David Hume’s Treatise of Human Nature

Idea of Necessary Connexion: Two Definitions of Cause

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Abstract

This paper aims to study Hume’s idea of causes and effects focusing on the problem of how knowledge is acquired. Since the necessary connection between cause and effect is copied, then does that mean everything is entertained by custom? The paper consists of five sessions including introduction, and conclusion. The study began with the review of Hume’s idea of necessary connexion, and two definitions of causes then go on to analyze and give a critical reflective on the subject in order to find the certainty from his philosophy.

Keywords: David Hume, Necessary Connexion, Two Definitions of Cause, knowledge, certainty
บทความนี้มุ่งศึกษามโนทัศน์เรื่องเหตุและผลในบริบทของที่มาของความรู้ตามทรรศนะของเดวิด ฮิวม์ จากแนวคิดที่ว่า ทุกมโนทัศน์นั้นเป็นสัณฐานจากสาเหตุ หากเป็นเช่นนั้น การรับรู้ของมนุษย์ก็ขึ้นอยู่กับความเคยชินเพียงเท่านั้นหรือ? บทความนี้มี 5 ประเด็นรวมบทนำ และบทสรุป โดยเริ่มจากบทปริทัศน์แนวคิดของฮิวม์ เรื่อง ความสัมพันธ์เชื่อมโยง และ ทวินิยามของสาเหตุ จากนั้นเป็นการวิเคราะห์เนื้อหา พร้อมสะท้อนแนวคิดเพื่อหาความเที่ยงแท้ในหลักปรัชญาของฮิวม์

คำสำคัญ : เดวิด ฮิวม์, ความสัมพันธ์เชื่อมโยง, ทวินิยามของสาเหตุ, ทฤษฎีความรู้

1. Introduction

According to Hume, our belief that events are causally related is a custom or habit acquired by experience. By observed the regularity with which events of particular sorts occur together, we form the association of ideas that produces the habit of expecting the effect whenever we experience the cause. But something is missing from this account: we also believe that the cause somehow produces the effect, even if this belief is unjustifiable. Thus Hume, offers some explanation for the fact that we do hold this cause-effect relation. His technique was to search for the original impression from which our idea of the necessary connection between cause and effect is copied. But how do we arrive at knowledge of causes and effects?
2. Idea of Necessary Connexion

Hume says that we cannot deduce what something will cause from examining it alone. If that object be entirely new to someone, he will not be able to discover any of its causes or effects. From this perspective the effect that follows seem arbitrary. So, from examining the first object, we cannot infer the thought that it causes ‘what happens next’. We must use experience to find the causal relations between events. Anyway, we cannot find that from this single experience, even if we have seen that the second event follows the first, but to say that it is an effect of the first is to claim too much. Moreover, Hume’s argument is not just that we cannot have knowledge of what causes what on the basis of single objects or single instances. It is that we cannot even form the idea of causation from these sources. The idea of causation is more than the idea of one object being followed by another. But surely all that we actually experience is one object following another in time. The idea does not arise from our objective experience of the events themselves. All we observe is that events of the “cause” occur nearby and shortly before events of the “effect”, and that this recurs with a regularity that can be described as a “constant conjunction.” (William E. Morris, 2009) Although this pattern of experience does encourage the formation of our habit of expecting the effect to follow the cause, it includes no impression of a necessary connection, nor do we acquire this impression from our own capacity for voluntary motion. Here the objective element of constant conjunction is rarely experienced, since the actions of our
minds and bodies do not invariably submit to our voluntary control. And even if volition did always produce the intended movement, Hume argued, that would yield no notion of the connection between them. So there is no impression of causal power here, either. Still, we do have the idea of a necessary connection, and it must come from somewhere. For an (non-justificatory) explanation, Hume refers us back to the formation of a custom or habit. Our (non-rational) expectation that the effect will follow the cause is accompanied by a strong feeling of conviction, and it is the impression of this feeling that is copied by our concept of a necessary connection between cause and effect. The force of causal necessity is just the strength of our sentiment in anticipating the effective outcomes.

3. Two Definitions of Cause

In both the Treatise and the Enquiry, Hume presents his two definitions as the outcome of an argument concerning the idea of necessary connection as Don Garretttt (1997) has summarized as follow:

1. Every idea is copied from some preceding impression or sentiment. (The Copy Principle)

2. [W]here we cannot find any impression, we may be certain that there is no idea. (from 1)

3. In all single instances of the operation of bodies or minds, there is nothing that produces any impression . . . of power or necessary connexion.
4. In all single instances of the operation of bodies or minds, there is nothing that . . . can suggest any idea . . . of power or necessary connexion. (from 2 and 3)

5. [W]hen many uniform instances appear, and the same object is always followed by the same event; we then begin to entertain the notion of cause and connexion.

6. [W]hen many uniform instances appear, and the same object is always followed by the same event . . . [w]e then feel a new sentiment or impression, to wit, a customary connexion in the thought or imagination between one object and its usual attendant.

7. [T]his idea [of necessary connection] arises from a number of similar instances [of one object being followed by another], and not from any single instance. (from 4 and 5)

8. [This idea of necessary connection] must arise from that circumstance, in which the number of instances [of one object being followed by another] differ from every individual instance. (from 1 and 7)

9. [T]his customary connexion or transition of the imagination is the only circumstance in which they [i.e., the similar instances of one object being followed by another] differ.

10. [T]his sentiment [i.e., the customary connection or transition or determination of the imagination] is the original of that idea [of necessary connection] which we seek for. (from 6, 8, and 9)

(p.105)
Through those arguments, Hume defined causality into two terms; the first is as following term (hereafter C1): “We may define a cause to be an object precedent and contiguous to another, and where all the objects resembling the former are placed in like relations of precedency and contiguity to those objects, that resembles the latter”. Thus, for X to be said to cause Y, the pair must fulfill two immediately perceivable relations. The first is spatial contiguity. The second is temporal contiguity, which the two objects must follow one another in close succession in time (the cause preceding the effect). Resemblance also plays a role in determining causal judgments, but chiefly as it allows for recognizing a third essential relation in C1—that of constant conjunction. Constant conjunction occurs when “all the objects resembling the former are placed in like relations” to those resembling the latter. Thus, particular Xs, those which sufficiently resemble other already observed Xs, will be determined by the mind to be of type X (and the same goes for Ys), and constant, repeated observations of spatial and temporal contiguity between Xs and Ys enables the imposition (by definition) of a causal relation on these pairs of objects. Thus, according to C1, the phenomenon of constant conjunction of (X,Y) pairs in the proper spatial and temporal relations to one another (which are classified as [X,Y] pairs by the resemblance between individual Xs and Ys) determines that the former causes the latter. On the other hand, Hume’s second definition (hereafter C2) is distinct from the first because it introduces a psychological element into the determination of
causality. This natural relation (i.e., that which involves human experience in its determination) is expressed by Hume through C2 as follows: “A cause is an object precedent and contiguous to another, and so united with it, that the idea of the one determines the mind to form the idea of the other, and the impression of the one to form a more lively idea of the other” (Hume, p.170). C2, then, defines causality to be the positing of a necessary connection between two objects by a human observer in response to a set of particular relations that he repeatedly witnessed between them.

4. Comments on the two definitions of cause

Why does Hume provide two different definitions for the same concept? And which definition does he regard as correct? We cannot understand his famous discussion of causation fully without the answers to these two fundamental questions. There are four possible answers to these questions which are, he endorses both, or he endorses only C1, or he endorses only C2, and he endorses neither. Each of the four alternatives has its proponents among commentators. Some scholars have argued that the very fact that C2 requires a subjective human observer as part of the definition of cause is problematic because it renders the two definitions not co-extensive and therefore incoherent. J.A. Robinson (1962) argues that C1 “determines a class of ordered pairs (x,y). . . , each pair having the completely objective property of being an instance of a general uniformity,” while C2 “determines a class of ordered pairs. . . by means of a property which is defined quite essentially
in terms of certain mental phenomena” (Robinson, 1962: p.163). From this Robinson infers that C2 requires a human observer to be present to witness the constant conjunction explained by C1 in order for the two definitions to be co-extensive. Yet he points out that there are countless instances in which human experience is limited or otherwise biased, such that the requisite association in the mind does not occur when in fact it should. Thus, because the objective truth of constant conjunction of objects and often do not correspond to one another, Robinson concludes that C1 and C2 cannot be co-extensive (Robinson, 1962: p.166). Don Garrett, On the other hand defends C1 and C2 by proposing that the two definitions should both be interpreted objectively, rather than objectively with regard to C1 but subjectively with regard to C2, as Robinson does. The diction of C1 implies that it is intended to be interpreted in a theoretical (objective) sense; Hume posits in C1 that “all the objects” of a certain type are placed in a causal relation to one another. The “all” here is not qualified by the adjectives “observed” or “experienced,” and hence refer to the entire set of pairs (X,Y) for which the relations obtain, not only to those that have been witnessed in the past. Yet, Garrett argues, “there is no reason why the ‘mind’. . . of C2 cannot instead be construed to be an idealized mind or spectator—for example, one who accurately views all and only representative samples, has a well-developed human inferential mechanism, and suffers from no interfering biases” (Garrett, 1997: p.108–9). Under this interpretation C2, like C1, refers to the entire set of pairs of objects for which the necessary
relations described by C1 obtain; with a theoretical reading of the two definitions one can be assured of their co-extension. Garrett, then, believes that Hume would ultimately prefer the absolute, or objective, reading of both of his definitions of cause. Hume certainly cannot allow for any subjective reading of C1, C2, or both, for this would imply the contradiction that something could be both cause and not cause at the same time. Under a subjective reading of either definition, each individual’s experience determines what cause is, and since experiences vary widely there is no doubt that often one person would form a mental association (through his experience of constant conjunction) where another would not, resulting in contradictory causal judgments. Thus, to define a coherent definition of cause Hume needs to frame the definition in a theoretical sense. Given the theoretical interpretation, we can understand cause to obtain when a particular resemblance class of objects is constantly conjoined with another class of objects, and a hypothetical human observer that is able to witness every instance of the conjunction of the two types would determine that the connection between the two classes is necessary. Of course, Hume understands that a human being is limited by a short life span and that one can never observe all conjunctions. Nevertheless, for the purpose of understanding what cause means in the theoretical and objective sense rather than how it is used in everyday human discourse, Hume must present his two definitions from the perspective of an ideal observer. Although a law of nature as expressed by fallible human beings might eventually be revised
due to the discovery of erroneous inferences based on biased experience, a law of nature in itself cannot change. The theoretical law is unchanging and constant, but what humans believe to be a law of nature may change over time. Hence, something that we had believed to be a law (or a cause) may turn out not to be one, so in the objective sense it was never a law to begin with, but merely labeled as such. Hume needs the objective definition to explain cause theoretically because language and believes can be arbitrary and erroneous. In order for his reader to understand the concept of causation in the first place, I reckon that Hume must be able to refer to something more general, beyond the mere collection of specific labels or particular uses of the term “cause” that exist in contemporary discourse.

5. Conclusion

Hume’s Problem of Causation has remained unsolved for more than two centuries and this lack of certainty has greatly prejudiced our belief in the possibility of Metaphysics and the certainty of Science, and has ultimately led to the extreme skepticism of our currently troubled and confused times. Hume correctly explains that Humans do not know the ‘Necessary Connexion’ between objects and thus do not know the relationship between cause and effect. This quite simply is the Problem of Causation - that until we know ‘what exists’ and the ‘necessary connexions’ between these things that exist, then it is impossible for Humanity to have certainty of knowledge. This then leads to
the further problem of Induction. We mistake the internal impression for the impression of a relation or quality intrinsic to individual cause-and-effect pairs, according to Hume, because we tend to “spread” this impression of necessary connection onto the objects, much as we ascribe spatial locations to sensory qualities, such as sounds and smells, which have no location (Hume, p.167). According to Hume, it seems that we can specify the membership of the revival set of ideas of cause-and-effect pairs in either of two ways, depending on whether we choose 1. To describe the shared (though not intrinsic) feature of the pairs of objects whose ideas become included in the revival set, or 2. to describe the shared feature of the ideas of pairs that are included in the revival set themselves. That is, we can define ‘cause and effect’ either in terms of the constant conjunction that in fact produces the determination or transition of psychological association and inference, without specifying the psychological process to which it gives rise, or we can define ‘cause and effect’ in terms of the association and inference, without specifying the features of objects that in fact give rise to it. These two approaches provide two different views of the revival set of ideas signified by ‘cause’, and they correspond, of course, to C1 and C2. As Hume says, “We must not here be content with saying that the idea of cause and effect arises from objects constantly united; but must affirm, that ‘tis the very same with the idea of these objects . . .” (Hume, p. 405). The abstract idea of cause and effect is precisely the abstract idea that has the idea of these objects as its revival set.
References