Abstract: While Hume traces our idea of causal necessity to a “determination of the mind” to pass from one object to another (which are regularly conjoined in experience), some argue that, in Hume, this is insufficient for a genuine idea of causal necessity. For instance, Kail (2007) argues that the experience of mental determination only “mimics” the effects that a genuine experience of causal necessity would have. However, I argue that Hume likely thinks that our experience of logical necessity is too just an experience of mental determination, and that the distinction between logical and causal necessity is a distinction of reason, lying with extrinsic factors such as nature of the determining connection. The question, then, is whether Hume thinks that the experience of mental determination is sufficient for a genuine idea of logical necessity. If so, then it is unclear why it would not also be sufficient for causal necessity.

Critical discussion of Hume on causal necessity has long been a cornerstone of Hume scholarship. There has been much less discussion of Hume on logical necessity. No doubt, this is attributable to the fact that he says far more concerning the former than he does concerning the latter, and to the fact that his skepticism regarding our reasoning concerning matters of fact is among the most philosophically engaging parts of his philosophy. However, an examination of Hume on logical necessity may help us better understand his views on causal necessity. In particular, it may help if we consider what Hume thinks is our experience of logical necessity.

The main contention of this paper is that Hume does not think there are any intrinsic differences between, first, our experience and idea of logical necessity and, second, our experience and idea of causal necessity. Both are essentially experiences and ideas of mental determination or psychological compulsion. A second contention, for which I’ll give a brief argument toward the end, is that this gives us reason to think that, in tracing our idea of causal necessity to an experience of mental determination (both in Treatise I.iii.14 and in first Enquiry VII/ii) Hume has satisfied the desideratum for a “just” or sufficient idea of causal necessity. If our idea of logical necessity can be nothing more than an idea of mental determination, why should our idea of causal necessity be anything more than that? The differences between these
types of necessities are extrinsic; they lie with different types of mental connections that occasions the determinations, as well as with our tendency to project causal necessity onto external objects. The distinction between the types of necessities is what Hume calls a *distinction of reason*: reflection is necessary to distinguish logical from causal necessity.

**Hume’s Positive Account of Causal Necessity**

I will begin with Hume’s positive account of causal necessity, in *Treatise* I.iii.14 and in the first *Enquiry* VII/ii. In the both texts, the positive account follows the more famous negative account, in which Hume argues that an idea of necessary connection could derive only from experience, but it does not derive from any of the experienced objects with which necessity “is commonly suppos’d to lie.” He appears to conclude that “[w]e never have any impression, that contains any power or efficacy” (T 161) and that such an impression is impossible (T 158). However, soon after he explains that while “the repetition of like objects in like relations of succession and contiguity” reveals nothing new between the objects themselves, with such repetition “we immediately feel a determination of the mind to pass from one object to its usual attendant[.]” And he concludes there that causal necessity is nothing but this “determination to carry our thoughts from one object to another” (T 165). The account in the first *Enquiry* is nearly identical:

> [T]here is nothing in a number of instances, different from every single instance[;] …except only, that after a repetition of similar instances, the mind is carried by a habit upon the appearance of one event, to expect its usual attendant[.] This connexion, therefore, which we *feel* in the mind, this customary transition of the imagination from one object to its usual attendant, is the sentiment or impression, from which we form the idea of power or necessary connexion.

As Don Garrett (2014) notes, Hume “strongly implies that the impression of determination that he has identified as that of ‘necessary connection’ is indeed properly characterized as an impression of *necessity*” (75). I agree with Garrett. In the positive account, Hume strongly
implies that we have a genuine experience of necessity and, therefore, upon the copy principle, that we have a genuine idea of necessity. This is not to say that Hume is a realist about causal necessity among external objects—a non-skeptical realist, because “skeptical realist” readings generally do not attribute a positive idea of necessity to Hume. However, it’s possible that Hume is a non-skeptical realist about an internal or mental sort of necessity—though one which we project onto external objects and mistake as a connection among external objects.

Many scholars would resist this suggestion and offer an alternative interpretation of Hume’s positive account. For instance, Kail (2007) argues that Hume traces our idea of causal necessity to an impression of mental determination only because that determination “mimics” the effects that a genuine experience of necessity would have (108). Kail contends that, for Hume, a genuine experience of necessary connection would result in a psychological inseparability of our idea of the cause from our idea of the effect—the sort of inseparability that occurs only with logical necessity, or the necessity “which makes two times two equal to four, or three angles of a triangle equal to two right ones” (T 166). With logical necessities, Hume says, “‘tis impossible to conceive anything contrary” (T 652-53). Whereas with causal necessities, he thinks it is always possible to conceive the contrary of a cause being followed by its usual effect. However, Kail argues that, on Hume’s view, we could not conceive the contrary of any causal necessity if we had a genuine experience of it. And Kail bases his reading upon passages at which Hume does seem to argue that if causal necessity were perceived, it would amount to a demonstration, and we could infer the effect from the cause a priori (T 161-162; EHU 63).

I dispute Kail’s interpretation on two accounts.

First, Hume’s arguments that perceiving causal necessities would amount to demonstrations, and allow us to infer effects from causes a priori, apply only to cause-and-effect
pairs with which we have no previous acquaintance of the effect. They do not extend to the perception of mental determinations with which we are already determined to infer the effect from experience. As the determinations are themselves mental inferences from causes to effects, the effect is determined to occur to us anyway, whether or not we perceive the determination itself. In other words, we are already determined to infer the effect, so perceiving the necessity of that very determination would make no difference. We would still make the inference, and that inference would still be based on experience.

Second, and the focus of this paper, there are no intrinsic differences between the experience of logical necessity and the experience of causal necessity anyhow, as the experience of logical necessity is too just an experience of mental determination. Moreover, the psychological inseparability of ideas with logical necessities is a function of the imagination and of the ideas compared—it is not a function of the experience itself. Kail assumes that an experience of logical necessity can result in a psychological inseparability of the ideas. However, he has it backwards. The mental determination and the experience of it result from the psychological inseparability of ideas, not vice versa. The psychological separability or inseparability of ideas are just two different conditions under which mental determinations (and the experience of those determinations) can occur. They are not the products of the determinations or the experiences of them.

But, for Hume, is the experience of logical necessity just the experience of mental determination?

*Logical Necessity*

Whether the *copy principle* is an empirical generalization that can admit of exceptions or is an exceptionless a priori condition for meaningfulness, Hume gives no indication that our
concepts of necessity, logical or causal, are exceptions to it. Upon the copy principle, ideas are less vivid replicas of impressions of particular objects (EHU 19). Though the idea of logical necessity is an abstract idea, Hume follows Berkeley in holding all abstract ideas to be ideas of particular objects. Particular ideas become abstract by being made to represent or revive any others that resemble it (the “revival set”).\(^1\) Thus, even our idea of logical necessity would be, on Hume’s view, an idea of some particular object. The task is to discern what he thinks that object is.

So far as I know, Hume never asserts explicitly that we have an idea of logical necessity. But, in the *Treatise*, he appears to distinguish that idea where he makes an explicit distinction between logical and causal types of necessity:

> Thus as the necessity, which makes two times two equal to four, or three angles of a triangle equal to two right ones, lies only in the act of the understanding, by which we consider and compare these ideas; in like manner the necessity or power, which unites causes and effects, lies in the determination of the mind to pass from the one to the other. (T 166)

Here Hume claims that logical necessity “lies only” in the “act of understanding” by which we compare the ideas. Now, if logical necessity lies only in an act of understanding, then it would seem that if we have an idea of logical necessity at all, it is an idea of that act of understanding or some feature of it (an idea of reflexion). The act in question is a *comparison of ideas*, with or without the interposition of other ideas, which comparison Hume thinks results in what he famously distinguishes as knowledge of relations of ideas (EHU 25).

This knowledge appears to involve both a compulsion to believe the demonstrated proposition and an inability to conceive anything contrary to it. Hume writes that “[w]hen a

\(^1\) For example, our abstract idea of *human* is an idea of a particular human, but associated with and revived by some token uses of “human”. Garrett calls the set of resembling associated with a certain general term a “revival set”: a set of ideas of particular objects from which the token use of a general term may revive in the imagination (1996, 104).
demonstration convinces me of any proposition, it not only makes me conceive the proposition, but also makes me sensible, that ‘tis impossible to conceive anything contrary” (T 652-53). Hume further argues that “[i]n that case [of intuition or demonstration], 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 ideas” (T 95). Here Hume explicitly refers to a “determination to conceive” the ideas according to the demonstrated proposition.

Thus, with demonstrations, on top of a compulsion to believe the demonstrated proposition, and a mental resistance to conceiving its contrary, there is a mental determination to conceive the constituent ideas together. Perhaps first with the help of interposing ideas, we become determined to conceive of four upon conceiving of “two times two”. In itself, this does not seem different from being determined to conceive of heat upon conceiving of fire. In both cases, our mind automatically passes from one idea to the other (though perhaps with different degrees of force). The differences are only external to the token mental acts. Unlike in the case of two times two, our minds are not always determined to conceive of heat upon conceiving fire, and repeated experiences of fire are necessary to forge the association that will determine our minds to pass from fire to heat in token instances (while in the case of two times two, only a single demonstration is necessary to forge an inseparable link).

**Logicism**

So, mental determinations, either to pass automatically from one idea to another or to resist passing from one idea to another (e.g. two times two equals five), certainly appears to be the primary candidate for the object of our idea of logical necessity. But could Hume really take something purely psychological as the object of our idea of logical necessity?
It would be highly psychologistic for Hume to do so. But Hume’s philosophy is unabashedly psychologistic. In the *Treatise*, he says his general philosophical aim is to apply “experimental philosophy to moral subjects” (T xvi). And, in the Abstract, he describes the aim of logic in a way that casts logic as being principally concerned with “moral” or mental phenomenon.\(^2\) He writes that “*the sole end of logic is to explain the principles and operations of our reasoning faculty, and the nature of our ideas*” (T 646; Hume’s italics). Logic is a psychological inquiry concerning our ideas and mental faculties. It does not concern extra-psychological or abstract entities. So, if Hume thinks we have any idea of logical necessity, that idea would be none other than an idea of our own acts of demonstrative reasoning or some feature thereof.

Does this mean that, for Hume, when we assert a logical necessity, we are just asserting something about our mental states? Agreeing that, in Hume, logical necessity is psychological, Thomas Holden (2014) tries to avoid a simple subjectivist interpretation defends an expressivist interpretation, according to which, for Hume, asserting a logical necessity amounts to “expressing an attitude that is prompted and controlled by our sense that we could never successfully formulate the contrary combination of ideas” (383). However, if Hume thinks we have a positive idea of logical necessity, and positive ideas bear descriptive content, I am unsure whether the subjectivist interpretation could be entirely avoided.

“*Absolute Necessity*” and a Distinction of Reason

One might further object that, for Hume, our idea of logical necessity would be an idea of the psychological inseparability and (what we can call) *contrary inconceivability*:\(^2\)

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\(^2\) Hume’s conception of logic has been described as psychologistic, though mostly by non-specialists and mostly as grounds to reject Hume. For instance, Kitcher (1991) treats Hume’s psychologism about logic as a foil and a catalyst for “Kant’s cognitivism”. Though I have no interest in defending or rejecting Hume’s psychologism, his position on demonstration or logical entailment can be correctly described as psychologistic.
inconceivability of anything contrary to a logical necessity. This is, after all, how Hume seems to distinguish logical from causal necessity. It is supported by a passage wherein he refers to logical necessity as “absolute necessity”:

   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, and the imagination is free to conceive both sides of the question. (T 95; my emphasis)

What Hume calls here “absolutely necessity” seems to include contrary inconceivability. However, this use of “absolute necessity” is belied by another instance of it in the Treatise, where “absolute necessity” includes causal necessity. Hume writes:

   [T]here is but one kind of necessity, as there is but one kind of cause, and that the common distinction betwixt moral and physical necessity is without any foundation in nature. … ‘Tis the constant conjunction of objects, along with the determination of the mind, which constitutes a physical necessity: And the removal of these is the same thing with chance. As objects must either be conjoined or not, and as the mind must either be determin’d or not to pass from one object to another, ‘tis impossible to admit of any medium betwixt chance and absolute necessity. In weakening this conjunction and determination you do not change the nature of the necessity[.] (T 171)

Here, Hume also declares that the strength of the mental determination makes no difference to the type of necessity, so if one were to argue that some intrinsic quality of mental determinations, such as their strength or forcefulness, makes the difference between our ideas of logical and causal necessity, it would not be consistent with what Hume says here.

Now, “logical necessity” does refer to mental determinations occurring through inseparable connections formed through comparisons of ideas, while “causal necessity” refers to mental determinations occurring through separable connections formed through constant conjunctions in experience. But the difference is not made by differences in the experience of necessity in each case (and thus not by the ideas of mental determination in each case). The distinction between logical and causal necessity is ultimately, what Hume calls, a Distinction of Reason. Hume’s main example of such a distinction is a globe of white marble. He argues that
we are unable to separate the color from the shape. Our idea of the whiteness of the marble globe is the same as our idea of the shape of it. But, he explains, we “accompany our ideas with a kind of reflexion, of which custom renders us insensible” (T 25). In the case of mental determinations, we attend to memory and recognize that the circumstances of mental determinations are of two different types: sometimes they arise from a comparison of ideas, where then their contraries are inconceivable, while at other times mental determinations arise from experience of constant conjunctions, where we are still able to conceive the contraries of those conjunctions. There is no difference between the mental determinations themselves (perhaps except for a degree of forcefulness). There are only differences with respect to the connected ideas and the circumstances of their connection.

**A Genuine Idea of Causal Necessity?**

I will conclude this paper with an argument, based on the preceding arguments, supporting an internal realism about causal necessity in Hume.

P1. If experiences of mental determinations occurring from *inseparable* connections suffice as experiences of logical necessities, then mental determinations occurring from *separable* connections suffice as experiences of causal necessities.

P2. Experiences of mental determinations occurring from *inseparable* connections suffice as experiences of logical necessities.

C1/P3. Thus, experiences of mental determination occurring from separable connections suffice as experiences of causal necessities.

P4. We have experiences of mental determinations occurring separable connections.

C2. Thus, we have experiences of causal necessities.

A reasonable premise to deny is P2, which is tantamount to denying Hume’s logicism. But aside from that, the criteria for having a genuine experience of causal necessity should be no more
demanding than the criteria for having a genuine experience of logical necessity. So, if experiences of mental determination suffice for logical necessities, they should suffice for the causal necessities (P1). In fact, we have more reason to view mental determinations as sufficient for causal necessity, since mental determinations, as natural relations, intuitively seem more like relations between (mental) causes and (mental) effects than they seem like logical relations.

Thus, we have reason to deny Kail’s reading of Hume on causal necessity: the experience of mental determination does not “mimic” the experience of causal necessity. It is the experience of causal necessity. Now, there may be other good textual reasons not to attribute an internal realism about causal necessity to Hume, but those reasons are for another paper to counter!

Works Cited:

The editions of Hume’s works are as follows:


