that ‘our ideas of bodies are nothing but collections form’d by the mind of the ideas of the several distinct sensible qualities’ (*T* 1.4.3.2; 219). An idea of an object is an idea of a bundle of qualities. When we project a non-spatial impression onto an object, we ‘incorporate’ the impression into the object, and therefore consider it as a part of the bundle of qualities that constitutes the object (*T* 1.4.5.11; 236). Now, an external object in which one locates the impression is itself believed to have continued and distinct existence. Because the impression is taken to be a part of the object onto which it is projected, it falls within the scope of that belief about the object. By virtue of its being located in a body, the non-spatial impression is believed to have continued and distinct existence, and *a fortiori* is believed to have mind-independent existence. This explanation applies to all non-spatial impressions that we locate in objects believed to have continued and distinct existence. Hence it applies to the impression of necessity: Hume can use this account to explain one’s taking the impression of necessity to have mind-independent existence. Modal projection does not itself produce the belief that the impression of necessity has mind-independent existence. Rather, it is the first stage in the process that gives rise to that belief. Hume has available to him an account of how we come to believe in mind-independent causal necessity.

All of this has a noteworthy implication. Early modern authors often use language with spatial connotation when discussing projection. [Arnauld and Nicole](#) ([1662] 1996, p. 49) speak of our ‘transporting sensations of heat, color, and so on, to the things themselves outside the soul’. Likewise, [Malebranche](#) ([1674–5] 1997, p. 370) says that we ‘place colors on the surface of bodies’ and ‘scatter light, sounds, and odors through the air’. It is unclear how literally to take the spatial connotation of this language. Call an account of projection *literally spatial* if it takes projection to involve attribution of external spatial location to perceptions. While Hume’s projectivism is often understood as metaphorical,

the present account implies that Humean projection is literally spatial.⁹ When the mind places the impression of necessity in spatial contiguity with a pair of causally related objects, it attributes spatial location to the impression. The spatial contiguity involved is not metaphorical spatial contiguity. There is no such relation in the (exhaustive) taxonomy of relations given in *T* 1.1.5, 'Of relations'. Hume's use of 'spread' and 'transfer' reflects his position that projection involves the attribution of spatial contiguity.¹⁰ This is the case even when the non-spatial impression of necessity is projected onto a volition that is itself non-spatial.

2. Explanandum

Recall our second question: what does Hume's projectivism aim to explain? Evidently, projectivism explains our having certain mental states. But mental states of what kind?

Some commentators have taken the explanandum of Hume's modal projectivism to be phenomenological: projection explains objects' appearing as if necessarily connected. Early modern authors seem to have understood several kinds of projection in this way. In *Leviathan*, Hobbes holds that all secondary qualities are 'in the object that causeth them but so many several motions of the matter, by which it presseth our organs diversely' ([1651] 1984, §1.4). A colour is merely a 'seeming' or 'fancy', but 'at some certain distance the real and very object *seems* invested with the fancy it begets in us' (§1.4, emphasis added). Hobbes's projectivism about secondary qualities explains why bodies perceptually appear to us as if coloured. Malebranche also accepts projectivism that is phenomenological in at least one respect. Malebranche agrees with Hobbes that we project secondary qualities. He also holds that we project 'all the dispositions of our heart' onto the objects we take to cause them (Malebranche, [1674–5] 1997, p. 370). Malebranche often speaks of projection as explaining judgements rather than perceptual experiences ([1674–5] 1997, p. 201). But projection plays an essential role in his account of visual experience.¹¹ In brief, Malebranche holds that the soul's 'spreading itself' is responsible for the particularity of visual experience

⁹ Wright (2009, p. 124) refers to the 'metaphor of the mind spreading itself on external objects'. Kail (2007, p. 108) refers to Hume's 'perceptual-sounding metaphors'. Marušić (2014, p. 267) refers to the 'metaphor' of spreading. See also Blackburn ([1987] 1993, p. 55).

¹⁰ There is a sense in which projection is not literally spatial: in attributing spatial location to the impression of necessity, we do not actually give the impression a spatial location. The impression remains essentially placeless.

¹¹ See Schmaltz (1996) and Ott (2017) for discussion.

([1674–5] 1997, p. 58). The projection of colour sensations is required for visual perception of particular bodies: ‘It is certain that we see bodies only by colour, and that we can distinguish them regarding their different nature only by the difference of [their] colours’ (Malebranche, [1693] 1960, p. 281, my translation).

Hobbes and Malebranche hold that the projection of secondary qualities contributes to perceptual experience; their projectivisms are at least partly phenomenological. Several recent commentators have understood Hume’s modal projectivism as phenomenological: as accounting for our perceptual experience of objects as necessarily connected. Such an interpretation presupposes that according to Hume, necessity enters into causal experience. There is one unremarkable sense in which it does: when we observe a cause, we are determined to form an idea of the effect, the impression of which determination is the impression of necessity. This leaves undecided whether necessity enters into the perceptual appearance of cause and effect: whether we, for example, *see* objects as necessarily connected. Proponents of the position in view accept this stronger, perceptual claim.¹² There are at least two points in its favour. First, as Kail (2007, p. 108) claims, the locutions used by Hume when discussing projection are ‘perceptual-sounding.’ This seems to suggest that Hume’s explanandum is the perceptual experience of necessity. Second, if we perceive causally related objects as necessarily connected, this requires explanation. Hume holds that necessity is not included in the content of our sense impressions, and so he cannot appeal to them alone to explain the perceptual experience of necessity. Projection is Hume’s best resource for explaining the phenomenology of causal experience.

Neither of these is persuasive. First, while Hume’s locutions may be perceptual-sounding, they are consistent with other potential explananda. For example, one may believe that necessity is ‘spread’ over objects. The second point presupposes that we perceive objects as necessarily connected. The evidence that Hume thinks we do is slight. Kail cites these passages:

’Tis natural for men, in their common and careless way of thinking, to imagine they perceive a connexion betwixt such objects as they have constantly found united together; and because custom

¹² Kail accepts the view that projection explains the ‘perceptual epistemology’ of causal experience (2007, pp. 108–9). Boehm, who offers an interpretation of the process underlying projection according to which its product is phenomenological, says that ‘spreading or staining is supposed to explain our phenomenology’ (2021, p. 816). Waxman takes projection to concern ‘the way things appear—their phenomenological “look”’ (2005, p. 495). See also Beebe (2006, ch. 6).

has render'd it difficult to separate the ideas, they are apt to fancy such a separation to be in itself impossible and absurd. (*T* 1.4.3.9; 223)

The generality of mankind ... suppose, that, in all these cases, they perceive the very force or energy of the cause, by which it is connected with its effect, and is for ever infallible in its operation. (*EHU* 7.21; 69)

According to the interpretation in view, Hume holds that necessity as mental determination enters into the vulgar's perceptual experience of causally related objects. Neither passage affirms this. Neither passage says that necessity is present in the perceptual phenomenology of causal experience. Instead, the first passage says that the vulgar 'imagine' that they perceive genuine necessary connections, and the second passage says that they 'suppose' that they do. Further, the first passage suggests that this fact about the vulgar is explained not by projection but rather by the fact that 'custom has render'd it difficult to separate the ideas' of causes and effects. I will argue below that Hume's projectivism does not aim to explain this aspect of vulgar psychology but aims rather to explain an illusion distinctive of philosophers.

Neither passage confirms that necessity is present in the perceptual phenomenology of causation. There are three passages that tell against it. In the first *Enquiry*, Hume says, 'All events seem entirely loose and separate. One event follows another; but we never can observe any tie between them. They seem *conjoined*, but never *connected*' (*EHU* 7.26; 74, emphases in original). This suggests that, in Hume's view, causally related objects never perceptually appear as if necessarily connected.¹³ Second, Hume says this with respect to the projection of smells, sounds, and tastes:

Sounds, and tastes, and smells, tho' commonly regarded by the mind as continu'd independent qualities, appear not to have any existence in extension, and consequently *cannot appear to the senses* as situated externally to the body. The reason, why we

¹³ Hume's use of 'seem' may suggest that he accepts this only provisionally. But consider the sentence that immediately follows the one quoted: 'And as we can have no idea of any thing, which never appeared to our outward sense or inward sentiment, the necessary conclusion *seems* to be, that we have no idea of connexion or power at all, and that these words are absolutely without any meaning, when employed either in philosophical reasonings, or common life' (*EHU* 7.26; 74, emphasis in original). In this sentence, Hume uses emphasis on 'seems' to flag that he will not ultimately accept the conclusion. That he does not emphasize 'seems' in the preceding sentence therefore suggests that he does not come to reject it.

ascribe a place to them, shall be consider'd afterwards.* (T 1.4.2.9; 191, emphasis added)¹⁴

The projection of smells, tastes, and sounds does not result in our perceiving those qualities as spatially located in the bodies. The projection of smells, tastes, and sounds makes no difference to perceptual experience. I have argued that the process responsible for such projection is also responsible for modal projection. That the former does not affect perceptual experience suggests that neither does the latter.

A third passage comes from T 1.3.14. There, Hume denies repeatedly that we perceive a necessary connection between cause and effect (T 1.3.14.22; 165). In those passages, Hume denies that genuine necessary connections are present in sense experience; our idea of necessity does not have as its source an impression of sensation. Those passages are consistent with the claim that the impression of necessity is projected into but does not derive from perceptual experience. But there is at least one passage that is not:

How often must we repeat to ourselves ... *that* this customary transition is, therefore, the same with the power and necessity; which are consequently qualities of perceptions, not of objects, and are internally felt by the soul, *and not perceiv'd externally in bodies?* (T 1.3.14.24; 166, emphasis added)

This passage should be read differently from those in which Hume denies that we perceive genuine necessity in objects. Hume tells us that power and necessity just are mental determination. He *then* tells us that power and necessity are not 'perceiv'd externally' but rather felt internally. Thus power and necessity *in the sense of which Hume approves* are not present in sense experience. Hume denies that necessity enters into perceptual experience; its doing so is therefore not the explanandum of his projectivism.¹⁵

Further, the only passage in the *Treatise* in which Hume tells us the explanandum of his projectivism makes no mention of our perceptual phenomenology. Hume says that modal projection explains why 'we *suppose* necessity and power to lie in the objects we consider, not in our mind, that considers them' (T 1.3.14.25; 167, emphasis added).

¹⁴ The '*' marks a footnote referring to T 1.4.5.

¹⁵ Beebe (2006, p. 89) argues that the projection passage from T 1.3.14 (quoted above) is evidence that Hume thinks that we perceive causally related objects as if they were necessarily connected. Beebe claims that objects' perceptually appearing as if necessarily connected explains our making the supposition discussed in that passage. I have argued that there is a different explanation for how we come to form that supposition.

Evidently, the explanandum of his projectivism is the *supposition* that necessity is located in causally related objects. Supposition should be distinguished from judgement.¹⁶ Both are forms of assent or taking-to-be-the-case. But there are conditions on judgement that are not conditions on supposition. First, in order to have a judgement, one must have a perception of that of which one judges (*T* 1.3.7.5; 96). By contrast, one may suppose that of which one does not have an impression or idea. Second, judgement must be coherent; one cannot believe a contradiction.¹⁷ By contrast, one may suppose what is internally incoherent, impossible, or unintelligible. These conditions are related: it is impossible to form an idea of what is incoherent; so failing the second condition entails failing the first.

Hume's holding that supposition, rather than judgement, is the product of modal projection is explained by his holding that it is impossible that necessity should exist in objects. He says of philosophers who 'search for the qualities' in which necessity or power resides, 'what can be imagin'd more tormenting, than to seek with eagerness, what for ever flies us; and seek for it in a place, where 'tis impossible it can ever exist?' (*T* 1.4.3.9; 223). Elsewhere, he says that necessity 'can only belong to the mind that considers the [causally related objects]' and is 'incompatible with those objects, to which we apply it' (*T* 1.3.14.27; 168). Because it is incoherent or absolutely impossible that necessity should exist in objects, a judgement that a necessary connection exists between a pair of causally related objects would fail the consistency condition on judgement. Thus Hume holds that the explanandum of modal projectivism is an (incoherent) supposition: the supposition that the impression of necessity is spatially contiguous with causally related objects.

Why does Hume consider the supposition to be absurd or incoherent? One suggestion is that the supposition is problematic because it involves our attributing something *mental*—the impression of necessity or mental determination—to non-mental, external objects. Noonan (1999, p. 149) accepts a version of this, holding that the incoherence arises 'because the objects in question could not possibly have the properties

¹⁶ Hume uses 'judgement' interchangeably with 'belief' (*T* 1.3.7.5n; 96, 1.3.13.9; 148). Several commentators have understood the explanandum of modal projectivism to be judgement. Marušić (2014, pp. 167, 170) understands projectivist interpretations of Hume in this way. See also Craig (2000, p. 117) and Stroud (1977, p. 83). Loeb (2001, p. 160) perhaps also takes the explanandum to be judgement.

¹⁷ This follows from Hume's accepting that conceivability entails possibility (*T* 1.2.2.8; 32). Belief in or judgement about *x* requires conceiving of *x*; so one can believe in *x* only if *x* is possible.

being ascribed to them.¹⁸ On this view, the incoherence arises because, in the same way that a stone could not have the feeling of sadness, external objects could not possibly possess that which is projected onto them: an impression of mental determination. Marušić (2014, p. 268) raises an objection to views of this kind. The objection is that Noonan's view implies that Hume should regard some instances of projection as coherent: those in which the impression of necessity is transferred to *animate* objects. On Noonan's view, Hume should, for example, regard it as coherent to attribute an impression to the mind of another person. But Hume gives us no reason to think that there is an asymmetry between projection onto animate causes and projection onto inanimate causes.¹⁹

We can identify an alternative source of the absurdity involved in projection that avoids Marušić's objection. Consider again the projection of smells, tastes, and sounds. Hume says that this sort of projection involves an 'absurdity' (*T* 1.4.5.14; 238). He explains why:

'Twill not now be necessary to prove, that those perceptions, which are simple, and exist no where, are incapable of any conjunction in place with matter or body, which is extended and divisible; since 'tis impossible to found a relation but on some common quality.* (*T* 1.4.5.11; 236)

The '*' marks a footnote referring to *T* 1.1.5. There, Hume claims that resemblance is 'a relation, without which no philosophical relation can exist' (*T* 1.1.5.3; 14). This commitment follows from another: Hume's view that ideas of philosophical relations are formed by means of *comparison* (*T* 1.1.5.3; 14). In Hume's view, in order for x and y to stand in a relation R , x and y must be comparable in respect of R , and x and y are comparable in respect of R just in case they share a 'common quality'.²⁰ In order for x and y to be comparable with respect to heaviness, for example, each must have some weight. Likewise, in order for x and y to be comparable with respect to redness, x and y must each have colour. Now, Hume holds that 'all our perceptions and objects, except those of the sight and feeling' lack spatial location (*T* 1.4.5.10; 236). The taste of the fig, for example, lacks spatial location. Because that impression is

¹⁸ Sokolowski (1968, p. 202) explains the incoherence as follows: 'the contrivance of necessary causes involves attributing to external bodies something that belongs exclusively to the mind: the determination or inclination to go from one object to another.'

¹⁹ *T* 1.3.14 gives us some reason to think that he denies such an asymmetry: Hume says that necessity, so far as we have an idea of it, 'can only belong to the *mind that considers*' the causally related objects (*T* 1.3.14.27; 168, emphasis added).

²⁰ Hume does not hold that x and y must be *compared* in respect of R in order to stand in R . He allows that some relations are mind-independent (*T* 1.3.14.28; 168).

non-spatial, it is not comparable in respect of spatial contiguity with the fig. Thus it is impossible or incoherent that the taste of the fig and the fig should stand in the relation of spatial contiguity (*T* 1.4.5.11; 236). The incoherence of modal projection admits of the same explanation. The impression of necessity is a non-spatial impression of reflection.²¹ If projection attributes spatial location to the impression of necessity, then it attributes to that impression a quality the impression could not have. The incoherence of projection arises from that process's being literally spatial. This avoids Marušić's objection: just as when we project the impression of necessity onto inanimate, external objects, we incoherently suppose that a non-spatial impression has spatial location when we project the impression of necessity onto an animate object.

3. Projection and causal judgement

Recall our third question: what is the relationship between modal projection and causal judgement? Hume defines 'cause' in two ways. First, a cause is an object prior to and contiguous with another, where 'all the objects resembling the former are plac'd in like relations of precedency and contiguity to those objects, that resemble the latter' (*T* 1.3.14.31; 170). Second, a cause is an object prior to and contiguous with another, where '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; 170). Significantly, neither definition mentions modal projection.²² Nonetheless, many commentators take it to be an essential part of his positive account of causal judgement.²³ I will argue that Hume's

²¹ Allison (2008, p. 193) says that Hume does not hold that 'the feeling or sentiment of unavoidability exists nowhere, since qua feeling its proper abode is the human mind'. In so far as Allison is claiming that the impression of necessity is properly located in the mind, I disagree. Non-visual, non-tactile perceptions have no location at all. There is a sense in which the impression of necessity is 'in' the mind: it is part of the bundle of causally related perceptions that constitutes the mind.

²² It is also notable that the second, psychological definition does not refer to the impression of necessity. Thanks to an anonymous referee for raising this point.

²³ Kemp Smith (1941, p. 395) holds that projection is responsible for the belief that 'bodies (or other existents) are causally operative on one another'. Williams (1985, p. 287) says that 'our belief in causal necessity springs from our tendency to project our inferential habits onto the world'. Stroud (1977, pp. 82–6) holds that projection is what allows us to think that a cause *must* produce its effect, which thought is essential to causal judgement. See also Stroud (2000, p. 23). Loeb (2001, p. 159) reads Hume as using projection 'to explain our inclination to believe that there is a "mustness" or "necessity", a necessary connection (in objects, over and above constant conjunction)'. Garrett (2015b, p. 83) seems to accept that projection might affect the content of causal judgement. However, Garrett (2015a, p. 202) holds that causal judgement may occur even

theory of causal judgement is not essentially projectivist. Hume's theory is not essentially projectivist if he accepts two claims:

- (A) Modal projection is not constitutive of causal judgement; it results in a supposition that is non-identical with the causal judgement that it accompanies.
- (B) Causal judgement need not occur in conjunction with modal projection. We can refrain from modal projection without refraining from causal judgement.

I argue that Hume accepts (A) and (B). Further, I argue that this is consistent with his holding that necessity is an ineliminable component of causal judgement.

'Causal judgement' is ambiguous. On one hand, it can refer to judgements formed *on the basis of* a causal relation. For Hume, these are probable judgements that have as their content an object's existing or an event's occurring. For example, upon observing smoke, one infers that there must be a fire. Hume's theory of causal judgement, developed in *T* 1.3 and *EHU* 5, is concerned with causal judgements of this kind. In *T* 1.3.6, he argues that causal judgements must be based on past experience (*T* 1.3.6.2; 87). In subsequent sections, he develops his account of causal judgement, answering the question 'why [do] we form an inference from one to another?' (*T* 1.3.3.9; 82, emphasis removed). Hume holds that a causal belief is 'a lively idea related to or associated with a present impression' (*T* 1.3.7.5; 96, emphasis removed). When one has experienced *x* to be constantly conjoined with *y*, their ideas become associated. Thus, when one perceives *x*, one is determined to form an idea of *y*, and the perception of *x* transmits a degree of its vivacity to one's idea of *y*, which idea constitutes one's belief in *y*'s occurring. On the other hand, 'causal judgement' can refer to judgements *about* a causal relation. The judgement 'the match's being struck caused the fire' is a causal judgement in this sense. Hume has such judgements in mind when he provides his 'rules by which to judge of causes and effects', which codify the conditions under which objects may be judged to be causally related (*T* 1.3.15.2–10; 173–5). Unlike judgements made on the basis of a causal relation, judgements about causal relations may require use of the concept of causation.²⁴ Moreover, such judgements need not result from the

when projection does not. [Storrs-Fox \(2017, p. 13\)](#) holds that projection is included in the concept of causation. Not all commentators accept this view. [Owen \(1999\)](#) does not ascribe a significant role to projection. [Winkler \(2009\)](#) denies that Hume's account of causal judgement is projectivist.

²⁴ [Garrett \(2015b, pp. 76–81\)](#) gives a sophisticated account of this.

associationist mechanism appealed to by Hume's account of judgements formed on the basis of a causal relation. Judgements about causal relations can be made by, for example, reflectively attending to observed regularities.

Hume does not regard projection as essential to judgements *about* a causal relation. The account of modal projection developed in §1 implies that projection occurs only when one has an occurrent impression of necessity that is temporally contiguous with and caused by a pair of causally related objects. Moreover, one has the impression of necessity only when one is determined to form an idea of one such object upon perceiving the other. Now, there is no evidence for Hume's holding that one can make a judgement about a causal relation *only when* one feels mental determination and has an occurrent impression of necessity. Hume nowhere implies that one can make a judgement *about* a causal relation only when one reasons *on the basis of* a causal relation. Because mental determination is required for projection, and because mental determination does not enter into all judgements about causal relations, projection is not essential to such judgements.

A second question is whether projection is essential to judgements made *on the basis of* a causal relation. (I hereafter use 'causal judgement' to refer to judgements of this kind.) Hume's discussion of causal judgement is framed by two questions: 'Why we conclude, that such particular causes must necessarily have such particular effects, and why we form an inference from one to another?' (*T* 1.3.3.9; 82, emphasis removed). We have already seen his answer to the second question. Let us now consider his first question. When one forms a judgement on the basis of a causal relation, one judges that the effect *must* occur. What explains this? Evidently, Hume does not dismiss this question but rather takes himself to have provided an answer to it.²⁵ The question is relevant to (A). Were projection constitutive of causal judgement, what role would it play in such judgement? I propose that we would expect Hume to invoke it in answering the question in view. Were (A) false, we would expect Hume to appeal to projection to explain our judging that a cause necessarily produces its effect.²⁶

I argue that Hume does not ascribe this role to projection. In the *Treatise* 1.3.14 passage that introduces projection, Hume does not say that projection explains why we judge that an effect must follow its

²⁵ Fogelin (1985, pp. 47–8) claims that Hume 'sharply separates' causation from necessary connection. For criticism of Fogelin's view, see De Pierris (2015, p. 249).

²⁶ This is how Stroud (1977, pp. 82–3) seems to understand the role of projection. See also Noonan (1999, p. 143).

cause but rather that it explains why ‘we suppose necessity and power to lie in the objects we consider, not in our mind, that considers them’ (*T* 1.3.14.25; 167). I have argued that the explanandum of projection is the incoherent supposition that the impression of necessity is located in objects. The supposition that necessity is located in objects is not equivalent to the judgement that one object must follow another. Consider occasionalism. Occasionalism holds that ‘matter is utterly deprived of energy, and that all its operations are perform’d merely by the energy of the supreme Being’ (*T* Abs 26; 656). Occasionalism accepts that a cause must follow its effect but denies that necessity is located in objects, and so ‘rob[s] nature, and all created beings, of every power’ (*EHU* 7.22; 71). Occasionalists do not suppose necessity to be located in objects but do judge that an effect must follow its cause. Occasionalism makes clear that one may judge that one object necessarily follows another without locating the power or necessity in the objects one judges to be necessarily connected. One may judge that *y* must follow *x* without thereby locating necessity in *x* and *y*. For all Hume says in the passage in which he introduces projection, projection explains our locating necessity in objects, and nothing more.

Hume does not take projection to explain the ‘must’ in our causal judgements. The first sentence of *T* 1.3.14 confirms this. Hume begins that sentence as follows: ‘Having thus explain’d the manner, *in which we reason beyond our immediate impressions, and conclude that such particular causes must have such particular effects ...*’ (*T* 1.3.14.1; 155, emphasis in original). Hume has explained why we judge that an effect must follow its cause *before* *T* 1.3.14 and hence before the passage in which he introduces projection. Hume takes himself to have an explanation for such judgements that makes no appeal to projection. What is Hume’s explanation for the ‘must’ included in our judgements formed on the basis of a causal relation? Causal judgement essentially involves one’s being determined to form an idea of *x* upon one’s perceiving *y*, due to one’s associating *x* with *y*. Hume holds that mental determination’s *causing* causal judgement explains our concluding that a cause necessarily produces its effect: to judge that an effect must follow from its cause is to be determined to form an idea of the effect upon one’s observing the cause. Necessity is an ineliminable component of causal judgement in so far as causal judgement essentially involves one’s being determined to form an idea of the object about which one judges. The mental correlate of the ‘must’ included in one’s causal judgements is one’s being determined to make certain inferences. Further, according to the theory of language that Hume inherits from Locke, language functions to signify mental

contents. The linguistic expression of the causal judgement that *x must* occur signifies the speaker's having been determined to form a lively idea of *x*.²⁷

The first *Enquiry* provides further evidence that Hume does not use projection to explain the content of causal judgement. There, Hume is again concerned to account for our judgements that an effect necessarily follows its cause, but projection is mentioned only briefly in a footnote, which was not included in the first (1748) edition of the *Enquiry*.²⁸ This would be surprising if Hume held that projection is constitutive of causal judgement. There is a passage that suggests that he did not:

The first time a man saw the communication of motion by impulse, as by the shock of two billiard-balls, he could not pronounce that the one event was *connected*: but only that it was *conjoined* with the other. After he has observed several instances of this nature, he then pronounces them to be *connected*. What alteration has happened to give rise to this new idea of *connexion*? Nothing but that he now *feels* these events to be *connected* in his imagination, and can readily foretel the existence of one from the appearance of the other. (*EHU* 7.28; 75–6, emphases in the original)

A man observes one event to be constantly conjoined with another. He comes to judge that they are necessarily connected. Hume explains this judgement without appeal to projection. He explains why we judge that a cause must follow its effect only by appeal to custom-based expectation. I conclude that projection does not explain what it would explain if it were constitutive of Humean causal judgement.

There is an additional reason to think that Hume accepts (A). I have argued that projection results in an incoherent supposition that the

²⁷ See Ott (2006) for discussion of Hume's philosophy of language. Some take Hume to accept an expressivist or quasi-realist semantics for causal judgement. This interpretation holds that, for Hume, causal discourse and thought serve, at least in part, an expressive rather than representational function. See Blackburn ([1987] 1993), Beebe (2006), Coventry (2006), Holden (2014), and Millican (2007). While the quasi-realist interpretation is often framed as holding that causal judgement essentially involves projection, the relevant projection is a kind of *explanatory* projection, in the sense noted above. While I lack space to consider the quasi-realist interpretation here, I take the present account to be consistent with it: the 'must' included in our causal judgements may function to express our inferential dispositions. Marušić (2014) criticizes quasi-realist interpretations and considers a subjectivist interpretation, according to which causal discourse and thought do not express but rather represent certain mental states. Ott (2009, p. 244) argues that 'our worry about the cognitive content of causal assertions has no real place in Hume's framework.'

²⁸ The relevant footnote was included in the second (1750) edition of the *Enquiry*. That version of the footnote, however, does not discuss projection.

impression of necessity is located in causally related objects. Were projection constitutive of causal judgement, an incoherent supposition would be included in the content of causal judgement. But Hume nowhere suggests that causal judgement unavoidably involves incoherence. Indeed, he seems to hold that many causal judgements are straightforwardly true. Were projection constitutive of causal judgement, this would be in tension with Hume's view that many causal judgements are true.

Projection is not constitutive of causal judgement. But one might think that modal projection always occurs in conjunction with causal judgement. When making causal judgements, can we refrain from projecting necessity? If we can then (B) is true: projection need not occur in conjunction with causal judgement. I will answer this question by considering the propensity from which projection arises.²⁹

Hume says that humans have the propensity to transfer their sentiments onto objects. The propensity plays a crucial role in the *Natural History of Religion's* explanation of the origin of polytheism. Hume claims there that there is a 'universal tendency among mankind to conceive all beings like themselves, and to transfer to every object, those qualities, with which they are familiarly acquainted, and of which they are intimately conscious' (*NHR* 3.2, p. 40).³⁰ In *T* 1.4.3, Hume says, 'There is a very remarkable inclination in human nature, to bestow on external objects the same emotions, which it observes in itself; and to find every where those ideas, which are most present to it' (*T* 1.4.3.11; 224). In a 1751 letter to Gilbert Elliot, Hume speaks of 'our Inclination to find our own Figures in the Clouds, our Face in the Moon, our Passions and Sentiments even in inanimate Matter' (*Letters* 1, p. 155). Hume identifies two important features of this propensity. First, he holds that the propensity is universal, deeply embedded in human nature. Second, he holds that the propensity is resistible. He says that the propensity can be 'corrected by experience and reflection' and that it 'may, & ought to be controul'd' (*NHR* 3.2, p. 40; *Letters* 1, p. 155). Further, he says that '[t]his inclination, 'tis true, is suppress'd by a little reflection' (*T* 1.4.3.11; 224). The latter statement of this propensity's resistibility is perfectly general: it implies that the propensity can be resisted in all of its forms.

²⁹ For readings on which the propensity for projection is resistible, see Baier (1991, p. 98), Winkler (1991, pp. 562–3), and Garrett (2015a, p. 202). None of these authors note Hume's remarks on what I call the 'propensity to anthropomorphize'.

³⁰ *The Natural History of Religion* and Hume's *Letters* are cited as '*NHR*' by section and paragraph number and '*Letters*', with page references to Hume ([1757] 2007) and Hume (1932) respectively.

Call this the *propensity to anthropomorphize*.³¹ What is the relation between this propensity and the propensity for projection? Allison (2008, p. 266) claims that they must be different: ‘Hume distinguished this propensity for which he chides the ancient philosophers from the [propensity for projection], since the latter is supposedly universal and not suppressible.’ Allison identifies two features that he takes to differentiate the propensity to anthropomorphize from the propensity for projection. First, Allison thinks that the propensity for projection is universal, whereas the propensity to anthropomorphize is not. Second, he thinks that the former propensity is not resistible, whereas the latter is. To Allison’s first claim, the above textual evidence shows that there is a sense in which the propensity to anthropomorphize is universal.³² To Allison’s second claim, Hume holds that the propensity for causal judgement is ‘permanent’ and ‘irresistible’ (*T* 1.4.4.1; 225). If the propensity for projection is taken to be identical to the propensity for causal judgement, Allison’s claim must be correct: projection must also be irresistible. But I showed above that projection is not constitutive of causal judgement. Thus the propensity for projection need not be considered identical to the propensity for causal judgement. The former may be resistible even if the latter is not.

I argue that the propensity for projection is, like the propensity to anthropomorphize, both resistible and universal, because the propensity for projection is just an instance of the propensity to anthropomorphize. There are two reasons for thinking that, in Hume’s view, the propensity for projection is an instance of the propensity to anthropomorphize. First, consider how Hume describes the propensity for projection: ‘the mind has a great propensity to spread itself on external objects, and to conjoin with them any internal impressions, which they occasion’ (*T* 1.3.14.25; 167). Compare this with the passage from the *Natural History of Religion*: there is a ‘universal tendency among mankind to conceive all beings like themselves, and to transfer to every object, those qualities, with which they are familiarly acquainted’ (*NHR* 3.2, p. 40).

³¹ The attribution of human features to non-human objects is closely related to what eighteenth-century Scottish authors called ‘personification’: the attribution of features had only by living things to inanimate objects. See Blair ([1783] 1787, p. 410) and Kames ([1762] 2005, p. 533).

³² Hume says that the fictions of the ancient philosophy are ‘deriv’d from principles, which, however common, are neither universal nor unavoidable in human nature’ (*T* 1.4.4.2; 226). If ‘universal’ is understood univocally, then this is inconsistent with the above passage from the *Natural History of Religion*. I suggest that the propensity to anthropomorphize is universal in so far as it is embedded in human nature; but it is not universal in that not all humans succumb to it.

These descriptions give us no reason to think that they describe different propensities. Second, Hume also discusses projection in the letter to Gilbert Elliot: ‘We feel, after the constant Conjunction, an easy Transition from one Idea to the other, or a Connexion in the Imagination. And as it is usual for us to transfer our own Feelings to the Objects on which they are dependent, we attach the internal Sentiment to the external Objects’ (*Letters* 1, pp. 155–6). This passage closely follows Hume’s discussion of the propensity to anthropomorphize, but Hume makes no attempt to distinguish the two propensities. That he discusses them in close proximity and yet fails to distinguish them suggests that he does not consider them to be distinct.

Textual evidence suggests that Hume regards the propensity for projection as an instance of the propensity to anthropomorphize. §1 argued that Hume explains projection by appeal to an instance of the galley: the union propensity. His commitment to both of these claims suggests that, in his view, the union propensity, and hence the galley, is responsible for the propensity to anthropomorphize.³³ Now, we have seen that all instances of the propensity to anthropomorphize are resistible. Because the propensity for projection is a species of the propensity to anthropomorphize, it follows that the former propensity is resistible. Thus we can resist the propensity for projection even when we succumb to our propensity for causal judgement. (B) is true: projection need not occur in conjunction with causal judgement.³⁴

I have argued that modal projection is inessential to causal judgement. What role, then, does projection play in Hume’s philosophy? I will answer this question obliquely, by considering who, in Hume’s view, participates in projection. Recall that Hume says that ‘nothing is more usual than to apply to external bodies every internal sensation, which they occasion’ (*EHU* 7.29 n; 78). Likewise, he says that his theory of necessity will have to ‘overcome the inveterate prejudices of mankind’ (*T* 1.3.14.24; 166). These passages seem to suggest that projection is something that everyone does. This is how projection is commonly understood. For example, Pears (1990, pp. 111–12) holds that ‘not only the

³³ The galley is not explained by the propensity to anthropomorphize. There are operations of the galley—such as that which explains the fiction of a perfect standard of equality—that are not anthropomorphic (*T* 1.2.4.24; 48).

³⁴ The claim that projection is both resistible and ultimately explained by the galley might seem in tension with *T* 1.4.2. Hume appeals to the galley (in cooperation with custom) in his coherence-based explanation of belief in external bodies (*T* 1.4.2.22; 198). But Hume clearly regards that belief as irresistible (*T* 1.4.2.50; 214). I think that Hume calls the galley ‘too weak to support alone’ the belief in body precisely because he regards it as resistible (*T* 1.4.2.23; 198–199). For further evidence that the galley is resistible, see *T* 1.4.5.14; 239.

philosopher but also the plain man' engages in projection.³⁵ I will argue that this is not Hume's considered view.

T 1.4.3 discusses the ancient philosophy. Ancient philosophers are those who are committed to at least one of several philosophical fictions involving 'substances, and substantial forms, and accidents, and occult qualities' (*T* 1.4.3.1; 219, emphases in the original).³⁶ Hume notes the 'sympathies, antipathies, and horrors of a vacuum' that the ancient philosophers ascribe to nature and invokes the propensity to anthropomorphize to explain such fictions (*T* 1.4.3.11; 224, emphases in the original). He says of that propensity:

This inclination, 'tis true, is suppress'd by a little reflection, and only takes place in children, poets, and the antient philosophers. It appears in children, by their desire of beating the stones, which hurt them: In poets, by their readiness to personify every thing: And in the antient philosophers, by these fictions of sympathy and antipathy. (*T* 1.4.3.11; 224–5)

Hume identifies three groups that fail to suppress their propensity to anthropomorphize: children, poets, and ancient philosophers. He associates the ancient philosophy with anthropomorphic fiction. I want to pursue this association and propose that Hume regards projection as of a piece with the fictions of the ancient philosophers. The supposition that results from projection stems from the same propensity that gives rise to the fictions of the ancient philosophers. Like those fictions, projection involves our attributing human sentiments to the natural world. Projection should be understood as a species of philosophical fiction importantly similar to the fictions of the ancient philosophy.³⁷ Rather than being common, projection occurs among philosophers who locate the impression of necessity in causally related objects.

This interpretation receives support from elsewhere in *T* 1.4.3. After discussing the fictions of substance and occult qualities, Hume changes course and distinguishes three kinds of opinion: those of the vulgar, those of the false philosophy, and those of the true philosophy. Hume applies this distinction to the topic of necessity. The vulgar take themselves to find necessary connections between causes and effects. This 'common and careless way of thinking' is explained not by projection but rather by the psychological principle to which Hume appeals in his explanation

³⁵ See also Baier (1991, pp. 97–9) and Craig (2000, p. 117).

³⁶ The ancient philosophy is defined primarily not by chronology but rather by content. See Ainslie (2015, p. 10).

³⁷ Costelloe (2018, pp. 89–92) takes the commitment to 'objective causal power' to be a fiction.

of ordinary causal judgement: custom or habit, which has ‘render’d it difficult to separate the ideas’ of causes and effects (*T* 1.4.3.9; 223). Vulgar thought about causal necessity is a product of the customary association of ideas. The philosophers, by contrast, ‘perceive the falshood of these vulgar sentiments, and discover that there is no known connexion among objects’ (*T* 1.4.3.9; 223). But these philosophers do not make the ‘just inference’ that ‘we have no idea of power or agency, separate from the mind, and belonging to causes’ (*T* 1.4.3.9; 223). Instead, they seek for ‘this connexion in matter, or causes’, which, Hume claims, is a ‘place, where ‘tis impossible it can ever exist’ (*T* 1.4.3.9; 223). This discussion is puzzling because it seems out of place. Why does Hume discuss the topic of necessity in a section on the ancient philosophy? The present interpretation provides an answer. Like the ancient philosophers and their occult qualities, proponents of the false philosophy are engaged in a philosophical fiction: the fiction of supposing necessity to be located in causally related objects. This fiction arises from the same principle of imagination—the propensity to anthropomorphize—as the ancient fictions of ‘*sympathies*, *antipathies*, and *horrors of a vacuum*’ (*T* 1.4.3.11; 224, emphases in the original). The supposition that necessity is located in objects is a fiction of the false philosophers that has the same source as ‘entirely incomprehensible’ fictions of the ancient philosophers (*T* 1.4.3.8; 222).

That projection belongs to false philosophy rather than common life is confirmed by a passage from *T* 1.3.14. In that section, Hume defends his claim that ‘we have really no idea of a power or efficacy in any object, or of any real connexion betwixt causes and effects’ (*T* 1.3.14.27; 168). He grants that there may be qualities ‘with which we are utterly unacquainted’ in bodies, and allows that we may use ‘power’ or ‘efficacy’ to signify those. However, if we use those terms to signify something of which we have an idea—necessity as mental determination—and attribute that necessity to causally related objects, then ‘obscurity and error begin then to take place, and we are led astray by a false philosophy’ (*T* 1.3.14.27; 168). Crucially, Hume continues: ‘This is the case, when we transfer the determination of the thought to external objects, and suppose any real intelligible connexion betwixt them; that being a quality, which can only belong to the mind that considers them’ (*T* 1.3.14.27; 168). We are led astray by false philosophy when we ‘transfer’ necessity to external objects. Thus this passage confirms that to participate in projection is to participate in false philosophy. What is more, this passage and the passage from *T* 1.4.3 are the only passages in the *Treatise* in which Hume uses the phrase ‘false philosophy’. Hume’s regarding modal

projection as a characteristic practice of false philosophy explains this textual datum.

Recall that Hume says that his claim that necessity ‘belongs entirely to the soul’ must ‘overcome the inveterate prejudices of mankind’ (*T* 1.3.14.24; 166). This might seem inconsistent with his identifying projection as a practice of false philosophy: it might seem to suggest the vulgar and philosophers alike project necessity onto objects. There is a reading that resolves the inconsistency. The propensity to anthropomorphize natural events is common to all humans. But it is only when one engages in philosophical inquiry and is ‘led astray’ by false philosophy that this propensity brings one to suppose that necessity is located in the objects one considers. Hume’s theory of necessity is contrary to this supposition. The supposition is an ‘inveterate’ prejudice in so far as it is both a product of a universal tendency of human beings and an instance of a long-standing philosophical fiction. Projection takes place among philosophers who, like the ancient philosophers, poets, and children, succumb to their propensity for projecting their sentiments onto objects.³⁸

4. Conclusion

I have argued that we misunderstand Hume’s projectivism in so far as we take it to constitute part of his positive account of ordinary causal judgement. Projection does not explain our judging that an effect necessarily follows its cause. The product of modal projection is an incoherent supposition that the impression of necessity is located in causally related objects. The supposition is made by false philosophers. Hume’s modal projectivism is a debunking explanation of the philosophical commitment to mind-independent necessary connections: that commitment is an unintelligible product of an ‘irregular’ and ‘trivial’ propensity of the imagination (*T* 1.4.4.1; 225, 1.4.3.11; 224).

This interpretation uncovers a way in which Hume’s modal projectivism differs from many early modern projectivisms. Projectivism about secondary qualities is often positioned as a philosophical explanation of a vulgar mistake.³⁹ For example, the authors of the *Port Royal*

³⁸ Pears (1990, pp. 111–12) claims that the projection passage from *T* 1.3.14 implies that the vulgar participate in projection. In that passage, Hume says that the human mind has a great propensity for projection, not that all humans engage in projection. Ott (2009, p. 242) also suggests that projection is performed only by philosophers.

³⁹ It is not exclusively positioned in this way. Malebranche, for example, explains some errors of Aristotelian philosophy by appeal to projection (Malebranche, [1674–5] 1997, p. 441).

Logic hold that our judging secondary qualities to be in bodies is a mistake that takes hold because ‘we were children before we became adults’; ‘transporting the sensations of hear, color, and so on, to the things themselves outside the soul’ is a vulgar error to be corrected by Cartesian philosophy (Arnauld and Nicole, [1662] 1996, p. 49). Hume’s modal projectivism turns this on its head. As Cartesianism shows colour and heat to be nothing in bodies themselves, so Hume’s philosophy shows that necessity, when considered as distinct from constant conjunction, is merely mental determination. But Hume’s modal projectivism does not show how the vulgar come to hold beliefs inconsistent with this conclusion, but rather uncovers the irregular psychological origins of a ubiquitous philosophical error.⁴⁰

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⁴⁰ Versions of this paper were presented at the 2021 Institute for the Study of Scottish Philosophy Conference in Antwerp, at the 2022 Hume Society Conference in Prague, to the Propositional Attitudes Task Force at the Five Colleges Consortium, and to the Early Modern Philosophy Working Group at the University of Edinburgh. I am grateful to those audiences for their helpful questions. Many thanks also to Miren Boehm, Jonny Cottrell, Steve Darwall, Michael Della Rocca, Don Garrett, Michael Gill, Josefine Klingspor, Sadie McCloud, Jen Marušić, Peter Millican, Lewis Powell, Manuel Vasquez Villavicencio, and Ken Winkler. The paper also benefited from very constructive comments from two anonymous referees and the editors of *Mind*.

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