

Immanuel Kant's Response to David Hume regarding Cause and Effect

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A thesis submitted to the Faculty of Graduate and Postdoctoral Affairs in partial fulfillment of the requirements for the degree of:

Master of Arts

In

Philosophy

Carleton University

Ottawa, Ontario

## Abstract

When David Hume could not experience the impression of a necessary connection in the constant conjunction of two events, he reasoned that the necessity inherent in such a relation was the result of a feeling or desire; a determination of the mind to connect one event to another. Immanuel Kant, on the other hand, argued that the idea of cause was an innate structure of thought that provided the objective validity to a causal relationship. I argue that Kant's combination of sensible intuition and the faculty of thought provides a more comprehensive and objective explanation of how we understand the necessary connection between a cause and its effect.

## Acknowledgement

There are two special people in my life for whom I owe a deep debt of gratitude for making this thesis possible. The first is my wife, Sheryll, whose encouragement and patience throughout this long process was steadfast. Besides being my life partner, she deigned to scrutinize my grammar, in an attempt to make my abstruse prose more accessible. The second person I wish to thank is my Supervisor, Dr. Melissa Frankel, whose patience, guidance, mentoring, and deep knowledge pushed me to produce a paper that is considerably better than if I was left to my own devices. I would like to especially thank Dr. Andrew Brook who introduced me to the curse of an obsessive desire to try to understand Kant. I have benefitted immensely from his wisdom and counsel. I must also thank my mentor, Dr. David Matheson, who has provided me with inspiration, friendship, and support over the years. I am also grateful to Dr. Marc Hanvelt who took the time to read my thesis, and who agreed to be a member of my thesis defense committee. I am especially grateful to Dr. Christine Koggel, my Graduate Supervisor and defense committee moderator, for both her wisdom and patience.

Last but not least, I must thank the Faculty of Philosophy whose brilliance and knowledge I had the privilege of experiencing throughout my time at Carleton University. They are the best kept secret at Carleton.

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## Introduction

It can be argued that Immanuel Kant wrote the *Critique of Pure Reason* in part as a response to David Hume's *Enquiry Concerning Human Understanding*. At issue were two distinct interpretations of cause and effect. Hume argued that we can never have an idea of cause because we can never experience an impression of the power or force of a connection between a cause and its effect. This power or force, for Hume, becomes a subjective necessity. Kant argues that the concept of cause cannot be abstracted from experience because it is a concept of our minds. It is a rule that is applied by our mind to understand how objects of experience are related to each other, thereby providing our knowledge with an objective reality. The purpose of this thesis is to elucidate this distinction between Hume's and Kant's analyses of causation.

Hume argued that ideas could only be acquired through perception. There are two kinds of perception, the first is impressions of sense and of internal reflection of the mind. The second are ideas formed in the imagination as faint copies of these impressions. These are the material of thought, stored as simple ideas, and recalled to be associated with other ideas. For example, the idea of the colour "red" can be recalled from memory and associated with the idea of a "sphere" to form the idea of a "red ball". The only source for ideas are impressions. No new idea can be formed without first being received through an impression.

Since the only source of new ideas are impressions of sense or reflection, then they must be the origin of the concept of cause. But Hume argues that the idea of cause (more specifically the idea of necessary connection) cannot be formed from a sensory

impression because there are no such impressions. However, since we are convinced there is such a thing as causation, it must originate from somewhere. Hume's solution is to argue that the necessary connection of a causal relation is a subjective propensity of our mind. Upon experiencing the constant conjunction of successive and contiguous events, we have an impression of an effect. Our mind, through custom and habit of experiencing such events, immediately transitions from the effect to its attendant cause. The necessity we ascribe to causation is a determination of the mind to connect constantly conjoined events.

Kant, who was educated in the rationalist school of Christian Wolff, was profoundly influenced by Hume's analysis of causation. So much so, he espoused Hume's philosophy up until the point he could not resolve the scepticism that was the inevitable conclusion of Hume's empiricism. It is in reacting to the scepticism of empiricism and the dogmatism of rationalism that pushed Kant into his critical philosophy; a philosophy that seeks to examine ideas and judgements to determine their validity and truth. From this he argued that there are two conditions for the possibility of knowledge. The first condition is the sensation that Hume espoused. The second is the intellect; that part of thought that Wolff relied on to determine what we know. If knowledge is to be possible, then the mind needs to have an object for thought, and a capacity to think or conceptualize the object. The rules that facilitate thinking are concepts not found in sensory experience, but are immanent in our faculty of thought: the understanding. The application of these rules to thinking the object of sensation provide the object of thought with what Kant refers to as objective validity, that is, the object thought is the same for anyone who thinks it.

For Kant, causation is one of the concepts or rules of the mind that allows us to understand how a change in the state of affairs can have objective validity. This means that any change over time in the shape, position, or characteristic of an object assumes that the object had a previous state and that the change from this previous state occurred according to a rule. In other words, for the object to change, there had to be a reason or a cause for the change. We may not know what that cause is (that is the realm of scientific investigation), but we know that a change has occurred. It is the way our minds are structured to think.

Since this concept of a cause is inherent in the faculty of understanding, and is not found in experience, Kant considers this concept to be *a priori*. *A priori* concepts are concepts not found in experience but are immanent in minds. It is Kant's formulation of the contribution of the intellect, and *a priori* knowledge, to sensory objects that is the difference between Kant and Hume. My thesis elucidates this difference over the origin of cause between the two philosophers. It magnifies the importance of the contribution of *a priori* knowledge and thought to the process of acquiring experience, something, I argue, missed by Hume.

The thesis is presented in four chapters, each divided into a number of sections. In the first chapter I start by explicating Hume's theory of mind and his notion of perception and association of ideas. I then discuss his difficulty with finding an impression for a necessary connection between a cause and its effect, culminating in his two definitions for causal relations. In the next chapter I present a brief summary of Kant's epistemology. Following this, there is a chapter discussing Kant's understanding of Hume's problem with causation. In this chapter I explain Kant's difficulty with Hume's subjective

necessity with cause. In the fourth and final chapter, I present Kant's answer and resolution to Hume's scepticism.

These two great philosophers changed the way we think about knowledge and how we understand the world. The fact that I have reduced it to a debate over causation, in no way diminishes their accomplishments. Understanding causation is vital to understanding the way we think. It is the fundamental concept of how we acquire knowledge, and without some understanding of what it is, we cannot make the judgements that we do. This thesis is not so much a reduction than the starting point for acquiring knowledge.

## Chapter 1 Section I Hume on Ideas

### Introduction

Before I relate Hume's propositions of cause and effect, I shall first explain how he understands the way we think and acquire knowledge. Early in the first part of the *Treatise of Human Nature* and near the beginning of *An Enquiry Concerning Human Understanding*, Hume presents his theory of mind. My purpose in this chapter is to explicate Hume's epistemology. This involves how, according to Hume, we acquire ideas and how we use them to think. Hume's understanding of causality is very much caught up in his thesis of idea acquisition.

In both the *Treatise* and the *Enquiry*, Hume presents a fundamental notion that all our perceptions are of two distinct kinds: "Impressions and Ideas" [T1.1.1.1./1]. Impressions originate from sensations, emotions, and feelings (in the *Enquiry* he sometimes refers to them as "outward or inward sentiment" [E7.5/20]) while ideas are fainter images of these impressions. His theory is that ideas replicate (or are copies) of impressions. Any impression we have whether from sensation, emotion, or feeling, is the source for all our thoughts and ideas. In the *Treatise* he presents this theory as "*That all our simple ideas in their first appearance are deriv'd from simple impressions, which are correspondent to them, and which they exactly represent*" [T1.1.1.7/5]. In the *Enquiry* when observing that ideas replicate impressions, Hume also emphasizes that ideas are fainter than impressions; "all our ideas or more feeble perceptions are copies of our impressions or more lively ones" [E2.5/20]. So, the difference between an impression and

an idea is the force or liveliness from which the idea is experienced.<sup>1</sup> This is a fundamental maxim in Hume's epistemology, one to which he returns frequently when testing the validity of ideas and concepts.

In this section, I will present Hume's thesis about impressions and how they relate to ideas. I also look at two aspects of impressions: impressions of sensation and those of reflection, and how they are related. After a short discussion regarding innate ideas, I begin by explaining Hume's concepts of impressions and ideas, and their origin. Next, I explicate the cornerstone to Hume's theory of human understanding: the Copy Principle. Related to this is an explanation of our imagination and memory. I then present Hume's theory of how we associate simple ideas to form more complex and livelier ideas. (Causality, as we will see, is a complex idea for Hume.) This leads to Hume's theory of belief which is related closely with impressions of inner sense or feeling. Belief is integral to how Hume represents causality. I conclude with a discussion of abstract ideas, since cause can be understood as an abstract idea in a Humean context.

### Impressions and Ideas

The core of Hume's philosophy is that we do not have any "*innate ideas*" but that all our ideas come from perception. This is a break from the Rationalist tradition of Descartes who argued for innate ideas resident in the intellect and in particular, the innateness of the idea of God.<sup>2</sup> Hume is professing his adoption of the Empiricist thesis

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<sup>1</sup> "[W]e find, that any impression either of the mind or body is constantly followed by an idea, which resembles it, and is only different in the degrees of force and liveliness" [T1.1.1.7/6].

<sup>2</sup> Descartes states in his *Principles of Philosophy* that if "we lay aside the preconceived opinions of the senses, [then] in this connection make use of the intellect alone, carefully attending to the ideas implanted by nature" [ATVIII A 42, (Descartes, 1985, pp. V1,224)]. In the Fifth Meditation, he states "So there is a great difference between this kind of false supposition [geometric inferences] and the true ideas which are

of Locke and Berkeley that the only source of our ideas are perception. As Hume notes, “This then is the first principle I establish in the science of human nature” [T1.1.1.12/8].

For Hume, perception is a category that includes both impressions and ideas. Hume presents this thesis when he states, “all our simple ideas proceed either mediately or immediately, from their correspondent impressions” [T1.1.1.11/8]. The only way we can have thoughts or ideas is if we first have an impression. There is, however, a difference between ideas and impressions. While impressions can originate in sensation or internal feelings and emotions, ideas reside in our imagination or mind. The difference between impressions and ideas is not only like “the difference betwixt feeling and thinking” [T1.1.1.2/3], but a distinction between their intensity, their force and vivacity. Hume uses terms such as forcefulness and liveliness to denote the difference as for example when he states, “any impression either of the mind or body is constantly followed by an idea, which resembles it, and is only different in the degrees of force and liveliness” [T1.1.1.8/4]. For instance, when we see an object such as a tree, our perception of the object is clearer and more distinct, than if we recall an image from memory of the same object at some later time. As Hume explains, “These faculties [mind and memory] may mimic or copy the perceptions of the senses; but they never can entirely reach the force and vivacity of the original sentiment” [E2.1/18].

As alluded to earlier, impressions “may be divided into two kinds, those of Sensation and those of Reflexion” [T1.1.2.1/8]. In the *Enquiry*, Hume notes that “all the materials of thinking are derived either from our outward or inward sentiment” [E2.5/20].

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*innate* in me, of which the first and foremost is the idea of God” [AT VII68, (Descartes, 1985, pp. V2, 47)]. Here Descartes is postulating the Rationalist principle that the intellect is the source of innate ideas.

So an outward sentiment is equivalent to sensation while an inward sentiment is an impression of reflexion. Although Hume states that sensation “arises in the soul originally, from unknown causes”<sup>3</sup> [T1.1.2.1/8], he does go on to describe such an impression as those that “first strikes upon the senses, and makes us perceive heat or cold, thirst or hunger, pleasure or pain of some kind or other” [T1.1.2.1/9]. So, impressions of sensation are those that we normally associate with our five senses of sight, sound, touch, taste and smell. Besides these sensations, impressions of sense also include sensations of pleasure and of pain. These are sensations that are at the limit of our sensory threshold. The pleasurable feeling of a warm fire can turn quickly to pain if we venture too close the flames.

Impressions of reflexion are a little less obvious, but, as we will see, are more significant to Hume than impressions of sensation. The impression of reflexion involves the recollection of an idea from memory. For example, if an idea is recalled from memory of some previously experienced “pleasure or pain, when it returns upon the soul, [it] produces the new impressions of desire and aversion, hope and fear, which may properly be called impressions of reflexion” [T1.1.2.1/9]. Note that it is the recalled idea that is responsible for producing an impression. We can see this if we consider a recollection of an experience such as a bee sting. The recollection of a bee sting can

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<sup>3</sup> The reference to “unknown causes” refers to the way sense organs function. Since the “examination of our sensations belongs more to anatomists and natural philosophers than to moral” [T1.1.2.1/9], it is beyond the scope of Hume’s enquiry, and is left as unknown. According to Kemp Smith, Hume considers himself a moral rather than a natural philosopher. He is enquiring into the moral nature of people. Here, the term moral is used in a very broad sense, meaning “Used to designate the kind of probable evidence that rests on a knowledge of the general tendencies of human nature, or of the character of particular individuals or classes of men; often, in looser sense, applied to all evidence which is merely probable and not demonstrative.” Quoted from Kemp Smith’s attribution to the *Oxford Dictionary* (Kemp Smith, 1960, p. 99n2)

account for a feeling of fear of pain that is sufficiently intense to be considered as an impression. Note however, that while the recollection of the trauma may possess considerable force and vivacity, it is still nowhere near the force or vivacity of the original impression of sensation. So, an impression of reflexion is essentially an idea, which, in possessing sufficient force and vivacity, can carry enough emotion or feeling to graduate to an impression.

An idea “of pleasure or pain, when it returns upon the soul, produces the new impressions of desire and aversion, hope and fear, which may properly be called impressions of reflexion” [T1.1.2.1/8]. Hume points out that not only the data from our senses are the source of impressions, but our feelings, emotions, and (as we will see), our beliefs, can be a source of impressions. If I remember a pleasant experience I had as a child, that feeling I have from the memory of that experience, is also considered an impression by Hume. So perceived feeling, or emotion from recollected or imagined ideas are also impressions which can form ideas.

Although the distinction between impressions of sensation and impressions of reflection is used by Hume throughout the first *Treatise*, “[i]t is not, it may be noted, so much as mentioned in the *Enquiries*.”<sup>4</sup> There is mention of inward as well as outward sentiment, in that “all the materials of thinking are derived either from our outward or inward sentiment” [E2.5/19]. This would suggest this is a statement of our ideas or “materials of thinking originating come from “sentiment or *inward* impression” [E7.6/63]. However, the term “sentiment” is fraught with confusion and ambiguity,

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<sup>4</sup> (Kemp Smith, 1960, p. 213)

which may be why Kemp Smith doesn't acknowledge "inner sentiment" as metaphorically an "impression of reflection". This confusion was noted by Peter Jones when he wrote, "It should be emphasized that the ambiguity in the French term *sentiment*, deplored by French and English writers alike, is precisely mirrored in Hume's term "sentiment", by which he sometimes means "emotion, passion," and sometimes "judgement, opinion"; indeed for him the term treacherously covers feeling and thought."<sup>5</sup> Therefore, I accept Kemp Smith's bracketed comment that discussion of the impression of reflection is to be found only in the *Treatise*.

#### The Copy Principle:

Hume holds that ideas (the material of thinking) are caused by and also resemble impressions. What remains in the mind after an impression passes are ideas that become memories. These ideas are copies of either sensations or feelings. The way Hume states the concept is, "An impression first strikes upon the senses, and makes us perceive heat or cold, thirst or hunger, pleasure or pain of some kind or other. Of this impression there is a copy taken by the mind, which remains after the impression ceases; and this we call an idea" [T1.1.2.8/7]. Hume refers to ideas as "the faint images of these [impressions] in thinking and reasoning" [T1.1.1.1/1]. The major difference between impressions and ideas is that although ideas are images that are "exact representations" [T1.1.1.4/3] of sensations or feelings, ideas are faint versions of these impressions. Ideas don't have the same "degree of force and vivacity" [T1.1.1.8/5]. So, although our memory or imagination may retain the images of our impressions, "they never can entirely reach the

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<sup>5</sup> (Jones, 1993, p. 280) See note 17.

force and vivacity of the original sentiment” [E2.1/17]. Hume, therefore, states the copy principle as “*That all our simple ideas in their first appearance are deriv’d from simple impressions, which are correspondent to them, and which they exactly represent*” [T1.1.1.7/4].

In the *Enquiry*, Hume very clearly states the Copy Principle when he writes,

[A]ll our ideas are nothing but copies of our impressions, or, in other words, that it is impossible for us to *think* of any thing, which we have not antecedently *felt*, either by our external or internal senses [E7.4/62].

For Hume the importance of ideas being copies of impressions cannot be overstated. It is the fundamental principle he uses to verify whether there is a legitimate idea for consideration. “When we entertain, therefore, any suspicion, that a philosophical term is employed without any meaning or idea (as is but too frequent), we need but enquire, *from what impression is that supposed idea derived*” [E2.9/23]? For terms to have the validity necessary for philosophical discourse, they must first be found in impressions of sensation or reflection.

As an example, suppose I have the experience of sitting by a warm fire. While I am enjoying the fire, I am experiencing an impression of the fire’s warmth. When I am experiencing the impression or feeling the warmth of a fire, this is causing an idea in my imagination which is stored in my memory. If, at a later time, I try to recall the memory of the sensation I experienced, the idea of the fire does not bring me the full force of the warmth I originally felt. When the experience is new, my memory “retains a considerable degree of its first vivacity, and is somewhat intermediate betwixt an impression and an

idea” [T1.1.3.1/8]. As Hume notes, “there is a considerable difference between the perceptions [impressions] of the mind, [...] and when he afterwards recalls to his memory this sensation, or anticipates it by his imagination. These faculties may mimic or copy the perceptions of the senses; but they never can entirely reach the force and vivacity of the original sentiment” [E2.1/17]. So, we experience the sensory impression of the warmth of the fire, which is copied as an idea and stored in memory. We can recall this idea from memory, but the idea in our imagination does not have the same intensity as the original impression.

Perceptions can be further divided “into Simple and Complex” [T1.1.1.2/2] impressions and ideas. Complex impressions can be reduced to simple impressions, such as, “a particular colour, taste, and smell are qualities all united together in this apple, ’tis easy to perceive they are not the same, but are at least distinguishable from each other” [T1.1.1.2/2]. Simple impressions are copied as simple ideas and “[s]imple perceptions or impressions and ideas are such as admit of no distinction nor separation” [T1.1.1.2/2], that is, they cannot be reduced any further. These simple ideas are then reconstituted into the image of the original impression.

With larger impressions (Hume uses the impression of a city like Paris as an example) he notes that “there is in general a great resemblance betwixt our *complex* impressions and ideas, yet the rule is not universally true, that they are exact copies of each other” [T1.1.1.5/3]. There are too many variables, all of which we would not be cognizant for the copy principle to hold completely. The limitations are due to our capacity to remember or imagine the myriad detail in such a large impression. But as Kemp Smith notes, the maxim is still operative because “all complex ideas are resolvable

into simple ideas without remainder.”<sup>6</sup> This also means that when simple ideas are combined into a complex ideas, “in serving to constitute the complex the simple undergoes no manner of alteration.”<sup>7</sup> Kemp Smith notes that Hume never argues for the reverse procedure but because “for him proof of exact resemblance between simple impressions and ideas when viewed in isolation is, in consequence, likewise proof that the maxim holds in regards to ideas combined in complexes.”<sup>8</sup> This is relevant to any discussion regarding the formation of complex ideas of causation.

Hume offers two arguments for the copy principle. The first is essentially an inductive argument that since “every simple impression is attended with a correspondent idea, and every simple idea with a correspondent impression,” and that this occurs “in such an infinite number of instances” and that “such a constant conjunction ... can never arise from chance;” then this “clearly proves a dependence of the impressions on the ideas, or of the ideas on the impressions” [T1.1.1.8/4]. Here Hume is arguing that simple ideas not only resemble simple impressions, but are also dependent on them. Also, impressions temporally precede ideas, since “Hume points out that to give a child an idea of a color or taste, we present the objects (which he equates with conveying the impression), but we never proceed in the reverse direction.”<sup>9</sup> The causal relationship between the constant conjunctions of impressions with ideas also establishes this precedence. From this, we can state that impressions cause<sup>10</sup> ideas.

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<sup>6</sup> (Kemp Smith, 1960, p. 208)

<sup>7</sup> (Kemp Smith, 1960, p. 208)

<sup>8</sup> (Kemp Smith, 1960, p. 208)

<sup>9</sup> (Allison H. E., 2008(2), p. 19)

<sup>10</sup> Here, Hume is using the term cause due to his observation that impressions are constantly conjoined with ideas: “The constant conjunction of our resembling perceptions, is a convincing proof, that the one are the

The second argument deals with a person's capacity to have experiences. For example, if someone cannot see or hear, then they will not have any visual or auditory impressions, and as a consequence, not only are the impressions from that sensory modality not extant, but neither are their correspondent ideas; "so that there never appear in the mind the least traces of either of them" [T1.1.1.9/5]. If you do not have the sensory capability to have an impression, then there can be no ideas corresponding to those impressions. A corollary to this is that if you have not had the experience of an impression, then there can be no idea of it. (As we will see later, this is an important concept in aiding our understanding of Hume's scepticism regarding causation. If I cannot experience an impression of the necessary and sufficient conditions for a causal relation, then I am unable to form an idea of such a relation.) Hume succinctly states this concept as, "We cannot form to ourselves a just idea of the taste of a pine-apple, without having actually tasted it" [T1.1.1.9/5]. Therefore, where there is no impression, there is no corresponding idea.

As Hume notoriously notes, there is one exception to the copy principle that may be considered. This is the 'missing shade of blue' argument. In this scenario, if someone is presented with a series of shades of the colour blue, from dark blue to light blue, and this gradation is continuous, if there is one of the shades missing, "'tis plain, that he will perceive a blank, where that shade is wanting;" the missing shade of blue will be noticed by the observer. Hume next asks if the observer could supply, or "raise up ... this particular shade" of blue even though he has not had a previous impression of this shade

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causes of the other; and this priority of the impressions is an equal proof, that our impressions are the causes of our ideas, not our ideas of our impressions" [T1.1.1.8/4].

of blue. If this be the case then “this may serve as a proof, that the simple ideas are not always derived from the correspondent impressions” [T1.1.1.10/6]. This argument must have been significant to Hume since it is presented in both the *Treatise* and the *Enquiry*. His dismissal in both books is identical: “the instance is so [particular and] singular, that it is scarcely worth our observing, and does not merit that for it alone we should alter our general maxim” [E2.16/21]. So Hume does not waver from the Copy Principle. This is significant because Hume acknowledges that the mind can create an idea of the missing shade of blue, which challenges his maxim that there has to be an impression before there can be an idea. To explain Hume’s dismissal of this phenomenon, Allison refers “to an important but often neglected aspect of Hume’s position . . . , namely the existence of natural resemblances among simple perceptions,”<sup>11</sup> and that there is “an extreme likelihood of the imagination being able to produce an idea that closely resembles the impressions it has already experienced.”<sup>12</sup> It certainly seems reasonable to expect our minds to function in a manner where we can form thoughts that technically we have not had before. One explanation for his dismissal could be traced to his theory of the association of ideas discussed later. Resemblance between the shades of blue could suggest what the missing shade would be, as well as, the notion of contiguity where the proximity and contiguity of the shade could also suggest the missing shade. For example, due to the close similarity of previous formed ideas, it is not unreasonable to suggest that we could be able to intuit possible gaps in our ideas.

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<sup>11</sup> (Allison H. E., 2008(2), p. 20) Allison also cites Garrett *Cognition and Commitment*, 51 to support this reading.

<sup>12</sup> (Allison H. E., 2008(2), p. 21)

While the forgoing attempts to rehabilitate the copy principle, Hume has left a dilemma, which within his philosophy, has no easy solution. Is Hume fully committed to the copy principle or should the missing shade of blue dissolve his commitment? As noted above, Hume denies the second horn of the dilemma by dismissing the counterexample as peculiar and unique. He therefore retains his allegiance to the copy principle. I do not think this threatens Hume's commitment to the copy principle because our minds are not zero sum decision engines. Ideas are not crystal clear with hard boundaries, but very organic, and may I say, even indistinct. There is a seeming presumption that each shade of blue is a simple idea; it is not. Differing shades of blue are complex ideas. They are composites of a variety of differing colours as any paint colour strip will attest. Simple impressions are reductions of more complex impressions. The process of simplifying complex impressions into simple ideas, which in turn become more complex ideas in the organic environment of human nature, would result in generation loss of distinctness and detail. No less so for forming complex ideas of differing shades of blue. If the neighbouring shades of blue, which already resemble each other, are reduced to their elements and reconstituted, it is not unreasonable to accept that the missing shade could be formed from selected constituent parts of the previous blue shades. The missing shade is filled in by the complex association of simple ideas of previous impressions. This does not threaten the copy principle, but in fact reinforces it.

## Association of Ideas

Simple ideas can be connected to each other in various ways. These connections do not happen by chance,<sup>13</sup> but by a “gentle force” governed by “some associating quality” [T1.1.4.1/10]. Hume states, “[t]he qualities, from which this association arises, and by which the mind is after this manner convey’d from one idea to another, are three, viz. Resemblance, Contiguity in time or place, and Cause and Effect” [T1.1.4.1/10]. Hume’s Principle of the Association of Ideas presents the thesis of how we think by forming complex ideas from simple ideas. The connection or association of ideas in the imagination is one of the more important theses that Hume propounds. It not only is involved in thought but also in Hume’s belief forming mechanism.

Hume’s principle of the association of ideas is where we first have a glimpse of the role of imagination in thinking. As we have seen, Hume states in the *Treatise* that all perceptions consist of impressions and ideas. Impressions are transient sensations and feelings which manifest as ideas in the imagination. As well, ideas from previous impressions can be recalled from memory. All these experiences can congregate in the imagination, where, through thought, ideas are separated, stored into memory, or combined into more complex ideas. The imagination, for Hume, is where we actively think about our perceptions. “’Tis plain, that in the course of our thinking, and in the constant revolution of our ideas, our imagination runs easily from one idea to any other” [T1.1.4.2/11]. Since Hume has made it clear that the only source of ideas are impressions of sensation and reflection and that for every simple idea we can only ask “*from what*

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<sup>13</sup> Chance, for Hume, is “merely the negation of a cause” [T1.3.11.7/127].

*impression is that supposed idea derived?"* [E2.9/22], then the imagination cannot create a new idea without the idea first originating from an impression.

An idea or impression can recall another idea from memory, and be processed in the imagination. For example, a photograph of a friend may recall her memory. When we think of a particular meal we enjoyed, this reminds us of the cafe where such a meal is served. The smell of baking may remind us of an earlier time. This is not a random linking of ideas, but the connection of ideas by the gentle force of resemblance, contiguity or causation. "Where ideas entirely loose and unconnected, chance alone wou'd join them; and tis impossible the same simple should fall regularly into complex ones (as they commonly do) without some bond of union among them, some associating quality, by which one idea introduces another" [T1.1.4.1/10]. We associate ideas all the time; constantly comparing, recalling, or forming new ideas from existing ones.

An association of ideas occurs under three conditions: resemblance, contiguity of time and place, and cause and effect.

The first condition, that of resemblance, occurs when "our imagination runs easily from one idea to any other that *resembles* it, and that this quality alone is to the fancy a sufficient bond and association" [T1.1.4.2/12]. Our thoughts connect ideas that are similar. For example, if I am presented with a picture of a person, then if I recognize the image in the picture, it would be because the image resembles the idea of someone of whom I had a previous impression. The resemblance awakens a memory I have of that person, and I am presented with an idea of that person.

In the case of contiguity: if one idea of an object is in close proximity of time or space with another, then this leads one to think of the second idea. For example, if I am thinking about a house in which I once lived, this may bring to mind memories of my time there. My idea of the house is contiguous with the memory of my old neighbourhood. An example of temporal contiguity would be associating one event with another, such as the idea of a festival with the idea of fireworks.

By far the most important of the principles of associating ideas, or for ideas and impressions, is cause and effect. As Hume notes, “there is no relation, which produces a stronger connexion in the fancy,<sup>14</sup> and makes one idea more readily recall another, than the relation of cause and effect betwixt their objects” [T1.1.4.1/11]. There are a plethora of ideas being associated because of causal relationships. For example, “Two objects may be consider’d as plac’d in this relation, as well when one is the cause of any of the actions or motions of the other, as when the former is the cause of the existence of the latter” [T1.1.4.4/13]. When a rock hits a window and shatters the glass, then the idea of a rock is the cause of the idea of the window breaking.

In the *Treatise*, Hume distinguishes two types of relation. The first is the relation where “two ideas are connected together in the imagination, and the one naturally introduces the other” [T1.1.5.1/14]. Though not explicitly stated at this point, it is here where Hume identifies the three principles used in associating ideas and impressions as being natural relations. The second relation between ideas is when “upon the arbitrary union of two ideas in the fancy, we may think proper to compare them” [T1.1.5.1/14].

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<sup>14</sup> For Hume, “fancy” is an alternate term for the “imagination.”

The various methods of comparing ideas in the imagination are identified by Hume as philosophical relations since “’tis only in philosophy, that we extend it to mean any particular subject of comparison, without a connecting principle” [T1.1.5.1/14]. Natural Relations are the same as the principles of associating ideas: resemblance, contiguity of time and place, and cause and effect. When it comes to comparison of ideas, there are seven methods that are effective in Philosophical Relations: resemblance, identity, space and time, quantity, quality, contrariety, as well as cause and effect. So there is a distinction between the processes of connecting ideas to form new concepts in thought, and comparing ideas to establish relations and understanding between ideas. As Hume notes, these two concepts of a relation are “considerably different from each other” [T1.1.5.1/14]. The distinction between philosophical and natural relations will become important later during my discussion of causation.

## Belief

How belief functions in Hume’s epistemology is, I think, as important as understanding his construal of impressions, ideas and the copy principle. Hume’s posits that ideas are copies of impressions of sense and reflexion, and that impressions have greater force and liveliness than ideas. From this, the only difference between impressions and ideas is its attribution of belief. As Kemp Smith points out, with regard to matters of fact, Hume reverses the roles of reason and passion. “Passion is Hume’s most general title for the instincts and sentiments ... and belief he teaches is a passion.”<sup>15</sup> As Hume states in Book 2 “On the Passions”, “Reason is, and ought only to be the slave

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<sup>15</sup> (Kemp Smith, 1960, p. 11)

of the passions” [T2.3.3.4/415]. So, according to Hume, if belief is a passion, a feeling, then it cannot be justified by reason, as standardly understood. Belief, therefore is a feeling or passion that augments the forcefulness and vivacity of an idea. From this we can understand why Hume would state “*that belief is more properly an act of the sensitive, than of the cogitative part of our natures*” [T1.4.1.8/184].

For Hume, a belief is an idea that has increased in forcefulness and liveliness by being associated with a recent impression. As Hume explains, “Whenever any object is presented to the memory or senses, it immediately, by the force of custom, carries the imagination to conceive that object, which is usually conjoined to it; and this conception is attended with a feeling or sentiment, [...]. In this consists the whole nature of belief” [E5.11/48]. Having a particular event occur repeatedly, the impression of the event recalls the idea of the same event. The association of the idea recalled from memory with the impression results in the feeling of the idea becoming stronger; the vivacity and strength of the idea increases. As I have shown, the only way Hume distinguishes between different ideas and impressions is by using the differing intensity of force liveliness and vivacity. Thus beliefs cannot differ in content from other ideas, but only have more force and vivacity as compared to another idea, and so “’Tis a particular manner of forming an idea: And as the same idea can only be vary’d by a variation of its degrees of force and vivacity; it follows upon the whole, that belief is a lively idea produc’d by a relation to a present impression” [T1.3.7.6/97]. Hume, therefore, defines belief as “A LIVELY IDEA RELATED TO OR ASSOCIATED WITH A PRESENT IMPRESSION” [T1.3.7.5/96].

This means that “the *belief* or *assent*, which always attends the memory and senses, is nothing but the vivacity of those perceptions they present; and that this alone distinguishes them from the imagination” [T1.3.5.6/86]. Imagination is the place where fictions can be formed and the “difference between fiction and belief lies in some sentiment or feeling, which is annexed to the latter, not to the former, and which depends not on the will, nor can be commanded at pleasure” [E5.11/48]. In other words, belief is grounded in experience. This is why, for example, we typically do not form the belief that unicorns exist. As Hume stipulates, “it is not in our power to believe, that such an animal has ever really existed” [E5.10/49]. This is because, although I can form the idea of a unicorn in my imagination by associating an idea of a horse with an idea of a single horn, I can never have experienced an impression of such an animal, and consequently the sentiment for the idea cannot be increased in force or liveliness by experiencing an impressions of a unicorn. “When we simply conceive an object [a unicorn], we conceive it in all its parts. We conceive it as it might exist, tho’ we do not believe it to exist” [Ab 19/653]. Since we cannot experience a unicorn then it is a fictional<sup>16</sup> animal. So, “the difference between *fiction* and *belief* lies in some sentiment or feeling, which is annexed to the latter, not to the former, and which depends not on the will, nor can be commanded at pleasure” [E5.11/45].

A belief is a feeling of the force and vivacity that has increased or diminished by the frequency of association of impressions. As Hume tries to explain, a belief in something has “[t]his different feeling I endeavour to explain by calling it a superior

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<sup>16</sup> For Hume, a fiction is any idea that cannot be correlated with an impression.

*force, or vivacity, or solidity, or firmness, or steadiness*” [T1.3.7.7/97]. However, by distinguishing ordinary ideas of imagination with ideas of belief by the intensity of their forcefulness and vivacity, Hume has effectively reduced belief, and thought in general to the same status as impressions, i.e. a feeling. As Allison explains, “[t]he problem, however, is that by ignoring the propositional nature of thought, and making its difference from feeling into a matter of FLV<sup>17</sup> Hume effectively treats thinking as a kind of feeling.”<sup>18</sup> While it may be a problem today, Hume has already relegated reason to sentiment. He has no problem with belief being a feeling rather than a propositional attitude.

I shall conclude by noting that an impression of reflection as noted earlier is essentially an idea that has the force and liveliness of an impression. To achieve this, “The effect, then, of belief is to raise up a simple idea to an equality with our impressions, and bestow on it a like influence on the passions” [T1.3.10.3/120]. For an idea to have the forcefulness of an impression, such that it can be copied as a new idea, it must be repeatedly reinforced by other sensory impressions or ideas. The custom or habit which results would cause the mind to move from the impression of reflection to its attendant idea. This, as we will see, is one way of understanding the idea of causation. “Belief, therefore, since it causes an idea to imitate the effects of the impressions, must make it resemble them in these qualities, and is nothing but *a more vivid and intense conception of any idea*” [T1.3.10.3/120 -1].

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<sup>17</sup> Allison uses the term ‘FLV’ for ‘force’, ‘liveliness’, and ‘vivacity.’ (Allison H. E., 2008(2), p. 16)

<sup>18</sup> (Allison H. E., 2008(2), p. 16)

## Abstract Ideas

An abstract idea, for Hume, is a particular idea that is representative of a general term that encompasses a set of equivalent particular ideas. For example, using the general term ‘dog’, would recall a particular animal such as Lassie, or Rin Tin Tin. General terms, terms that apply to numerous particulars, are also abstract in the sense that their referents are abstract. In Hume’s epistemology, there is no room for abstract terms since all ideas must be copies of a particular impression. What Hume argues, following Berkeley, is that “all general ideas are nothing but particular ones, annexed to a certain term, which gives them a more extensive signification, and makes them recal upon occasion other individuals, which are similar to them” [T1.1.7.1/17]. Hume does not accept that there can be an idea that is not a copy of an impression, that is, that has been abstracted from a number of ideas or impressions.

When we experience a number of ideas of particular objects or events that appear to us to resemble each other, “whatever differences we may observe in the degrees of their quantity and quality, and whatever other differences may appear among them” [T1.1.7.7/21], we group these ideas into a set and assign the set a name or a general term. As Hume notes “[w]hen we have found a resemblance among several objects, that often occur to us, we apply the same name to all of them” [T1.1.7.7/21]. This is how we can, for example, group the ideas of different species of dogs and apply the general term ‘dog’ to a set of ideas of all particular dogs that sufficiently resemble each other. As Hume explains, we “acquire a custom” [T1.1.7.7/21], a habitual practice of associating resembling ideas with the general term for the set. When we hear the set name, this “revives the idea of one of these objects, and makes the imagination conceive it with all

its particular circumstances and proportions” [T1.1.7.7/20]. This means that hearing the word ‘dog’ revives one of the ideas of a particular dog that is a member of the set.

However, since there are numerous members of the set, the general term “not being able to revive the idea of all these individuals, only touches the soul” [T1.1.7.7/20], that is, the general term after repeated use acquires the custom of the idea of a particular member representing the complete set. The other individual members are not abandoned but neither are they “in fact present to the mind, but only in power; nor do we draw them all out distinctly in the imagination, but keep ourselves in a readiness to survey any of them, as we may be prompted by a present design or necessity” [T1.1.7.7/20]. So, while the general term revives a particular idea of a set member, the rest of the set need not be present to the mind, but we can at any time survey the set if necessary.

For example, in the proposition “Caesar is a man”, the term man applies to the custom of referencing the set of all ideas of particular men that identify with the term man. As Hume explains, “[t]he image in the mind is only that of a particular object, tho’ the application of it in our reasoning be the same, as if it were universal” [T1.1.7.6/20]. The term man revives the custom or habit of a particular and determinate man (it could be my Father) who is representative of all resembling particulars in the set with the name ‘man.’<sup>19</sup> The idea of a particular man can then become representative of the universal term ‘man.’

In my upcoming discussion of causation, the word ‘cause’ is used to refer to a set of all causal relations. Included in the set is not only the causal relations themselves, but

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<sup>19</sup> (Garrett D. , 2006, p. 175) For a discussion on using sets of particular and determinate ideas of objects in what Garrett refers to as. a ‘revival set.

also the attendant qualities that are associated with a causal relation, namely, priority, contiguity in time and place and the idea of necessary connection. This discussion regarding abstract ideas is directly related to the idea of causation.

## Chapter 1 Section II – Hume on Causation

### Introduction

In this section, my purpose is to explicate Hume's scepticism of causal relationships, and his controversial solution as posited in his two definitions for cause. His scepticism stems from the fact that he was unable to perceive the nature of the connection between a cause and its effect by inspection.

When we look about us towards external objects, and consider the operation of causes, we are never able, in a single instance, to discover any power or necessary connexion; any quality, which binds the effect to the cause, and renders the one an infallible consequence of the other [E7.6/64].

By not being able to “discover any power or necessary connexion” means that there is no sensory impression of a connection and therefore, nothing from which an idea of such a connection could be copied. This scepticism is further exacerbated by Hume's position that reason, through intuition and demonstration, cannot deduce why a cause necessarily has the effect that it has. As Hume argues, “I shall venture to affirm, as a general proposition, which admits of no exception, that the knowledge of this relation [cause and effect] is not, in any instance, attained by reasonings *a priori*” [E4.6/28]. This means, for Hume, we can have no knowledge, nor certainty, of what constitutes the complex idea of a causal relation.

While we may not have knowledge of a causal relation, we hold the opinion that such a relation exists. We use the idea of causes being necessarily connected to their effects in our daily discourse. We have an opinion, a belief, that there are such notions as

causal relations. It is this belief, this passion<sup>20</sup> that Hume develops into an impression of reflection from which the idea of a necessary connection can be found. While this may be a subjective solution, it is consistent with Hume's thesis that since we are possessed of moral<sup>21</sup> natures, we are governed by our passions.<sup>22</sup>

As my interest is with Immanuel Kant's defense of reason in the face of Hume's attack, I shall note at this juncture that Kant "freely admit[s] that the remembrance of *David Hume* was the very thing that many years ago first interrupted my dogmatic slumber and gave a completely different direction to my researches in the field of speculative philosophy" [4:260]. This resulted in a work that arguably changed the direction of philosophical thought: *The Critique of Pure Reason*. Kant's problem was that the concept of cause and effect was not to be "derived from experience, but had arisen from the pure understanding" [4:260], something that Hume could not accept. For Kant, cause is one of a number of concepts that provide the objective validity for the possibility of knowledge, that is, understood through reason, and not an empirical or emotional observation. Kant saw Hume's empirical arguments as a threat to the foundation of reason, and therefore, knowledge itself. Since much of Hume's scepticism can be traced to the idea of the relation between cause and effect, this is the key concept to which Kant responds (almost directly). This section, therefore, examines Hume's understanding of

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<sup>20</sup> As previously noted, "belief, he [Hume] teaches, is a passion." (Kemp Smith, 1960, p. 11)

<sup>21</sup> In the broad sense as previously noted.

<sup>22</sup> (Kemp Smith, 1960, p. 11) Kemp Smith proposes that "what is central in his [Hume's] teaching is not Locke's or Berkeley's 'ideal' theory, . . . , but the doctrine that the determining influence in human, as in other forms of animal life, is feeling, not reason or understanding, i.e. not evidence whether *a priori* or empirical."

the idea or concept of causality and the necessary and sufficient conditions for a cause to have the relationship it has with its effect.<sup>23</sup>

This section has three parts. The first is a discussion of causality, its importance and Hume's understanding of the conditions for causation. Next I present the two questions that Hume believed needed to be answered in order to understand the concept of cause, and the necessary connection between a cause and its effect. In the last part, I present Hume's answer in the form of his two definitions for cause. In this section I also survey some of the contemporary literature that Hume's definitions have engendered, and conclude with some of my own remarks.

## Cause

Before delving into Hume's understanding of causation,<sup>24</sup> I want to explain why the idea of cause was such a puzzle for Hume, and why it is so important. When we observe an event of any kind, we are naturally predisposed to think that there was a reason that caused the event. We naturally assume we know what this means, but once the concept is explored, it rapidly becomes opaque. As Hume notes,

There is no question, which on account of its importance, as well as difficulty, has caus'd more disputes both among ancient and modern

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<sup>23</sup> Professor Andrew Brook, years ago, when advising me on an essay I was writing on Kant's Second Analogy that I should keep in mind that "If every change has a cause, how do we know that the cause has the effect it has?"

<sup>24</sup> For Hume, to perceive a causal event involves not only the need for an empirical impression of a cause and its connection to its effect, but also the idea or concept of a causal relation that have the selfsame conditions.

philosophers, than this concerning the efficacy of causes, or that quality which makes them be follow'd by their effects [T1.3.14.3/156].

Understanding the idea of cause is important because it is the main ingredient in the Principle of Sufficient Reason, a major principle in philosophy. “The Principle of Sufficient Reason is a powerful and controversial philosophical principle stipulating that everything proposition must have a reason or a cause.”<sup>25</sup> While some philosophers took this principle to be axiomatic, arguments for the Principle of Sufficient Reason are beyond the scope of this paper. However, it should be noted that Leibniz coined the phrase, when he stated in his “The Monadology,” “we can find no true or existent fact, no true assertion, without there being a sufficient reason.”<sup>26</sup> This concept was also the core of Spinoza’s philosophy.<sup>27</sup> Samuel Shirley, in his translation of Spinoza’s *Principles of Cartesian Philosophy*, “Part 1, Axioms Taken from Descartes”, writes “[Axiom] 7. Nothing, nor any perfection of a thing actually existing, can have nothing, or a nonexisting thing, as the cause of its existence.”<sup>28</sup> Since nothing can be a cause of existence or ‘coming to be,’ then there must something that is its cause. This leads to Axiom 11, where Spinoza formulates the Principle of Sufficient Reason as, “Of everything that exists, it can be asked what is the cause or reason why it exists.”<sup>29</sup> Spinoza explains this axiom, stating, “Because to exist is something positive, we cannot say that it has nothing for its cause (Ax. 7). Therefore we must assign some positive

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<sup>25</sup> (Melamed, 2015, p. 1)

<sup>26</sup> (Leibniz, 1989, p. 217) Leibniz also notes that this principle is a “received axiom that *nothing is without reason, or there is no effect without a cause*” found in “Primary Truths.” (Leibniz, 1989, p. 31)

<sup>27</sup> (Melamed, 2015, p. 1)

<sup>28</sup> (Shirley, 2002, p. 131) This just another way of stating the adage, *ex nihilo nihil fit*, ‘out of nothing comes nothing’, which I understand was attributed to Parmenides.

<sup>29</sup> (Shirley, 2002, p. 133)

cause or reason why it exists. And this must be either external (i.e., outside the thing itself) or else internal, (i.e., included in the nature and definition of the existing thing itself).”<sup>30</sup> This demonstrates that when a claim about something is made, there needs to be a reason or a causal explanation supporting the claim for it to be accepted. Since uncovering causal relations is integral to providing sufficient reason for a claim, it is evident why the concept of cause is so important.

Hume believes that before we can have any ideas, we must first have received an impression from which the idea was copied. If he is to have the idea of a causal relationship, he needs an impression of a cause and its effect, and the “quality” that connects the two. However, he fails to discover a sense impression for such a connection, when he explains,

Let us therefore cast our eye on any two objects, which we call cause and effect, and turn them on all sides, in order to find that impression, which produces an idea of such prodigious consequence. At first sight I perceive, that I must not search for it in any of the particular *qualities* of the objects; since, which-ever of these qualities I pitch on, I find some object, that is not possest of it, and yet falls under the denomination of cause or effect. And indeed there is nothing existent, either externally or internally, which is not to be consider’d either as a cause or an effect; tho’ ’tis plain there is no one quality, which universally belongs to all beings, and gives them a title to that denomination [T1.3.2.5/76].

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<sup>30</sup> (Shirley, 2002, p. 133)

Hume knows that causality, both epistemologically as well as metaphysically, is basic to philosophical reasoning.<sup>31</sup> It is so important that his reliance on the copy principle is shaken when he states, “Shall the despair of success make me assert, that I am here possess of an idea, which is not preceded by any similar impression” [T1.3.2.12/77]? However, Hume (while still holding to the copy principle) needs to find the necessary conditions for an impression to produce the idea of a causal relation. This is why he embarks on what has become known as the “impression hunt.”<sup>32</sup>

Hume establishes parameters for his impression hunt by stating, the “power [cause], by which one object produces another, is never discoverable merely from their idea, ’tis evident *cause* and *effect* are relations, of which we receive information from experience, and not from any abstract reasoning or reflection.” [T1.3.1.1/69]. If we cannot acquire the idea of causation from *a priori* reasoning, and we are bound by the copy principle, this means that the idea of cause must be discoverable by “examining that primary impression, from which it arises” [T1.3.2.4/75].

Since Hume does not accept that *a priori* reasoning can explain the connection between the impression of a cause and an impression of an effect, he examines what is observable. What he finds is that “the two relations of *contiguity* and *succession* to be essential to causes and effects” [T1.3.2.9/77]. We can have an impression of the two events (objects) being contiguous in time and space, and that an effect succeeds its cause. While these conditions are necessary for a causal relation, they are not sufficient. There is

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<sup>31</sup> For clarity, it should be noted that “[r]eason, for Hume, is simply the faculty of making inferences, which may be either demonstrative [deductive] or probable [inductive].” (Allison H. E., 2008(1), p. 526)

<sup>32</sup> (Allison H. E., 2008(1), p. 526)

a third condition, there is also “a NECESSARY CONNEXION to be taken into consideration” [T1.3.2.11/78]. However, Hume cannot discover an impression of sense for this last condition. It is not only necessary, but in conjunction with contiguity and succession in time and place, it is a sufficient condition for a causal connection. All three conditions are evidenced in the following example Hume presented in his *Abstract*,

Here is a billiard-ball lying on the table, and another ball moving towards it with rapidity. They strike; and the ball, which was formerly at rest, now acquires a motion. This is as perfect an instance of the relation of cause and effect as any which we know, either by sensation or reflection [A9].

This example presents the conditions that Hume attributes to a causal event: contiguity in time and space (the two billiard balls connecting with each other at a particular time and location), and priority in time and place (the moving ball connects with the stationary ball before the stationary ball starts to move) evidenced by the first ball causing an effect in the second ball. We may be convinced that the second billiard ball had to move because of the collision with the first moving billiard ball, but “the particular powers,<sup>33</sup> by which all natural operations are performed, never appear to the senses” [E5.3/43]; there is no sensory impression to support this conviction. This is the problem. Hume wants to understand where this conviction originates. What follows is Hume’s explanation of each of these conditions.

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<sup>33</sup> For Hume, “*power, force, energy, or necessary connexion*” [E7.3/63] are synonymous. So, when one billiard ball exerts “that energy, of which it was secretly possess” [T1.3.2.7/77] causing the second billiard ball to move, the impression of that “energy” or “necessary connection” is what cannot be experienced.

The first condition is spatial and temporal contiguity. One observes an object produce an action in another only when the first object is temporally or spatially proximate to the other. As Hume notes, “[W]hatever objects are consider’d as causes or effects, are *contiguous*” [T1.3.2.6/75]. In all situations where he has a putative experience of cause and effect, he is also aware of an impression of contiguity. Returning to Hume’s example of billiard balls, they are both spatially and temporally contiguous when the cue ball comes into contact with the shot ball. As Hume concludes in the *Abstract*, “*Contiguity* in time and place is therefore a requisite circumstance to the operation of all causes” [A9/649], that is, contiguity is a necessary condition and an integral condition for the complex idea of causal relation.

The next condition for a causal relation is “that of priority of time in the cause before the effect” [T1.3.2.7/76]. When there is one object or event that produces a second object or event, the first always precedes the second, and never vice versa.<sup>34</sup> When the cue ball approaches the shot ball, it is the cue ball’s precedence to the impact that causes the shot ball to move. It doesn’t matter how quickly the transition can occur,<sup>35</sup> “that the motion of it precedes that of the other, but without any sensible interval” [T1.3.2.9/76], a cause necessarily takes precedence to any effect, and is not reversible.<sup>36</sup> Hume argues against such non-reversibility of causes to their events concluding a *reductio* to the effect that “[t]he consequence of this wou’d be no less than the destruction of that succession of causes, which we observe in the world; and indeed, the utter annihilation of time”

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<sup>34</sup> This correlates to Kant’s controversial irreversibility of objective succession of appearances in time [A193/B238]. I elaborate on this in my discussion of Kant’s “Second Analogy.”

<sup>35</sup> While the change in the states of the two billiard balls may appear instantaneous (simultaneous), if the collision was measured, there is a finite amount of time between the two states.

<sup>36</sup> If the causal events occurred in a reverse order, then it would be a different causal event.

[T1.3.2.7/76]. As with contiguity, succession in time is a necessary condition for the complex idea of a cause and effect. He therefore accepts that a causal event or object must precede its effect.

For Hume, contiguity and succession are necessary but not sufficient for a cause to have occurred. There are numerous instances where we can experience one object being prior to and contiguous to another without there being a cause. To assume such a sequence as causal can lead one to mistake correlative events as being causal. For example, day following night. Day is spatially and temporally contiguous to night, and day succeeds night, but there is no causal relationship between the two events.<sup>37</sup> Similarly, we can also form a belief that when one event repeatedly follows another there can be a causal relationship. Continuing with the day following night example, there is the folk belief that the crowing of a rooster causes the morning sunrise. These are examples of what is known as the *post hoc ergo propter hoc*<sup>38</sup> fallacy. There are countless situations where there are contiguous events that proceed one another, yet there is no causal relation between them. There needs to be a third element in our concept of cause, which Hume identifies as a necessary connection between the cause and the subsequent event. For example, when one billiard ball caroms with a second billiard ball, there is a ‘force’ or ‘power’ that the first billiard ball possesses that causes the second ball to move. It is this force that Hume refers to as a necessary connection. The significance

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<sup>37</sup> In T1.3.15, Hume provides “*Rules by which to judge of causes and effects*” which are intended to guard against such fallacies.

<sup>38</sup> *Post hoc ergo propter hoc*: (Latin: "after this, therefore because of this"), "Since event Y *followed* event X, event Y must have been *caused* by event X." Correlation does not imply causation. ([https://en.wikipedia.org/wiki/Post\\_hoc\\_ergo\\_propter\\_hoc](https://en.wikipedia.org/wiki/Post_hoc_ergo_propter_hoc))

of the relation of a necessary connection “is of much greater importance, than any of the other two above-mention’d” [T1.3.2.11/77].

A necessary connection between a causal event and its effect, is not only required, but when conjoined with contiguity and succession, it is also sufficient for a causal event. In the *Abstract* Hume notes that “’tis commonly suppos’d, that there is a necessary connexion betwixt the cause and effect, and that the cause possesses something, which we call a *power*, or *force*, or *energy*” [A26/656]. We can see the influence of Malebranche<sup>39</sup> on Hume’s thinking here, since Hume is concerned to make sure that necessary connection is included as a condition for causality. The reason that the relation of a necessary connection is important is because, as Graciela de Pierris notes, “The idea of a necessary connection between cause and effect crucially underlies our distinguishing, among the sequences that fulfill the conditions of contiguity and priority, those sequences that we regard as causal from those that we do not.”<sup>40</sup> This points to the distinction between one event causing another (a billiard ball carom) or merely being correlated (day following night).

Hume notes in the *Abstract*, “[t]here are no ideas, which occur in metaphysics, more obscure and uncertain, than those of power, force, energy, or necessary connexion, of which it is every moment necessary for us to treat in all our disquisitions” [A7.3/61-2]. This is the challenge that faces Hume: to find that impression that produces the idea of a necessary connection, and along with the other two conditions, constitutes a causal

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<sup>39</sup> Malebranche wrote in *The Search After Truth* “A true cause as I understand it is one such that the mind perceives a necessary connection between it and its effect.” (Malebranche, 1980, p. 450)

<sup>40</sup> (De Pierris, May 2002, p. 512)

relation. “To be fully acquainted, therefore, with the idea of power or necessary connexion, let us examine its impression; and in order to find the impression with greater certainty, let us search for it in all the sources, from which it may possibly be derived” [E7.5/63].

### Hume’s Two Questions about Cause and Effect

Hume formulates two questions regarding cause and effect which helps him to clarify the issues central to understanding the relation of a cause and its effect, and the nature of the relation. The first question asks why we hold that if there is an effect that it should necessarily have a cause. Or stated another way, when we are cognizant of something, why do we immediately think that there must be a reason for it? The second question is a two part question which addresses particular causal situations. The first part asks, when something happens, why must we always think that there is a particular reason for it happening? Another way of stating this is, why must every event have the cause that it has? The second part asks, what makes us think there should be connection between a cause and its effect, and if so, what this connection would be. Hume asks why we should think this, and why we believe it to be the case. Here is the way Hume poses these questions:

First, for what reason we pronounce it *necessary*, that every thing whose existence has a beginning, shou’d also have a cause [T1.3.2.14/78]?

Secondly, why we conclude, that such particular causes must *necessarily* have such particular effects; and what is the nature of that *inference* we

draw from the one to the other, and of the *belief* we repose in it

[T1.3.2.15/78]?

### First Question

The first question is what Hume refers to as “a general maxim in philosophy” [T1.3.3.1/78] hereafter simply referred to as the “Causal Maxim.”<sup>41</sup> It is expressed as “*whatever begins to exist, must have a cause of existence*” [T1.3.3.1/78]. The Causal Maxim supports the claim that for anything to happen, that is, any change of state, any beginning or ending, every object we encounter, etc., there must be a cause, or a reason for that thing to happen.<sup>42</sup> I do not think that Hume wants to doubt that such a maxim is required for philosophical or scientific investigation. It is just that he thinks that neither reason, understood as intuition and demonstration “(if not the *a priori* status usually assigned to it),”<sup>43</sup> nor the lack of an impression of sense can justify the truth of Causal Maxim. Hume uses the maxim throughout the *Treatise*. As I noted previously in my discussion on the copy principle, Hume posits ideas are caused by impressions of sense or reflection.<sup>44</sup> Hume also states that, “our impressions are the causes of our ideas, not our ideas of our impressions” [T1.1.1.8/5]. So, Hume is very much committed to there

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<sup>41</sup> The Causal Maxim “is the proposition that it is a *necessary truth* that every beginning of existence has a cause.” (Noonan, 1999, p. 104)

<sup>42</sup> Scientific investigation/experimentation, in its search for the cause or reason for some phenomenon, presupposes the Causal Maxim. This is why both the principles of verification and falsification are grounded in reasons.

<sup>43</sup> (Allison H. E., 2008(2), p. 95) For a discussion on Allison’s analysis of Hume’s argument against the causal maxim. This is also presented in (Allison H. E., 2008(1)).

<sup>44</sup> (Allison H. E., 2008(2), p. 95) here Allison notes, “it [the Causal Maxim] is presupposed in the argument for the Copy Principle, which we have seen is at least in part a causal argument in the course of which Hume claims that, ‘Since such a constant conjunction, in such an infinite number of instances, can never have arisen from chance’<sup>44</sup> (T1.1.1.8; SBN 4), it must depend on causal dependence of some sort.”

being causal relationships, he just cannot accept the rational ground for the Causal Maxim.<sup>45</sup>

Since Hume wants to show that perception and the copy principle are his maxims for the only source of thought, and that *a priori* reasoning cannot establish the truth of a causal relationship,<sup>46</sup> he argues against the necessary truth of the Causal Maxim. As Hume notes, “it is not from knowledge or any scientific reasoning, that we derive the opinion of the necessity of a cause to every new production, that opinion must necessarily arise from observation and experience” [T1.3.3.9/83]. In the *Enquiry*, he reaffirms the empirical nature of the causal relationship when he stipulates that, “All reasonings concerning matter of fact seem to be founded on the relation of *Cause and Effect*” [E4.4/27]. Matters of fact as objects of experience are contingent, and therefore, not being certain, cannot be considered knowledge but “opinion”. By denying that any connection between cause and effect can be found in any “scientific reasoning”, he is saying that the causal maxim cannot be found in either intuition<sup>47</sup> or demonstration.<sup>48</sup> It is not intuition because these are objects of immediate awareness that are axiomatic, and so by their nature *a priori* and necessary. It is not demonstration because it is deductive by nature, which is again *a priori* and therefore, also necessary. So Hume asks the question, “For what reason we pronounce it [Causal Maxim] *necessary*, that every thing whose

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<sup>45</sup> It is this scepticism of reason to ground the Causal Maxim that concerns Kant, which I present later.

<sup>46</sup> (Allison H. E., 2008(1), p. 528) Hume wants to show that “experience is the source of the first principle (this is presumably a consequence of the argument of T 1.3.3, which rules out any *a priori* source).”

<sup>47</sup> Intuition is the immediate awareness of the truth of a proposition and is not dependent on empirical experience but on *a priori* judgement. (Blackburn, 1994, p. 197)

<sup>48</sup> In the Early Modern period, a demonstration “a chain of ‘intuitive’ comparisons of ideas, whereby the principle or maxim can be established by reason alone.” (Blackburn, 1994, p. 98) Using reason alone is an *a priori* inference.

existence has a beginning, shou'd also have a cause" [T1.3.2.14/78]? This is why Hume argues that the truth of the Causal Maxim cannot be proven by demonstration or intuition.

While Hume has three arguments to demonstrate his position, I shall only present the first one. Hume argues that, "We can never demonstrate the necessity of a cause to every new existence" [T1.3.3.3/80]. His argument starts with the claim that the idea of a causal event or object is completely separate from the idea of its effect. Since these are completely separate ideas, the certainty of philosophical comparison, "*resemblance, proportions in quantity and number, degrees of any quality, and contrariety*" [T1.3.3.2/79] cannot establish the necessary truth of the Causal Maxim. The argument proceeds by appealing to both the separability principle and the conceivability principle.<sup>49</sup> The separability principle states that, "whatever objects are different are distinguishable, and that whatever objects are distinguishable are separable by the thought and imagination" [T1.1.7.3/18]. The conceivability principle is presented as, "nothing of which we can form a clear and distinct idea is absurd and impossible" [T1.1.7.6/20].

Cause and effect are ideas separable in the imagination. Such a separation "of the idea of a cause from that of a beginning of existence, is plainly possible for the imagination;" and is conceivable so "consequently the actual separation of these objects is so far possible, that it implies no contradiction nor absurdity" [T1.3.3.3/79-80]. Since the ideas are separable in the imagination then they are conceivably separable in actuality, so there can be no connection between the ideas of cause or effect, necessary or otherwise. If the Causal Maxim is not necessarily true, then it must be contingent, that is,

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<sup>49</sup> (Noonan, 1999, p. 105) According to Noonan Hume's argument "appeals to the combination of the Conceivability Principle and the Separability Principle."

the negation of the causal maxim implies no contradiction or absurdity. As Allison explains, “he denies that it is either intuitively or demonstratively certain and concludes from this that it must be founded on ‘observation and experience’ (T1.3.3.9; SBN 82).”<sup>50</sup>

The importance of this argument is that Hume is adamant that the necessity of any connection between a cause and its effect, can neither “be intuitively nor demonstratively certain, and [he] hope[s] to have prov’d it sufficiently by the foregoing arguments” [T1.3.3.8/82]. So, the Causal Maxim, according to Hume, cannot be proved either by demonstration or intuition, which is why Hume is confident that “the knowledge of this relation is not, in any instance, attained by reasonings *a priori*” [E4.6/27].

## Second Question

The second question states that for any particular cause, we infer and believe there is a particular effect.<sup>51</sup> For example, if we observe that when the sun is shining on stones, the stones become warm. From observing numerous constant conjunctions between the sun shining and stones becoming warm, we infer that it is the sunshine that caused the stones to become warm. There seems to be a necessary connection between the sun shining and the stones becoming warm. Hume not only wants to know why we believe this to be the case, but also why we should infer this will happen. If such an inference has the attribute of necessity, then there can be a certainty that the cause has the effect that it has; that they are necessarily connected to each other. While Hume spends more time on

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<sup>50</sup> (Allison H. E., 2008(2), p. 93) See also (Allison H. E., 2008(1), p. 525)

<sup>51</sup> Following Allison, this can be termed ‘particular-cause-particular-effect’ or as L.W. Beck formulates it as ‘same-cause-same-effect’. Allison likes Beck’s formulation better “Since the particular causes and effects are viewed as tokens of a type, it is the assumption that tokens of one type will be universally correlated with tokens of the other that is the issue which Hume is primarily concerned. Thus ‘same’ is to be understood ‘same type.’ (Allison H. E., 2008(2), pp. 94-5)

this question than the first,<sup>52</sup> he wryly notes that, “Perhaps ’twill appear in the end, that the necessary connexion depends on the inference, instead of the inference’s depending on the necessary connexion” [T 1.3.6.3/89].

Before I explore this question, I want to examine causal inference briefly. Here Hume examines why when we experience a particular causal event that we *believe* we can *infer* that there will necessarily be a particular effect.<sup>53</sup> The reason is because we believe that “*the course of nature continues always uniformly the same*” [T 1.3.6.4/90]. If by enumerating a number of causal events that are constantly conjoined, we see that the effects are consistently the same, we come to believe that the constant conjunction of the two events will remain uniform. This belief, we think, gives us license to infer that when we experience a particular event, it was because of its associated cause. Because it is conceivable that particular causes have the effects they do, we have the confidence that our inferences hold. However, there is no necessity to the uniformity of nature and therefore this causal relation will always be contingent.<sup>54</sup> This is because, as Hume notes, “We can at least conceive a change in the course of nature; which sufficiently proves, that such a change is not absolutely impossible” [T 1.3.6.5/90]. This is Hume’s way of stating that unlike demonstrative reasoning where “the truth of the premises provides a *guarantee* of the truth of the conclusion,”<sup>55</sup> the best inductive logic can provide is “some

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<sup>52</sup> Allison observes that Hume “devotes the vast bulk of his attention to the latter [the second question].” (Allison H. E., 2008(2), p. 93)

<sup>53</sup> This “question is characterized generally, though not by Hume, as the problem of induction.” (Allison H. E., 2008(2), p. 112) It should also be noted that for Hume, induction didn’t have the same meaning as today, but “simply means a chain of argument.” (Allison H. E., 2008(2), p. 360 n1)

<sup>54</sup> (Blackburn, 1994, p. 192) As Blackburn explains, “The rational basis of any such inference was challenged by Hume, who believed that induction presupposed belief in the uniformity of nature, but the belief had no defense in reason ... Hume ... was not sceptical about the process of induction, but sceptical about the role of reason in either explaining or justifying it”

<sup>55</sup> (Hawthorn, 2014, p. 1)

*degree of support* for the conclusion.”<sup>56</sup> As Hume explains, “Reason can never shew us the connexion of one object with another, tho’ aided by experience, and the observation of their constant conjunction in all past instances” [T1.3.6.12/93]. While this is a significant discussion of Part 3 of Book 1 of the *Treatise*, my concern is with Hume’s understanding of what constitutes a necessary connection between a cause and its effect, so a detailed discussion of causal inference is beyond the scope of this paper.

In section T1.3.14 of the *Treatise*, Hume presents his argument for what becomes an interpretation of necessary connection as a natural relation. His first premise is “that from the simple consideration of one, or both these objects<sup>57</sup> [events] we never shall perceive the tie, ..., or be able certainly to pronounce, that there is a connexion betwixt them” [T1.3.14.14/162]. However, when we observe numerous events that are constantly conjoined, “we immediately conceive a connexion betwixt them, and begin to draw an inference from one to another” [T1.3.14.15/163]. Witnessing a number of constant conjunctions “constitutes the very essence of power or connexion, and is the source, from which the idea of it arises” [T1.3.14.15/163]. This is not the same inductive demonstration of constant conjunctions that relies on the uniformity of nature. This is a feeling of power, that when we experience constantly conjoined events, we anticipate that one is connected to the other. Looking for such an impression, Hume states, “The idea of power is a new and original idea” so there must be an impression for this idea. However, the “repetition *alone* has not that effect, but must either *discover* or *produce* something

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<sup>56</sup> (Hawthorn, 2014, p. 1)

<sup>57</sup> Up until Kant, ‘objects’ have the connotation of intentionality. This means that objects are objects of thought, and not as Kant considered them, object or things external to our thought.

new, which is the source of that idea” [T1.3.14.15/163]. Since the idea of power or connection cannot be found “in any objects by their constant conjunction, and by the uninterrupted resemblance of their relations of succession and contiguity” [T1.3.14.19/163], we then have to look elsewhere for the impression.

The idea of power and connection is not produced by any sensory impression or “any new quality *in the object* ... yet the *observation* of this resemblance produces a new impression *in the mind*, which is its real model” [T1.3.14.19/164]. After observing a number of constant conjunctions between causes and effects “we immediately feel a determination of the mind to pass from one object to its usual attendant, and to conceive it in a stronger light upon account of that relation” [T1.3.14.19/165]. This feeling of expectation is the result of the resemblance between a cause and its effect. “Necessity, then, is the effect of this observation, and is nothing but an internal impression of the mind, or a determination to carry our thoughts from one object to another” [T1.3.14.19/165]. It is from custom, derived from the habit of constantly conjoining particular causes with their particular effects, that we have a feeling of expectation, which is the impression that produces the idea of a necessary connection.

Hume summarizes his position as follows,

The idea of necessity arises from some impression. There is no impression convey'd by our senses, which can give rise to that idea. It must, therefore, be deriv'd from some internal impression, or impression of reflection.

There is no internal impression, which has any relation to the present business, but that propensity, which custom produces, to pass from an

object to the idea of its usual attendant. This therefore is the essence of necessity. Upon the whole, necessity is something, that exists in the mind, not in objects; nor is it possible for us ever to form the most distant idea of it, consider'd as a quality in bodies. Either we have no idea of necessity, or necessity is nothing but that determination of the thought to pass from causes to effects and from effects to causes, according to their experienc'd union [T1.3.14.21/165].

Hume employs the term “custom” to describe the origin of the impression that produces the idea of necessary connection. In the *Enquiry*, Hume defines custom as,

Custom, then, is the great guide of human life. It is that principle alone, which renders our experience useful to us, and makes us expect, for the future, a similar train of events with those which have appeared in the past [E5.6/44].

Inherent in this term is the notion of a pattern of repeatable behavior of objects or events. As Hume explains, “we call every thing custom, which proceeds from a past repetition, without any new reasoning or conclusion” [T1.3.8.10/103]. So, when Hume refers to something understood as being custom, it means that “the repetition of any particular act or operation produces a propensity to renew the same act or operation, without being impelled by any reasoning or process of the understanding; we always say, that this propensity is the effect of *Custom*” [E5.5/43]. This is not an inference, causal or otherwise. There is no reasoning involved. It is a determination of the mind, a feeling

which becomes an impression of reflection that is the source of the idea of a necessary connection.

With this in mind, when Hume states that, “we call every thing custom, which proceeds from a past repetition, without any new reasoning or conclusion, we may establish it as a certain truth, that all the belief, which follows upon any present impression, is deriv’d solely from that origin” [T1.3.8.10/102], then custom has to do the heavy lifting for Hume. Note that he states that there is no reasoning or conclusion to be made from constant conjunction but there is belief. Since we already know that a belief is a lively idea whose force and vivacity is increased through repeated impressions, then we can understand that the inference from a relation of constant conjunction can have the force of “a certain truth” [T1.3.8.10/102].

The feeling I have of the mind’s “propensity, which custom produces, to pass from an object to the idea of its usual attendant” [T1.3.14.22/165] is the impression resulting from reflection on that emotion, from which the idea of a necessary connection is derived.

Hume summarizes his position as follows;

*that* the simple view of any two objects or actions, however related, can never give us any idea of power, or of a connexion betwixt them:

*that* this idea arises from the repetition of their union:

*that* the repetition neither discovers nor causes any thing in the objects, but has an influence only on the mind, by that customary transition it produces:

*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 [T1.3.14.24/166].

However we still attribute causality to objects such as the carom of billiard balls. The cue ball, by impacting the shot ball, caused the shot ball to move. Hume accounts for this by again appealing to the propensity of our mind. He states that "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" [T1.3.14.25/167]. For Hume, secondary qualities that are ideas in our minds such as sounds or colours, are attributed to objects external to us. As he remarks in the *Enquiry*, "all the sensible qualities of objects, such as hard, soft, hot, cold, white, black, &c. are merely secondary, and exist not in the objects themselves, but are perceptions of the mind" [E12.15/155]. This attribution to mind independent objects of secondary qualities is common in the Early Modern Period.<sup>58</sup>

So, Hume's answer to the second question is that the reason we believe there is a necessary connection between cause and effect is as a result of an impression of reflection. This impression of reflection is founded on custom which produces a propensity, a determination of the mind, for us to pass from an object (its cause) to its

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<sup>58</sup> (Noonan, 1999, p. 144) As Noonan notes, Hume position is that "we ascribe an external spatial location *between* the objects to the necessary connection we have an idea of, though in doing so, as in the case of tastes, we are ascribing a location to something which really exists nowhere."

usual attendant (an effect). This, according to Hume, is the essence of a necessity, an internal feeling of determined expectation.

#### Two definitions of Cause and Effect

Hume closes his discussion on the necessary connection between a cause and its effect by stating that, “’Tis now time to collect all the different parts of this reasoning, and by joining them together form an exact definition of the relation of cause and effect” [T1.3.14.19/169]. In fact Hume does not present one definition but two that, “are only different, by their presenting a different view of the same object, and making us consider it either as a *philosophical* or as a *natural* relation; either as a comparison of two ideas, or as an association betwixt them” [1.3.14.31/170].

Hume’s two definitions for cause are:

Definition 1: A cause is “An object precedent and contiguous to another, and where all the objects resembling the former are plac’d in like relations of precedency and contiguity to those objects, that resemble the latter” [T1.3.14.30/170].

Definition 2: “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” [T1.3.14.31/171].

In the *Treatise*, Hume describes the definitions falling into two categories of relation, when he states, “Thus tho’ causation be a *philosophical* relation, as implying contiguity, succession, and constant conjunction, yet ’tis only so far as it is a *natural*

relation, and produces an union among our ideas, that we are able to reason upon it, or draw any inference from it” [T1.3.6.16/95]. In my discussion of ideas I explain that philosophical relations compare ideas and in no way change or combine ideas to form more complex ideas. Natural relations are founded on the principles of association of where one idea is connected to another idea; such as when the mind can necessarily connect a cause with its effect, forming more complex ideas.

In the first definition, we see Hume comparing a cause with its effect, and as has already been noted there are two necessary qualities or conditions for a causal relation: contiguity in time and place, succession in time. In the first definition, Hume adds the condition of constant conjunction of a cause and its effect. When these conditions are enumerated, objectively, we can believe that there has been a causal relation. While the condition of a constant conjunction is not considered a necessary connection, (“when I consider the influence of this constant conjunction, I perceive, that such a relation can never be an object of reasoning, and can never operate upon the mind” [T1.3.14.31/171]), Hume retains it because when we experience a cause and effect we “always find that from the constant conjunction the objects acquire an union in the imagination” [T1.3.6.15/94]. So Hume presents, in the first definition, the necessary conditions for a causal relation, but it is still missing the idea of a necessary connection.

The second definition, similarly along with contiguity in time and space, and succession in time, includes the idea of a necessary connection. Here a cause is an idea that determines the mind, and “this determination of the mind forms the necessary connexion of these objects” [T1.3.14.29/170]. In this case, cause and effect are considered a natural relation, one in which ideas can connect to form more complex

ideas. To explain this Hume states, “after a frequent repetition, I find, that upon the appearance of one of the objects, the mind is *determin’d* by custom to consider its usual attendant, and to consider it in a stronger light upon account of its relation to the first object. ’Tis this impression, then, or *determination*, which affords me the idea of necessity” [T1.3.14.1/157]. Unlike the first definition, the second definition is subjective, since it is the subject that is making the “determination” through a moral (in the wide sense) account of the experience.

There has been considerable debate over the two definitions with some claiming that the definitions are quite different and hardly the same concept, while others argue that they are coextensive.<sup>59</sup> As Beauchamp and Rosenburg suggest, “The primary problem is that of determining which of these two apparently different definitions expresses Hume's theory of causation.”<sup>60</sup> For now, I shall present contemporary views that both attack Hume for offering non-coextensive definitions, and those who wish to rehabilitate Hume’s definitions by providing explanation of how to understand both definitions providing differing *definiens* for the same *definiendum*. Out of necessity, since the commentary on these definitions is extensive, the review of contemporary views will have to be a very small subset of what is available. I will first look at arguments that reinforce the dichotomy of the two definitions, and subsequently take a look at arguments that propose that the two definitions are coextensive.

The first reading as presented by Harold Noonan in *Hume on Knowledge* is that the two definitions are referring to two distinct concepts. The first definition addresses

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<sup>59</sup> Two propositions are *coextensive* just in case their predicates pick out the same sets of things.

<sup>60</sup> (Beauchamp, 1981, p. 7)

“what is going on in the world, independently of its effect on the observer.”<sup>61</sup> The second definition is more psychological and deals with “what goes on in the mind of the observer who is prompted to apply the concept of causation to the world.”<sup>62</sup> David Shanks in his “Hume on the Perception of Causality”<sup>63</sup> argues that it is obvious that one definition deals with the physical realm, while the other an inner sensation or feeling where the idea of one determines the mind to move from one idea to its attendant effect. As Shanks notes, one definition provides an external reading suggesting a “physical property of one event causing another, such as one ball colliding with and causing the movement of a second ball.”<sup>64</sup> The second definition “describes the attribution by an organism of an effect to a cause.”<sup>65</sup> What this means is that while Definition 1 is describing a relation between two objects of a constant conjunction; Definition 2 is presenting how an individual observer would feel a propensity to move from a causal impression to the idea of an effect.

J.A. Robinson in his “Hume's Two Definitions of "Cause"” argues that Hume was propounding an “empirical psychology”<sup>66</sup> while at the same time providing a “philosophical analysis”<sup>67</sup> especially of causation. According to Robinson, the two definitions differ “not only in meaning, but also in that the class of cases [tokens of a kind] to which each applies evidently contains members which are not the class of cases determined by the other.”<sup>68</sup>

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<sup>61</sup> (Noonan, 1999, p. 150)

<sup>62</sup> (Noonan, 1999, p. 150)

<sup>63</sup> (Shanks, 1985)

<sup>64</sup> (Shanks, 1985, p. 95)

<sup>65</sup> (Shanks, 1985, p. 95)

<sup>66</sup> (Robinson, 1962, p. 162)

<sup>67</sup> (Robinson, 1962, p. 162)

<sup>68</sup> (Robinson, 1962, p. 162)

Definition 1 describes a type (kind) of cause whose tokens comprise a set of objects that have a like relationship (i.e. precedency and contiguity) to similar tokens, which is nothing more than “an instance of a general uniformity of concomitance between two classes of particular occurrences” and these occurrences are “quite independent of any associations of ideas which may or may not exist in human minds.”<sup>69</sup> Such uniformity of concomitance simply means that each set of events (the cause as well as the effect) are existing together and are united to each other. There is no hint of necessity between these sets of tokens. The lack of co-extensiveness is due to Definition 1 being predicated on observed constant conjunctions, while Definition 2 is predicated on passion. As Robinson notes, Hume agrees “that the operations of nature are independent of our thought and reasoning, I allow it; and accordingly have observ’d, that objects bear to each other the relations of contiguity and succession; that like objects may be observ’d in several instances to have like relations; and that all this is independent of, and antecedent to the operations of the understanding” [T1.3.14.27/168]. Accordingly, Robinson affords this the status of a definition. However, Robinson argues that Definition 2 “is now seen not to be a definition at all, but simply a restatement of the proposition that the (already defined) cause-effect relation is a natural relation, in a somewhat elliptical formulation.”<sup>70</sup> Robinson also comments that Hume made a mistake by offering the second definition as a definition at all. However, Hume believes that “it is a philosophical error to include this element (necessity) in the analysis of the causal relation”<sup>71</sup> because it is a natural relation and we cannot “ascribe a power or necessary

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<sup>69</sup> (Robinson, 1962, p. 167)

<sup>70</sup> (Robinson, 1962, p. 167)

<sup>71</sup> (Robinson, 1962, p. 167)

connexion to these objects; this is what we can never observe in them, but must draw the idea of it from what we feel internally in contemplating them” [T1.3.14.67/169].

Hume includes two relations in Definition 1 that he identified as being necessary for a causal occurrence to take place; contiguity in time and place and priority in time. This is what occurs in any causal event. However, as Hume has already noted, “An object may be contiguous and prior to another, without being consider’d as its cause. There is a *NECESSARY CONNEXION* to be taken into consideration; and that relation is of much greater importance, than any of the other two above-mention’d” [T1.3.2.11/77]. There is no doubt that contiguity and succession in time are necessary for a cause to have an effect, however, they are not sufficient. What is also required is a necessary connection between the causal event and its effect; all three conditions have to be met. This why Definition 1 is augmented by Definition 2. We can have impressions of event contiguity and temporal order, but not of necessity. If we understand the first definition to be a comparison between two events, and that such comparison of objects are ones of a philosophical relation, then the absence of necessity from this definition is notable.

As Robinson observes, “Realising, therefore, that definition (1), omitting the element of inevitability or necessity, will shock those who believe, mistakenly, that it should be included.”<sup>72</sup> By omitting any impression of necessity from Definition 1, Hume was concerned that his definition may “be esteem’d defective’ [T1.3.14.31/170]. The reason for this is that people mistakenly include the notion of necessity in causal relations because “the mind has a great propensity to spread itself on external objects, and to

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<sup>72</sup> (Robinson, 1962, p. 167)

conjoin with them any internal impressions” [T1.3.14.24/167]. If necessity is not included, then the Definition 1 could indeed “be esteem’d defective” [T1.3.14.24/167]. To remedy this, “Hume offers in [Definition] (2) a "compromise" characterization of the cause-effect relation.”<sup>73</sup> So, Robinson’s position is that Definition 1 constitutes a philosophical relation that properly defines causation, but Definition 2 is a way of psychologically accounting for why we attribute a necessary connection between a cause and its effect, and not a definition for causation.

Don Garrett in his “The Representation of Causation and Hume's Two Definitions of ‘Cause’” presents a way of interpreting the two definitions through what he refers to as “revival sets.” Garrett’s argument is ultimately that Definition 1 and Definition 2 are coextensive. The argument depends on the concept of ‘revival sets’. In Section 1 on Ideas, I present Hume’s theory of abstract ideas from which Garrett draws for his revival sets.

Garrett argues that there must be a revival set which has the general abstract term ‘cause.’ Upon hearing the term ‘cause,’ this revives the custom of calling to mind ideas of a particular relation of a cause with its effect. This relation “which-as we have seen- Hume characterizes at the outset as involving the three relations of priority, contiguity, and necessary connection [T1.3.2.9-10/76-77].”<sup>74</sup> The relation of necessary connection is an issue since we have “both an impression and an idea of "necessary connexion" as an internal feeling of "transition" or "determination.”<sup>75</sup> We do not have a sensory impression

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<sup>73</sup> (Robinson, 1962, p. 167)

<sup>74</sup> (Garrett D. , 1993, p. 176)

<sup>75</sup> (Garrett D. , 1993, p. 178)

of a necessary connection between ideas of cause and effect pairs. However, when we revive the idea of a cause and effect pair “each cause-and-effect pair whose idea we become disposed to call up is such that all objects *similar to the first* have been followed by objects *similar to the second*, which results in a determination of the mind to pass *from the idea of the one to the idea of the other.*”<sup>76</sup> This means we have two avenues to include the complex ideas of cause and effect pairs in the revival set. The first is by specifying a constant conjunction or “*pairs of objects* whose ideas become included in the revival set”<sup>77</sup> which produces “the determination or transition of psychological association and inference, without specifying the psychological process to which it gives rise.”<sup>78</sup> The second is by identifying a cause and effect “in terms of the association and inference, without specifying the features of objects that in fact give rise to it.”<sup>79</sup>

By populating a revival set in this manner, both of Hume’s definitions for cause are included. The first definition identifies the objects that are related without specifying the resulting psychological effect. The second definition identifies the psychological effect of a causal relation without identifying features of the objects that produced the internal propensity. Since both are members of the same set, they by definition have the same extension, and therefore, following Garrett’s argument, both definitions are coextensive.

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<sup>76</sup> (Garrett D. , 1993, p. 178)

<sup>77</sup> (Garrett D. , 1993, p. 178)

<sup>78</sup> (Garrett D. , 1993, p. 178)

<sup>79</sup> (Garrett D. , 1993, p. 178)

## Concluding Remarks

Hume asks two questions: first why we think that for every event there is a cause, and second, why we believe and infer that there is a connection between two conjoined events. In response to the first question he argues that there is no reason to believe that it is necessarily true that for something to be there must be a cause. For the second question, Hume offers an explanation for a connection between an effect and its cause; that after numerous constant conjunctions between two events that there is a determination in the mind to move from an impression of an effect (its object) to an idea of its cause. This determination of the mind, Hume argues, is what gives us the impression of a necessary connection. The answer to the second question leads to Hume's two definitions of a cause; the first states that for a cause to be experienced, there must be succession in time and contiguity in time and space, and that the first event is in a like relation to the second event.<sup>80</sup> The second definition is essentially a psychological explanation why we believe there is a necessary connection between two events which permits us to infer that one is the cause of the other.

Hume has asked the right questions, in my opinion. The first one is asking whether or not there is a general concept of a cause, while the second pursues particular instances of apparent causal relationships. However, his denial of the first question compromises the answer to the second question. For there to be a psychological impression of a causal relation, there must be some concept of a cause and effect

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<sup>80</sup> Hume states this as "where all the objects resembling the former are plac'd in like relations of precedency and contiguity to those objects, that resemble the latter" which means that there is a consequential relation between the two "objects" [T1.3.14.30/170]. By constantly conjoining them in this manner, Hume presumably avoids a *post hoc* fallacy.

relationship. If it is not the case, the psychological belief has no substance. The fact that causality, according to Hume, has no basis in fact; that it cannot be proved through intuition or demonstration, removes any foundational belief for supporting his definitions for cause.

The second reason I find Hume's argument difficult to accept is that necessity must be independent of any emotion or passion. A necessary connection, being a propensity of the mind, is a contradiction. For something to be necessary,<sup>81</sup> it cannot be otherwise. Urges, propensities, or determinations of the mind are all emotional impressions, which Hume argues, gives his concept of necessary connection credence. These are all subjective perceptions, which by their very nature, can change. As has already been noted, it is conceivable that the course of nature can change, and emotions are subject to the nature of our passions. I can agree that there is a connection where we can infer after numerous constant conjunctions that the mind is moved from its object to its attendant. However, it is not all necessary. It is conceivable that the propensity of the mind can change. So, while I agree that the connection between a cause and its effect must be necessary, I do not accept Hume's subjective definition as necessary.

Causation, either as a concept in our minds, or as a universal fact of nature, is part of the furniture of the world, something that Hume does not accept. My reasons are as follows: We constantly make judgements that involve causal relations. Determining how to clarify what a cause is, is what seems to be the issue. I accept Hume's conditions that a cause involves two events where one is prior to the other, that they are contiguous, and

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<sup>81</sup> "A necessary truth is one that cannot be otherwise." "A proposition is necessary if it could not be false." (Blackburn, 1994, p. 257)

there must be an unambiguous and necessary connection between the two events. When something happens, we instinctively seek the reason why it occurred. And when we discover how the events are connected, we ascribe one to a cause and the other, its effect. This is not some propensity of the mind to believe an inference, but the discovery of a fact of nature. Since it is a discovery, then it must have existed prior to being discovered. That we innately possess the structure in the way we think, to effect such a discovery means that we possess an *a priori* condition for seeking out and discovering causal relationships.

It is this *a priori* condition of the structure of our thinking that Hume either could not accept, or simply denied because of his adherence to the copy principle, which makes his arguments against the Causal Maxim weak. Responding to this, Immanuel Kant, developed a very elaborate answer to Hume's scepticism. This answer took the form of the *Critique of Pure Reason* which I present in the next chapter. Kant does not respond from a completely rationalist perspective, but of necessity includes empirical considerations to present a metaphysic of experience. His Critical Philosophy avoids the scepticism in which Hume unfortunately and unavoidably falls.

## Chapter 2 Kant's on Knowledge

### Introduction

In this chapter I present Kant's theory of knowledge,<sup>82</sup> the objectivity of experience, as presented in Kant's *Critique of Pure Reason*.<sup>83</sup> I explain how Kant's epistemology supports subjective sensible appearances becoming objectively validated by reason's use of intellectual faculties of the mind (understanding, imagination and consciousness). I contrast Kant's thesis of knowledge's objectivity with the subjective nature of Hume's positivist conception of idea acquisition from impressions of "sensation and reflexion" [T1.1.2.1/8]. Kant wanted to provide a justification, through deduction,<sup>84</sup> the application of *a priori* concepts of the understanding to sensory appearances so that experience can be possible. This is the essence of what Kant referred to as synthetic *a priori* judgement discussed below. If synthetic *a priori* judgements are possible, then Kant feels he has salvaged metaphysics in a somewhat restricted form as the metaphysics of experience,<sup>85</sup> and has justified the possibility of knowledge.

I draw a distinction between Kant's critical defense of reason's contribution to thought against Hume's denial of reason's involvement in experience. In Hume's case, the only thing of which we can be aware is grounded on impressions of sensation and

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<sup>82</sup> Kant states that "To know an object I must be able to prove its possibility, either from its actuality as attested by experience, or *a priori* by means of reason" [Bxxvii]. This means that knowledge is an idea, or concept that has become a universal and certain object of experience. One of the purposes of the *Critique* is to explain how this is possible.

<sup>83</sup> "'Critique' does not for Kant imply a negative evaluation of its object: it means simply a critical enquiry, the results of which may equally be positive (Bxxv-xxvi). 'Pure', a technical term of Kant's, means not containing anything derived from sense experience. 'Reason' is also used here in a technical sense, to refer to conceptual elements in cognition which we bring to experience and which are not derived from it - in Kant's language, 'a priori' conceptual elements." (Gardner, 1999, p. 23)

<sup>84</sup> The term 'deduction' is here used in the Kantian context as a justification for the right to apply metaphysical rules and concepts in thought so that knowledge can be possible.

<sup>85</sup> (Gardner, 1999, p. 24) Metaphysics can only be applied to experience, to sensory intuition. Metaphysics was discredited by Hume and others since it speculated on objects that were not found in experience such as God, freedom and immortality.

reflection (as I have previously discussed in Chapter 1 Section 1), from which faint ideas or concepts are copied. For Kant, this sensory receptivity, and reflective feelings of habit and custom cannot afford us knowledge. For Kant, it is only half the picture. We also need the contribution of our intellect, what Kant refers to as the faculty of thought or the *a priori* concepts of the understanding.<sup>86</sup> Without the contribution of the understanding, there can be no possibility of knowledge.

Hume, in my opinion, never really points to the possibility of knowledge as an idea that is certain and universal. In the *Treatise*, Hume explains, “W[herever] ideas are adequate representations of objects ... this we may in general observe to be the foundation of all human knowledge” [T1.2.2.1/30]. If an idea, which is a copy of an impression, is an “adequate” representation of the object that caused the impression, then this is what knowledge is built on. However, if there is no idea of an object such as the necessary connection between a cause and its effect [E4.6], which I have shown to be Hume’s position, then we can have no knowledge of causation. Kant’s position, conversely, is that “when the, holding of a thing to be true is sufficient both subjectively and objectively, it is knowledge. The subjective sufficiency is termed *conviction* [belief] (for myself), the objective sufficiency [justification] is termed *certainty* (for everyone)” [A822/B850]. Kant’s agenda is to establish the conditions for the possibility of there being an object that is intersubjective universal, i.e. knowledge of an idea’s or concept’s objectivity. Hume provided the subjective conviction which, by being subjective,

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<sup>86</sup> Understanding for Kant is the faculty of thought and judgement and the seat of pure concept such as cause [Axvii] “The faculty ..., which enables us to think the object of sensible intuition is the understanding” [A51/B75].

amounts to, at best, a belief, and not something that could be considered knowledge.<sup>87</sup>

The empirical stance is that there can be no *a priori* ideas since such ideas, by definition, are not found in experience. Kant goes one step further and argues for justification for the possibility of knowledge by applying *a priori* concepts to sensory intuitions.

Before Kant, knowledge took two forms (using Kant's terminology) analytic *a priori* and synthetic *a posteriori*. This is what Hume referred to respectively as relations of ideas and matters of fact, sometimes identified as Hume's Fork.<sup>88</sup> According to Kant, there is a third epistemological form that Kant identifies as synthetic *a priori* propositions or judgements. Kant proposed that if Hume understood and accepted<sup>89</sup> that there was such a form as synthetic *a priori* propositions, then he would not have had the difficulty he did with metaphysical concepts such as cause. As Gardener notes, "Hume's critique of causation . . . , is based on this division: there is, he argues, no room for knowledge of causation construed as necessitation because causal relations are not relations of ideas (the contrary of any causal judgement is always conceivable) and yet cannot be derived from experience (there is no impression of necessity)."<sup>90</sup> As I shall argue, Kant's position is that the concept of causality is an immanent structure or concept of our understanding. As Kant explains, "if we have a proposition which in being thought is thought as

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<sup>87</sup> Kant had three degrees for holding something to be true: "opining, believing and knowing [A822/B850]. An opinion is neither subjectively nor objectively sufficient, while belief is subjectively but not objectively sufficient, but if "the holding of a thing to be true is sufficient both subjectively and objectively, it is knowledge" [A822/B850].

<sup>88</sup> (Allison H. E., 2008(1), p. 351) In Note 1 to Chapter 3, Allison states, "I believe that the expression [Hume's Fork] was coined by Anthony Flew, *Hume's Philosophy of Belief. A study of his First Inquiry* (New York: Humanities Press, 1961), 53."

<sup>89</sup> Kant notes that Hume did not accept synthetic *a priori* propositions when he wrote, "such pure synthetic cognitions *a priori* were not actual, altogether impossible; which is what actually befell *David Hume*" [4:277].

<sup>90</sup> (Gardner, 1999, p. 52)

necessary, it is an *a priori* judgment” [B3]. *A priori* in this context is “knowledge absolutely independent of all experience” [B2], which has necessity. This is contrasted with “empirical knowledge, which is knowledge possible only *a posteriori*, that is, through experience” [B3], which is contingent. “Necessity and strict universality are thus sure criteria of *a priori* knowledge, and are inseparable from one another” [B4]. In other words, if “the proposition, 'every alteration has its cause', [is] an *a priori* proposition” [B3], then the concept of a cause is necessary. This is the difference between Kant and Hume with respect to causality; the former sees it as *a priori* concept, while the latter argues against being able to know the necessity of causality except as a subjective determination of the mind or subjective feeling.

This chapter is divided into three sections. The first section I present my understanding of the nature of synthetic *a priori* propositions. The next section will provide a brief overview of Kant’s theory of mind, his transcendental idealism, and how it contrasts with Hume’s empiricism. The last section is a discussion of the epistemological divide between relations of ideas and matters of fact, and how Kant augments this divide by providing a third epistemic option.

### Section 1 How are Synthetic *A Priori* Judgements Possible

For Kant, the central issue in metaphysics, as well as natural science and mathematics is “the general problem of transcendental philosophy: *how are synthetic a priori judgments possible*” [A46/B63]?

While this is the subject matter of the *Critique*, for my purposes, it identifies the difference between Hume arguing against the *a priori* concept of cause, and Kant

providing an explanation how the concept of cause is necessary for knowledge to be possible. Following Kant, I present an explanation of the terms *a priori*, *a posteriori*, analytic and synthetic. I start with explaining the terminology and end with Kant's addition to Hume's Fork.

*A priori* concepts, for Kant, are completely independent of any empirical sensation, that is, "knowledge absolutely independent of all experience" [B3]. As Kant writes, "Such universal modes of knowledge [cognition],<sup>91</sup> which at the same time possess the character of inner necessity, must in themselves, independently of experience, be clear and certain. They are therefore entitled knowledge *a priori* whereas, on the other hand, that which is borrowed solely from experience is, as we say, known only *a posteriori*, or empirically" [A2]. *A priori* concepts while considered by Kant as necessary, *a posteriori* concepts, which Kant also terms 'empirical', are contingent. So, Kant uses *a priori*, and *a posteriori* is terminology to distinguish concepts and ideas that are respectively found in the intellect and sensation.

The distinction between analytic and synthetic is "a contrast originally introduced by Kant between types of propositions."<sup>92</sup> For Kant, a proposition performs the same function as a judgement. If we study the proposition "A is a B", as Kant explains, "Either the predicate B belongs to the subject A, as something which is (covertly) contained in

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<sup>91</sup> As Kemp Smith footnotes, "As the term 'knowledge' cannot be used in the plural, I have usually translated *Erkenntnisse* 'modes of knowledge.' Gary Hatfield, on the other hand, "follow[s] the recent tendency of translating *Erkenntnis* as "cognition" rather than as "knowledge." "Cognition" accords better with the fact that Kant is most often discussing *Erkenntnis* as a process or as a cognitive achievement of a mind" [*Prolegomena*, "Notes on Translation", pp xlii].

<sup>92</sup> (Blackburn, 1994, p. 15)

this concept A; or B lies outside the concept A, although it does indeed stand in connection with it” [A6/B10].

In an analytic proposition, the predicate is ‘contained’ in the subject. Whenever we analyze a concept, we deconstruct a thought into its elements. These elements, since they are deduced from the original concept, being abstracted from the original concept, are contained within it. Kant’s example of an analytic proposition is “All bodies are extended” [A6/B10]. For Kant the definition of a body (any independent object) includes extension.<sup>93</sup> Since a body occupies space then the concept of extension “belongs to the subject.” A more familiar example is “All spinsters are unmarried women.” A spinster by definition is an unmarried woman therefore the concept of the predicate is contained within the concept of the subject.

In the case of a synthetic proposition, the predicate while outside the concept of the subject, augments our understanding of the subject. For Kant, synthesis means “the act of putting different representations together, and of grasping what is manifold in them in one [act of] knowledge” [A77/B103]. Hume’s Association of Ideas, discussed earlier, can also be considered synthetic thinking. In a synthetic proposition the predicate is not contained in the subject. The predicate is, however, connected to the subject, and adds to our understanding of the subject and “may therefore be entitled ampliative” [A7/B11]. To use Kant’s example, “All bodies are heavy” [A7/B11], the concept of ‘heavy’ is not contained in the subject, but adds to our understanding of the concept of ‘body.’ A more

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<sup>93</sup> Extension is used here to mean “that essential property of matter by which it occupies space,” (Calderwood, 1894, p. 147) not to be confused with “the class of objects that it describes.” (Blackburn, 1994, p. 132)

current example would be “the ball is red.” While the concept of ‘red’ is not contained in the notion of a ‘ball,’ it is connected to the subject since it expands our understanding of the subject.

For Kant, there are three forms that a judgement can take, depending on the source of concepts (*a priori*, or, *a posteriori*) and the mode of making the judgement (analytically, or, synthetically). The first I consider is analytic *a priori* judgements. The proposition “All bachelors are unmarried men” is such a judgement since we can know that this is the case without resorting to experience to enumerate all bachelors to see if they are unmarried. It is true merely by the meaning of the terms involved, and as Hume explains, we know it is true by “the mere operation of thought, without dependence on what is any where existent in the universe” [E4.1/26].

Similarly, synthetic *a posteriori* judgements can only be known empirically. As Kant explains, “Experience is thus the X which lies outside the concept A, and on which rests the possibility of the synthesis of the predicate ... (B) with the concept (A)” [A8]. The synthesis occurs when two ideas are combined into one thought. In the case of *a posteriori* concepts, the ideas are found in sensuous perception. To use Hume’s example, “When we think of a golden mountain, we only join two consistent ideas, *gold*, and *mountain*, with which we were formerly acquainted” [E2.5/20]. So the colour ‘gold’ is synthesized, that is, combined with the concept ‘mountain’ due to a third element that does the synthesizing, which in this case is experience. The only way I can think “The mountain is gold” is by having the impression of “gold’ and of a “mountain.”

As for analytic *a posteriori* judgements, as far as Kant is concerned, this is quite impossible since where in experience would we be able to discern an analytic relationship, one dependent only on the meaning of the terms?<sup>94</sup>

The third form of judgement are synthetic *a priori* propositions. Kant's transcendental philosophy depends on being able to answer the question, "How are *a priori* synthetic judgments possible" [B19]? Here we see his bifurcation of the sources for possible knowledge into sensation (synthetic proposition) and intellect (*a priori* concepts). Both are required for knowledge to be possible. The example that Kant provides for a synthetic *a priori* proposition is, "Everything which happens has its cause" [A9/B13], which is also the maxim of causation that Hume rejects.<sup>95</sup> In this example, there is a synthetic relationship between the subject 'everything which happens' and the concept of a 'cause,' since the predicate is not contained in its subject. However, how is it possible for me "to apprehend that the concept of cause, though not contained in it [in the subject], yet belongs, and indeed necessarily belongs, to it" [A9/B13]? Since the proposition is necessary, I cannot look to experience to find the third element, the "=X" [A9/B13] that makes the synthesis possible "because the suggested principle has connected the second representation with the first, not only with greater universality, but also with the character of necessity, and therefore completely *a priori* and on the basis of mere concepts" [A9/B13]. As we have seen, *a priori* concepts are such that they are not derived empirically, that is, they are not abstracted from sensory experience.

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<sup>94</sup> *Pace* Hilary Putnam's thought experiment of Water and H<sub>2</sub>O in possible worlds.

<sup>95</sup> As Hume wrote "'Tis a general maxim in philosophy, that *whatever begins to exist, must have a cause of existence*" [T1.3.3.1/79], which I have previously discussed and shall return to later.

That synthetic *a priori* propositions are possible is evident by the fact that we can have knowledge of causal relationships. Since a relation between a cause and its effect is a synthetic *a priori* proposition, what are the conditions for this proposition to be possible? The answer to this question is a three stage process. The first is to identify the *a priori* concepts that will provide the condition for the =X in the synthesis of a predicate with its subjects. Next is a justification for taking an empirical perception such as “something that happens” and synthesizing it with an *a priori* concept so that knowledge of the perception is possible. And lastly, explaining how the connection between an empirical object can be synthesized with an *a priori* concept so we may have the possibility of knowledge. The task of the Transcendental Deduction of the first *Critique* argues for the justification of synthetic *a priori* judgements; the details of which are beyond the scope of this paper. My purpose here is to present the thesis in outline, and to highlight that is the essential difference between Kant’s and Hume’s epistemologies.

## Section 2 Transcendental Idealism

No discussion of Kant’s theory of mind can ignore his Transcendental Idealism. When Kant introduces the term he writes, “I entitle *transcendental* all knowledge which is occupied not so much with objects as with the mode of our knowledge of objects in so far as this mode of knowledge is to be possible *a priori*” [A11-12/B25]. The term ‘transcendental’ is ubiquitous in Kant’s theories of knowledge. Because Kant’s work is not one of empirical psychology, but a thesis of what is necessary for knowledge to be possible, then ‘Transcendental’ constitutes the *a priori* (non-empirical) form and function

of thought.<sup>96</sup> Transcendental deals strictly with the *pure*<sup>97</sup> operations of the mind that “concern the *a priori* possibility of knowledge or its employment [A56/B81]. Paul Guyer describes Kant referring to anything that is transcendental as connoting “the conditions of the possibility of synthetic *a priori* cognition.”<sup>98</sup>

The term transcendental refers to the way the mind thinks; how it perceives objects and the way it validates these perceptions to be possible knowledge. Transcendental enquiry involves *a priori* operations of the mind, a philosophical enquiry into the mind’s cognitive faculty. Hume, by contrast, in the first book of the *Treatise*, was propounding a more positivist approach to human nature; that all that we can conceive, is what we perceive. Hume’s work is more of an empirical psychology. Kant is more concerned with determining how the mind uses sensory information so that knowledge can be possible, and that such knowledge can be universal and objective. So “transcendental” does not refer to an empirical theory of how the mind cognizes, but how we can possibly know something and how it receives an *a priori* warrant to do so.<sup>99</sup> Transcendental knowledge therefore “is at one removed from objects, and concerns only what makes objects, and *a priori* knowledge of them possible.”<sup>100</sup>

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<sup>96</sup> The term “transcendental” is not to be confused with the term “transcendent”. Transcendent cognitions address subjects that transcend experience such as unicorns, God, angels and such like entities.

<sup>97</sup> As Kant explains, “*A priori* modes of knowledge are entitled pure when there is no admixture of anything empirical” [B3]. If I make an *a priori* judgement such as “every alteration has a cause” since I am using empirical concepts such as ‘alteration’ the proposition is not *pure*. As Kant notes, “I term all representations *pure* (in the transcendental sense) in which there is nothing that belongs to sensation” [A20/B34].

<sup>98</sup> (Guyer, Kant, 2006, p. 129)

<sup>99</sup> (Kitcher, 1980) For a discussion on *a priori* knowledge.

<sup>100</sup> (Gardner, 1999, p. 46)

It would not be entirely inconsistent to consider Hume's project as transcendental, if we understand transcendental as concerned with how our mind functions. His theory of perception, his copy principle and the principle of association of ideas characterize how the mind operates. The difference is that Hume sees his project as an experiment of observing and determining human nature, rather than examining any unobservable *a priori* aspects of the intellect. In other words, it is Hume understanding of how the mind processes sensory information. What is distinct between Kant and Hume is whether appearances of objects that we perceive conform to the structures of our mind,<sup>101</sup> or that our minds have an immanent capacity to represent objects as they are independent of our minds, (i.e. as objects). The former, as argued by Kant, is transcendently ideal, while the second position is transcendently real. Because of this, Kant considers Hume to be a Transcendental Realist.<sup>102</sup>

Idealism "is not ... to be understood as applying to those who deny the existence of external objects of the senses, but only to those who do not admit that their existence is known through immediate perception" [A368]. Another definition, found in an old *Dictionary of Philosophy* (1894), which seems to support Kant is "[Idealism] makes our

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<sup>101</sup> Having objects of perception conform to the way we think rather than having our intuition conform to the object perceived is what has been referred to as Kant's Copernican turn. The former is idealism while the latter is realism. Just as Copernicus changed the reference for planetary rotation from geocentric to heliocentric perspective, Kant proposes that "we suppose that objects must conform to our knowledge" because in this way "it should be possible to have knowledge of objects *a priori* [Bxvi].

<sup>102</sup> See (Allison H. , 2004, pp. 25-27) for discussion as to why both Berkeley as well as Hume are to be considered transcendental realists. As Allison summarizes, "both Berkeley and Hume may be said to view appearances *as if* they are things in themselves, because they deny any *a priori* contribution of sensibility to the cognition of these appearances" [pp 27]. As Gardener notes, "to conceive the objects that we cognise as independent from us – [is] the presupposition of 'transcendental realism', in Kant's terminology." (Gardner, 1999, pp. 37-38) Kant's position regarding transcendental realism is expressed as, "The transcendental realist thus interprets outer appearances (their reality being taken as granted) as things-in-themselves, which exist independently of us and of our sensibility, and which are therefore outside us" [A369].

knowledge [of things in themselves] indirect by restricting knowledge to ideas. ...

Idealism treats the so called *external* as the objectifying of subjective conditions.”<sup>103</sup>

Kant’s position is that we can only experience the sensations of our intuition, that is, the raw unprocessed data from our senses, which combine to form what Kant refers to as *appearances*. We cannot be cognizant of an object’s “reality outside us” [A378], or as Kant writes, “be sentient [of what is] outside ourselves” [A378]. Kant refers to these as *things-in-themselves* (*Ding an sich*).

Kant explains that “there are two stems of human knowledge, namely, sensibility and understanding, which perhaps spring from a common, but to us unknown, root. Through the former, objects are given to us; through the latter, they are thought” [A15/B29]. Hume’s theory of ideas only identified sensory impressions as the exclusive source of our ideas. Kant adds the spontaneity of the mind or the understanding to provide objectivity to our experiences. As Kant explains, “Objects are given to us by means of *sensibility*, and it alone yields us intuitions,<sup>104</sup> they are *thought* through the understanding, and from the understanding arise *concepts*” [A19/B33]. In order for there to be the possibility of knowledge both “stems” are required. As Kant notes, “Thoughts without content are empty, intuitions without concepts are blind. It is, therefore, just as necessary to make our concepts sensible, that is, to add the object to them in intuition, as to make our intuitions intelligible, that is, to bring them under concepts” [A51/B75]. For us to be able to know anything at all, we first must have some *content* which originates in our senses. However, for this *content* to be meaningful, we spontaneously apply these

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<sup>103</sup> (Calderwood, 1894, p. 182)

<sup>104</sup> Intuition is the receptive faculty of the mind where we “see” our representations.

sensory data to our intellect where we become aware, and understand what we are perceiving, so that the appearances are no longer *empty*. And since concepts have appearances, they are no longer *blind*.

Looking at knowledge from a Kantian perspective, knowledge is the synthesis, or the combining, of a (subjective) appearance (a representation of the intuition, a perception) with the *a priori* structures (pure concepts) of the understanding (the faculty of reason, judgement). This process of synthesizing representations of the sensible intuition with *a priori* concepts of the understanding is called thinking and is what makes knowledge possible. Using current epistemological terminology, knowledge is defined as something that can be justified to be true by a reliable belief forming process.<sup>105</sup> From a Kantian perspective, for knowledge to be possible the following can be understood to take place: a belief is a representation of an appearance, which has subjective validity; this belief is then justified by predicating (synthesizing) this representation with the pure concepts of the understanding (thinking). The pure concepts of the understanding, which possess objective validity,<sup>106</sup> when synthesized with representation of sensible intuition (a reliable belief form process), are what validate or make it possible for appearances to be objective. When a representation of an appearance, is judged to be objective (true,) <sup>107</sup> it

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<sup>105</sup> *pace* Gettier

<sup>106</sup> Objective validity, for Kant, means that which “can furnish conditions of the possibility of all knowledge of objects” [A89-90/B122]. The pure concepts understanding, (the categories) supply the *a priori* conditions for the possibility of knowledge. The pure concept of cause, understood as that which “makes strict demand that something, A, should be such that something else, B, follows from it *necessarily and in accordance with an absolutely universal rule* [A91/B124] is one of twelve pure concepts of the understanding. These *a priori* conditions are what validate subjective appearances of the intuition as possible objects of knowledge (experience).

<sup>107</sup> For Kant, “When the holding of a thing to be true is sufficient both subjectively and objectively, it is *knowledge*. The subjective sufficiency is termed *conviction* (for myself), the objective sufficiency is termed *certainty* (for everyone)” [A822/B850].

therefore, becomes an object of experience. It is this reasoning that justifies the possibility of knowledge. It is this additional processing, using *a priori* rules or concepts of the understanding (such as cause), which is missing from Hume's epistemology. Kant presents a very extensive argument for this thesis in the first *Critique*, which is beyond the scope of this paper.

Kant argues that *a priori* concepts are immanent structures in our understanding. He provides a justification<sup>108</sup> for pure concepts of the understanding as functions used in judgement or thought.<sup>109</sup> “[All *a priori* concepts] must be recognised as *a priori* conditions of the possibility of experience, alike of the intuition which is to be met with in it and of the thought” [A94/B126]. The significance is that these are *a priori* concepts, concepts that are not found in, or abstracted from experience, and are what are necessary for making experience possible. This is what Hume could not accept. For Hume, if we are to have any concept, any idea, we must first be able to experience it as a matter of fact. The facts as they are presented to our minds through impressions result in our having ideas. However, *a priori* concepts such as cause, are not evident through observation, and so, for Hume, cannot be considered as contributing to experience.

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<sup>108</sup> Kant uses the term “deduction” for providing a justification. The presence of the pure concepts of the understanding, (also known as the Categories) are presented in the Chapter of the *Critique* titled: “The Clue to the Discovery of all Pure Concepts of the Understanding” what Kant refers to as the ‘Metaphysical Deduction’”. It is in this chapter that Kant deduces or justifies the presence of the Categories in our understanding.

<sup>109</sup> For Kant, judgement is a proposition that is thought.

### Section 3 A Third Tine for Hume's Fork

The last item I wish to present is another application of how impressions and ideas are employed. What Allison has entitled “Hume’s Epistemological Divide,”<sup>110</sup> has elsewhere become known as “Hume’s Fork.” The *Enquiry* presents the clearest delineation of Hume’s Fork as the division of “[a]ll the objects of human reason or enquiry” into two kinds: “*Relations of Ideas*, and *Matters of Fact*” [E4.1/25]. Relations of ideas are referred to as an “affirmation, which is either intuitively or demonstratively certain” [E4.1/25]. Matters of fact are propositions, which unlike relations of ideas, cannot be certain since the “contrary of every matter of fact is still possible; because it can never imply a contradiction” [E4.1/25]. This is relevant because Hume argues that causality cannot be proved through intuition and demonstration, nor discovered in impressions of matters of fact.

As Allison notes, this distinction between relations of ideas and matters of fact, “seems to correspond fairly closely, to the traditional distinction between necessary and contingent truths ... it also seems to map smoothly onto the familiar distinction between *a priori* and *a posteriori* knowledge ... at least within the positivist tradition.”<sup>111</sup> This distinction is significant when Hume examines elements of causation; for example when he argues that the idea of a necessary connection required for causality cannot be established by intuition or demonstration, and that “the knowledge of this relation [cause

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<sup>110</sup> (Allison H. E., 2008(2), p. 63)

<sup>111</sup> (Allison H. E., 2008(2), p. 64)

and effect] is not, in any instance, attained by reasonings *a priori*; but arises entirely from experience” [E4.1/6].

Hume’s Fork identifies two forms of propositions described by Kant as analytic *a priori* propositions which correspond to relations of ideas, and synthetic *a posteriori* propositions, which correspond to matters of fact. My proposition is that Kant adds a third tine to Hume’s Fork, namely: synthetic *a priori* propositions. The dichotomy of Hume’s Fork is transformed under Kant into a trichotomy.<sup>112</sup> Hume did not include this form of judgement in his epistemology, and it is because of this, and its consequences that “awakened” Kant, which I discuss next.

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<sup>112</sup> (Korner, 1955, p. 18)

## Chapter 3 Kant's Understanding of Hume's Problem

### Introduction

In this Chapter, I interpret Kant's understanding of Hume's analysis of the idea of the necessary connection between cause and effect. While Hume argued in his *Treatise of Human Nature* for a subjective concept of the necessary connection between cause and effect, since it is not found in experience, Kant argues in his *Critique of Pure Reason* that the concept of cause is an *a priori* condition of thought that is necessary for the possibility of experience.<sup>113</sup> The difference, I argue, is that Hume saw sensory experience as the sole source of ideas,<sup>114</sup> while Kant, taking a further step, united ideas or appearances of sensory intuition with intellectual reasoning so that experience could be possible. As I have previously explained, reason as well as sensible experience failed to show Hume how it was possible for there to be an idea of a cause necessarily connected to an effect. Kant found this scepticism of causal efficacy unacceptable. As Kant notes in his *Prolegomena*, "the remembrance of *David Hume* was the very thing that many years ago first interrupted my dogmatic slumber" [4:260], and motivated Kant to find a "complete solution of the Humean problem" [4:313]. Since, for Kant, experience is the synthesis or combination of sensible concepts with pure concepts of the understanding, as explained in the previous chapter, and that the concept of cause is an *a priori* concept of the understanding, then cause is "not, ... derived from experience, but that experience is derived from [cause], a completely reversed type of connection that never occurred to *Hume*" [4:313]. The idea of the necessary connection between cause and effect is not

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<sup>113</sup> For Kant, possible experiences are the same as "objective knowledge of appearances" [A201/B246]. The difference between Hume and Kant is that experiences for Hume are born of perception, while for Kant they are an active result of thought or judgement. For Hume experience becomes impressions and ideas, while for Kant they are objects of knowledge that are universal and certain.

<sup>114</sup> For my purposes, Humean *ideas* are synonymous with Kantian *concepts*.

found in experience, but is what makes experience possible. It is the *a priori* nature of cause's contribution to the possibility of experience, something that Hume could not accept, that distinguishes Kant's positive solution from Hume's skepticism.

Kant, in many respects, agreed with Hume's analysis of cause and effect. He agreed with Hume that a necessary link between a cause and its effect cannot be discovered through inspection of two things alone. However, where Kant parted with Hume was over what has been referred to as the Causal Maxim.<sup>115</sup> The causal maxim states that "*whatever begins to exist must have a cause of existence*" [T1.3.3.8/78]. Kant similarly represented the maxim as, "every alteration has its cause" [B3]. Hume argues the causal maxim has "no mark of any such intuitive certainty" [T1.3.3.1/79], while Kant argues "for what has to be established is the objective validity<sup>116</sup> of a concept that is *a priori*" [A90/B122].

In this chapter I explore Kant's understanding of Hume's problem with causation. I look at how Hume's empiricism prevents him from allowing for other sources of ideas, such as intellectual concepts; concepts or ideas not abstracted from sensory experience. I discuss Kant's understanding of what he says as Hume's problem. I next discuss how this led to Hume's skepticism regarding causal relations and why Hume's naturalist solution is not acceptable to Kant.

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<sup>115</sup> I presented the Causal Maxim in Chapter 1, Section II where it was challenged by Hume as not being intuitive nor demonstrable certain.

<sup>116</sup> Objective validity is the "conditions of the possibility of all knowledge of objects" [A90/B122]. This means that for something to have objective validity is "if its predicate is necessarily true of all objects in its domain, i.e. if it has strict universality." (Gardner, 1999, p. 153) Further, for something to be "objectively valid" means that it is "universally valid", an object that is universal and necessary for everybody [4:298].

## Hume's Problem

Kant presents his analysis of Hume's problem in the *Prolegomena* with the relationship of a cause to its effect when he writes:

*Hume* started mainly from a single but important concept in metaphysics, namely, that of the *connection of cause and effect* (and also its derivative concepts, of force and action, etc.), and called upon reason, which pretends to have generated this concept in her womb, to give him an account of by what right she thinks: that something could be so constituted that, if it is posited, something else necessarily must thereby also be posited; for that is what the concept of cause says. He indisputably proved that it is wholly impossible for reason to think such a connection *a priori* and from concepts, because this connection contains necessity; and it is simply not to be seen how it could be, that because something is, something else necessarily must also be, and therefore how the concept of such a connection could be introduced *a priori* [4:257].

Hume describes "Relations of Ideas" as "Propositions of this kind [e.g. relations between numbers] are discoverable by the mere operation of thought, without dependence on what is any where existent in the universe" [E4.1/26]. This is one kind of "human reason" and it describes what Kant would understand as analytic *a priori* thought. As noted earlier, *a priori* thought does not depend on experience; i.e. without dependence on what is anywhere in the universe. Hume is using this reasoning to determine the necessity of the connection between a cause and its effect. As I have shown, in analytic propositions, the predicate is contained in the subject, but in the case

of cause and effect there is no containment: an effect is not found in its cause. As Hume writes, “I shall venture to affirm, as a general proposition, which admits of no exception, that the knowledge of this relation is not, in any instance, attained by reasonings *a priori*” [E4.6/28]. Kant understands this when he states in the above quote that Hume “proved that it is wholly impossible for reason to think such a connection *a priori* and from concepts” [4:257]. Hume affirms in the *Treatise* that the relation contains not only contiguity and succession but also there is a “NECESSARY CONNEXION to be taken into consideration; and that relation is of much greater importance, than any of the other two above-mention’d” [T1.3.2.11/78]. Since, for Hume, only ‘operations of thought’ “ever retain their certainty” [E4.1/26], i.e. are necessary, and since there is no containment of an effect within the concept of cause, then the relationship between cause and effect is not an analytic *a priori* relationship.

Now the problem becomes, if causal relationships are not analytic, then the only alternative for Hume is that they must “arises entirely from experience, when we find, that any particular objects are constantly conjoined with each other” [E4.6/28]. This is an example of matters of fact, which according to Hume “seem to be founded on the relation of *Cause and Effect*” [E4.4/27]. The difficulty arises because “contrary of every matter of fact is still possible” [E4.2/26], which is the same thing as being contingent. Using Kantian terminology, for Hume, cause and effect, as discussed earlier, is the same as being a synthetic *a posteriori* proposition. So, Hume’s problem, is that since there is a necessity connection between a cause and its effect, and this relationship is not analytic, but synthetic, how can a contingent matter of fact or an empirical experience ever

become necessary, or as Kant writes “how the concept of such a [synthetic] connection could be introduced *a priori*” [4:257]?

(Kant also had difficulty with this problem. In fact he agreed with Hume for a period of time as evidenced in his *Dreams of a Spirit Seer* (1766). Even as late as the *Inaugural Dissertation* (1770) the notion of combining synthetic propositions with *a priori* concepts hadn't really taken hold. It was not until his ‘critical period’ that the development of the notion of synthetic *a priori* judgements breaks the impasse and explains how a causal relation can be both synthetic and also possess the necessity of *a priori* concepts.)

Kant disagreed with Hume's assessment that the idea of cause is “borrowed from experience, and from taking the necessity represented in [necessary connection] to be falsely imputed and a mere illusion through which long habit deludes us of the idea that the concept of cause” [4:311]. For Kant, the constant conjunction of a cause with its consequence leading to “immediately feel a determination of the mind to pass from one object to its usual attendant” [T1.3.14.20/166] does not identify the objective validity that he argues is necessary in the concept of cause.

Hume's epistemology only allowed him two possible sources for acquiring the idea of the necessity of cause and its effect, and Hume finds them both deficient. The first method relies on *experience* where Hume is unable to find any sensible impression or idea connecting (necessary or otherwise) a cause with its effect. In the *Enquiry* Hume states that there is no “power or necessary connexion; . . . , which binds the effect to the cause, and renders the one an infallible consequence of the other” [E7.6/64]. The second

approach relies on *intuition*<sup>117</sup> and *demonstration* where, in the *Treatise*, Hume also denies that reason can demonstrate a necessary connection between a cause and effect, because “all distinct ideas are separable from each other, and . . . the ideas of cause and effect are evidently distinct” [T1.3.3.3/80]. Since it is conceivable that one event can “be non-existent this moment, and existent the next, without conjoining to it the distinct idea of a cause or productive principle” [T1.3.3.3/80], then there is no reason to think that there is any connection between them. This effectively is an argument that the synthetic relationship between a cause and effect cannot possess necessity. For Hume, neither sensory experience nor reason can establish any certainty for the idea of a causal relation.

First method, experience:

For Hume, the first approach relies on his Copy Principle<sup>118</sup> whereby the only way the mind could acquire a new idea was if there was either a precedent impression from the senses or a reflection on the internal operations of the mind. Hume was committed to sensation and reflexion being the only way that the mind could acquire ideas so that, as Kant observes, “it is impossible, [Hume] says, to cognize *a priori* and as necessary the connection between one thing and *another* (or between one determination and another entirely different from it), when [i.e.] they are not given in perception”

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<sup>117</sup> (Imlay, 1975) Hume’s use of the term *intuition* is ambiguous. “For, while there may be a correlation between the size of an image of an angle and the size of the corresponding angle on the assumption that images of angles have sizes, there is no such correlation when a number is substituted for an angle. The size of my image of the number five, for example, has nothing to do with the place that number occupies in the series of natural numbers.”(pp38) Although this discussion is beyond the scope of this paper, suffice to say, Hume’s ideas seem to be images, so concepts such as number didn’t fit well in this context. Number for Kant is a pure concept of the understanding. Like causality, number does not fit into Hume’s imagistic account of ideas.

<sup>118</sup> The Copy Principle, as explained in Chapter 1 Section I on Hume’s Ideas, is Hume’s theory of ideas which states that the only sources of ideas in our imagination are from impressions of sense and impressions of reflection.

[5:51]. This confines Hume's source of ideas to sensory impressions or inner sentiments, leaving out the possibility of *a priori* or innate sources of concepts or ideas.

Kant agreed with Hume that it is not possible to observe a necessary connection between a causal event and its effect, by perception alone. What can be observed is that one event succeeds the other and that they can be contiguous in time and place. However, we cannot through inspection, determine any power, force or necessary connection between constantly conjoined objects. If we think that "experience continually presents examples of such regularity among appearances and so affords abundant opportunity of abstracting the concept of cause, and at the same time of verifying the objective validity of such a concept, we should be overlooking the fact that the concept of cause can never arise in this manner" [A91]. The regularity of events is no guarantee that such constant conjunction of events will not be different next time. The concept of a cause's necessary connection to its effect cannot be discovered in experiencing constantly conjoined events. Since there is nothing to validate the connection between the two events, then there is no necessary connection between the two events. The necessity of causal relationships, therefore, cannot be determined from the regularity of such constant conjunctions. Kant agrees, "When Hume, taking objects of experience to be *things in themselves*<sup>119</sup> (as, indeed, is done almost everywhere), declared the concept of cause to be deceptive and a false illusion, he acted quite rightly" [5:53].<sup>120</sup>

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<sup>119</sup> The concept of *things in themselves* is how Kant refers to objects that are external to our minds or mind independent objects. Any discussion of things in themselves is beyond the scope of this paper.

<sup>120</sup> Kant provides a very succinct summary in his *Critique of Practical Reason* of his encounter with Humean thought. This has the *Akademie* reference AK V or [5:x].

Since Hume could not discover a sensory impression of a necessary connection between a cause and its effect, there could be no such idea or concept which leaves the possibility of the second source of impression: reflexion. The impression of reflexion “is derived in a great measure from our ideas” [T1.1.2.1/8]. These are lively ideas, or beliefs, which in the case of the idea of causation, arise through custom “which determines the imagination to make a transition from the idea of one object to that of its usual attendant, and from the impression of one to a more lively idea of the other” [T1.3.14.31/171]. The constant conjunction between numerous causal relations results in a lively idea, a belief, formed by habit which through custom, becomes the origin of the impression of reflexion of a necessary connection. So, for Hume, one way to understand the necessary connection between a cause and effect is that it is “deriv’d from some internal impression, or impression of reflection. There is no internal impression, which has any relation to the present business, but that propensity, which custom produces, to pass from an object to the idea of its usual attendant [T1.3.14.22/166]. This idea of a necessary connection is internally generated by the subject, and as such is a subjective necessity.

Kant’s problem was that subjective necessity is not really a necessity at all, but “a necessity which can only be felt” [B168]. As he explains with regard to “The concept of cause, for instance, which expresses the necessity of an event under a presupposed condition, *would be false if it rested only on an arbitrary subjective necessity*” [B168] (my emphasis). For Kant, something that is subjective is arbitrary and therefore uncertain and changeable. Something that is objective, on the other hand, is true or certain for all. Kant highlights this distinction in the *Prolegomena* when he writes, “*Empirical judgments, insofar as they have objective validity, are **judgments of experience**; those,*

however, that are *only subjectively valid* I call mere **judgments of perception**” [4:298]. Hume’s impressions of reflection are the same as judgements of perception, which for Kant are not necessary at all, but contingent and therefore not objective. Since they are not objective, they cannot be knowledge. As has been pointed out earlier, experience for Kant is tantamount to objects of knowledge, and thus, cannot occur without the validation of perception.

#### Second Method: Intuition and Demonstration

In the second approach, Hume argues that reason through demonstration and intuition could not provide an empirical argument for the relation between a cause and its effect. The difficulty, as noted earlier, is surrounding the notion of *a priori* concepts or ideas, something that for Hume is restricted to the ‘operations of thought’ [E4.1] of the relations of ideas. While intuition and demonstration seem to involve “operations of thought,” the argument that a cause is separable from its effect is “incapable of being refuted by any reasoning from mere ideas” [T1.3.3.3/79]. In other words the argument cannot be refuted through the application of *a priori* concepts to thought. The only ideas used in demonstration are restricted to empirical ideas. For Kant, it is the *a priori* concepts found in the understanding that provide the objective validity to thought, something that “never occurred to Hume” [4:313].

As discussed in Chapter 1 Section 2 of this paper, Hume’s argument is that reason cannot establish any connection between cause and effect. This is because the idea of a cause is distinct from the idea of its effect and since these two ideas are independent of each other, it is conceivable that there is no connection between them. The reason is that if it is conceivable that if there is a connection between a cause and its effect, then

according to Hume, it is also conceivable that the contrary can also be true. While the relation of the idea of a cause to its effect is a “synthetic proposition regarding the connection of an effect with its cause” [B19], the connection can be otherwise, making it not necessary and therefore not *a priori*.

Since reason, using only sensible ideas, cannot establish a necessary connection between a cause and its effect, there is no ground for the proposition that “Whatever begins to exist must have a cause for existence” [T1.3.3.1/78]. As Allison argues, “begins to exist” means the same thing as “new existence, or new modification of existence” [T1.3.2.4; SBN 79].<sup>121</sup> Hume argues that the idea of any existence or modification of existence cannot be necessarily connected to the idea of a cause. For Kant, a modification of an existence is the same as an “alteration”. So when Kant writes that “every alteration has its cause” [B3] is a synthetic *a priori* proposition, this is a direct contradiction to the conclusion of Hume’s argument. Since *reason from mere ideas* cannot refute the argument, then Hume does not countenance the contribution of *a priori* thought. The distinction I wish to highlight is that Hume’s argument is founded on sensible ideas only, while, as I shall present below, Kant identifies cause as an *a priori* concept that provides a necessary rule for any alteration or modification of existence.

#### Hume’s Skepticism with regard to Causation

My opinion is that Hume, as well as Kant, believed that one of the purposes of philosophical enquiry is the “desire to know the ultimate and operating principle, as something, which resides in the external object” [T1.4.7.5/267]. How can we know, by

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<sup>121</sup> (Allison H. E., 2008(1), p. 531)

observing the world, that what we are sensing is an object of knowledge? In observing a causal event, Hume skeptically writes “how must we be disappointed, when we learn, that this [causal] connexion, tie, or energy lies merely in ourselves, and is nothing but that determination of the mind, which is acquir’d by custom, and causes us to make a transition from an object to its usual attendant, and from the impression of one to the lively idea of the other” [T1.4.7.5/266]. The idea of cause turns out not to be objective at all, but a subjective “determination of the mind.” As I have stated, for Hume, neither empirical experience, nor reasoned argument can establish the objectivity of causality. Kant recognized this as a problem for Hume when he wrote “He indisputably proved that it is wholly impossible for reason to think such a connection *a priori* and from concepts” [4:257]. While Kant agreed that the concept or idea of cause was a “determination of the mind,” it is just not in the imagination, but found *a priori* in the understanding.

Kant believed that Hume recognized “it was necessary that these concepts should have an *a priori* origin” [B127]. In the *Treatise*, Hume notes that, “There is no foundation for any conclusion *a priori*, either concerning the operations or duration of any object, of which ’tis possible for the human mind to form a conception” [T1.4.5.35]. Hume is arguing against any *a priori* origin of ideas. Kant’s position is that Hume “could not explain how it can be possible that the understanding must think concepts” and “it never occurred to him that the understanding might itself, [...] be the author of the experience in which its objects are found” [B127]. Kant clearly understood Hume’s position when he noted that the concept of cause developed “from a subjective necessity (that is, from *custom*) which arises from repeated association in experience, and which comes mistakenly to be regarded as objective” [B127].

Kant argues that if Hume tried to universalize his position, which would have encompassed such synthetic *a priori* subjects as mathematics and laws of natural science, then he “would never have been guilty of this statement, so destructive of all pure philosophy” [B20]. He would have realized that mathematics would be synthetically *a priori* possible, and as Kant famously stated, “from such an assertion his good sense would have saved him” [B20]. Kant explains that Hume missed the fact that mathematics was a science of synthetic propositions.<sup>122</sup> Hume “erred severely in this, and this error had decisively damaging consequences for his entire conception” [4:273]. It seemed to Kant that for Hume “Pure mathematics contains only *analytic* propositions” [4:272]. Had he expanded his enquiry beyond the “metaphysical concept of causality and extended it also to the possibility of *a priori* mathematics; for he would have had to accept mathematics as synthetic as well” [4:273-4]. Part of Hume’s difficulty was that he was looking to empirical experience to provide him with the source of all ideas. *A priori* concepts were not possible since they are not founded in experience. If mathematics was a matter of fact rather than a relation of ideas, according to Kant, Hume would have had “to subject the axioms of pure mathematics to experience as well, which he was much too reasonable to do” [4:273]. From this, Hume’s position was that metaphysical propositions (such as those involving cause) are not based on empirical experience, and so are impossible to be cognized.

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<sup>122</sup> If we look at the equation  $7+5=12$ , the first thought is that this “is a merely analytic proposition” [B15]. The concept of 12 is contained in  $7+5$ . However, Kant argues, the concept of  $7+5$  “contains nothing save the union of the two numbers into one” [B15], and “I may analyse my concept of such a possible sum as long as I please, still I shall never find the 12 in it” [B15]. That 5 should be added to 7, I have indeed already thought in the concept of a sum  $=7 + 5$ , but not that this sum is equivalent to the number 12. Arithmetical propositions are therefore always synthetic” [B16].

As Kant notes, “Hume dwelt in particular upon the principle of causality” [A760/B788], and believed that causality was not based on *a priori* concepts. The only necessity, in this interpretation of causality comes from a “subjective necessity [...] which he [Hume] entitles custom” [A760/B788]. Kant argued that Hume could not understand why reason could not provide the answer why when one event occurred, that it could be necessarily connected to a subsequent occurrence. From this “he inferred the nullity of all pretensions of reason to advance, beyond the empirical” [A760/B788]. Since cause could not be found empirically, and reason could not deduce how such a cause could be, then we cannot have any idea of causality.

For someone who began “certainly on the track of truth” [A764/B792], Kant explains where Hume’s reasoning fell into error. Kant knew that Hume was aware that we could make a synthetic judgement such as would occur by associating two or more ideas with each other. There are two ways this can occur: the first is to combine perceptions so that the “the concept which I have obtained by means of a perception is increased through the addition of other perceptions” [A784/B792]. This is the same notion as the “uniting principle among ideas” [T1.1.4.1/11]. Hume describes as his principle of associating ideas. An example would be, “The ball is red.” The second is to attempt to extend our concepts by combining them with an *a priori* concept, “either through the pure understanding, in respect of that which is at least capable of being an object of experience or through pure reason, in respect of such properties of things [...] as can never be met with in experience” [A765/B793]. An example for this would be, “sunlight should melt wax” [A766/B794], which incorporates the *a priori* concept of cause. While associating ideas in the imagination was within his philosophy, he held that

judgements relying on “supposed *a priori* principles of these faculties as fictitious” [A765/B793].

Kant feels that Hume found such concepts generated “on the part of our understanding and of our reason, without impregnation by experience, as being impossible” [A765/B793]. For Hume, an idea could not be formed in our imagination without first being experienced through an impression. The only source of ideas are “from sensation and reflexion” [T1.1.1.12/8], “since the principle of innate ideas ... has been already refuted” [T1.3.14.6/159]. This means that the concepts of causality didn’t exist as an *a priori* principle for Hume. Causality was, instead, a notion of “custom-bred habit arising from experience ... and its laws are merely empirical, that is, rules that are in themselves contingent” and therefore to which we can “ascribe a supposititious necessity and universality” [A765/B793]. The distinction that surfaces here is between Kant’s application of cause as a rule of transcendental logic, and Hume’s ascription of cause as a determination of the mind as a feeling. For Hume, any thoughts we may have, arise from sensation whereas Kant identifies two sources of thought, sensation and intellect, both of which are required for knowledge. I shall return to this dilemma.

When presented with two events, (to use Kant’s example) such as when the sun is shining, wax melts, the two occurrences appear separate. However, Kant’s position is that since the wax melted “I can know *a priori* that something must have preceded, [...] for instance [...] the heat of the sun, upon which the melting has followed according to a fixed law” [A766/B794]. Hume, as noted above, felt that *a priori* structures in our understanding where such thought “takes place *a priori* and constitutes the objective reality of the concept” [A766/B794], were fictitious. Kant argues that Hume confused

this form of synthesis, “with the synthesis of the objects of actual experience, which is always empirical” [A766/B794]. Uniting two ideas in the imagination is not the same as synthesizing a sensory idea from intuition with an *a priori* concept of the understanding. In the first case, the two ideas are found on ‘sense or reflexion’ which can change and be otherwise. In the second case, Kant is combining an idea of sensation, with a concept which he argues affords the representation of sensation with objective validity. An idea that can change depending on circumstances is mere opinion, according to Kant [A822/B850]. An idea that is objectively valid can be considered as certain, and therefore knowledge. The light of knowledge for Kant dispels skepticism, and in this particular case, Hume’s skepticism of causal relations not being founded on *a priori* concepts of the understanding.

Kant never doubted that Hume was correct in his assessment that one cannot discover any power or necessary connection between a cause and its effect from merely inspecting causal events. Any result that has been observed could have a contradictory outcome the next time. As Kant succinctly states, “Experience teaches us that a thing is so and so, but not that it cannot be otherwise” [B3]. That there is such a concept as cause was not in dispute. The contention was that Hume could not accept that the synthetic proposition of a causal relation also had an *a priori* nature; that it did not originate in experience, but rather the understanding. As discussed in Chapter 3, it is Kant’s thesis and addition of a third tine (synthetic *a priori* propositions) to Hume’s epistemological fork that resulted in solving Hume’s dilemma and consequent scepticism.

The distinction is between Kant’s application of cause as a rule of transcendental logic, and Hume’s ascription of cause as a determination of the mind as a feeling. For

Hume, any thoughts we may have, arise from sensation whereas Kant identifies two sources of thought, sensation and intellect, both of which are required for knowledge. The difficulty that Kant encountered with Hume's thinking is that it led to skepticism. In section T1.4.7, Hume notes that "reflections very refin'd and metaphysical have little or no influence upon us" and he "can scarce forbear retracting" this opinion. The effect is that Hume is "ready to reject all belief and reasoning, and can look upon no opinion even as more probable or likely than another" [T1.4.7.8/270]. The idea of cause has been the crux upon which Hume's skepticism can be traced when he writes, "in the most usual conjunctions of cause and effect we are as ignorant of the ultimate principle, which binds them together" [T1.4.7.6/268]. For Hume, we cannot experience the necessary connection between a cause and effect and therefore we have no metaphysical solution to the relationship. This is why he promotes a natural solution when he states "since reason is incapable of dispelling these clouds, nature herself suffices to that purpose, and cures me of this philosophical melancholy and delirium" [T1.4.7.9/270] which has already been explained.

Kant does not accept that sensation alone is adequate to the purpose since it can, at best, provide only an opinion, which is not certain. To dispel Hume's skepticism, especially with regard to causality, Kant argues throughout the first *Critique* that the Categories, or pure concepts of the understanding not only exist but are required for knowledge to be possible. The argument is that instead of causality being abstracted from sensation, it is a rule of thought that when synthesized with sensory intuition, validates the necessary connection between a cause and its effect.

The debate is, of course, who is correct, or even if there is a correct answer. Can there be innate structures in our minds that provide us with the metaphysical solutions that stumped Hume? Kant believes that Hume's empiricism prevented him from realizing that we possess *a priori* ideas; what Kant refers to as pure concepts. According to Kant, it is these ideas, not abstracted from impressions that are required for experience to be possible.

### Conclusion

Kant identifies Hume's problem as Hume not accepting that cause or any other metaphysical notion could be an *a priori* concept, or that the mind could hold such ideas. The reason, Hume argues, is that "the knowledge of this relation [cause and effect] is not, in any instance, attained by reasonings *a priori*; but arises entirely from experience [matters of fact]" [E4.6/28]. Kant acknowledges that Hume, "occupied himself exclusively with the synthetic proposition regarding the connection of an effect with its cause (principium causalitatis), and he believed himself to have shown that such an *a priori* proposition is entirely impossible" [B20]. As Hume writes, "the ideas of cause and effect be deriv'd from the impressions of reflection as well as from those of sensation" [T1.3.2.16/79] where he clearly links the idea of cause as a copy of an impressions of reflection. As Hume writes, "impressions of reflection resolve themselves into our passions and emotions" [T1.1.6.1/17]. For Hume, "impressions of reflection, *viz.* passions, desires, and emotions ... arise mostly from idea" [T1.1.2.1/9]. The idea is born from custom and habit which produces a determination in the mind, the origin of a subjective idea that seems necessary. If the idea of cause is an idea of passion, then it cannot be found *a priori* in the intellect as Kant believes. Since, for Kant, the idea or

notion of cause is an *a priori* concept of the understanding, and since metaphysics involves *a priori* concepts of rational insight, then “if we accept [Hume’s] conclusion, then all we call metaphysics is a mere delusion” [B20]. Kant cannot accept this conclusion. If “custom has taken the illusory semblance of necessity” [B20], a necessity that can only be felt and not known, then the rational foundation for the possibility of knowledge is uncertain. If this is the case, the idea of cause as a metaphysical concept is an illusion. Kant believes that Hume missed the fact that ideas such as cause are *a priori* concepts of the mind, and not found in experience. This led to Hume’s skepticism of the necessary connection between a cause and its effect.

Kant’s understanding of Hume’s problem is succinctly stated in the following quote from the *Prolegomena*:

From which he concluded that reason has no power at all to think such connections, not even merely in general, because its concepts would then be bare fictions, and all of its cognitions allegedly established *a priori* would be nothing but falsely marked ordinary experiences; which is so much as to say that there is no metaphysics at all, and cannot be any [4:258].

Kant’s solution to Hume’s problem is found in the “Second Analogy of Experience” in the *Critique of Pure Reason*. It is this topic I undertake next.

## Chapter 4 Kant's Response to Hume's Problem with Causation

### Introduction

In this chapter I examine Kant's response to what he considered Hume's problem: the denial of the *a priori* status of the causal principle. While the *Critique of Pure Reason* is arguably, in part, a reaction to Hume, The Second Analogy of Experience, is generally considered to be Kant's response to Hume with regard to cause and effect.<sup>123</sup> In his *Commentary on Kant's Critique of Pure Reason*, Norman Kemp Smith notes the Second Analogy "is of special historical importance as being Kant's answer to Hume's denial of the validity of the causal principle."<sup>124</sup> Accordingly, the Second Analogy is the focus of this chapter.

In the *Treatise of Human Understanding*, Hume presents the causal principle as "a general maxim in philosophy, that *whatever begins to exist, must have a cause of existence* [T1.3.3.1/71]. Similarly, in the *Critique of Pure Reason*, Kant in the Introduction to the B-edition identifies this maxim as "every alteration has its cause" [B3] where an alteration is any change to a substance. Hume realized that the relation of a cause to its effect is not an analytic relation. This means that it could not be a relation of ideas, which are based on reason<sup>125</sup> and therefore not *a priori*. Kant realized this, stating,

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<sup>123</sup> (Longuenesse, 2005, p. 2) "Kant was trying to prove in his Second Analogy of Experience, namely in that section of the *Critique of Pure Reason* in which he is supposed to provide his response to Hume's skeptical doubt concerning the concept of cause." Allison asks, "does Kant provide an effective response in the Second Analogy to Hume's denial of *a priori* status to the causal principle?" (Allison H. E., 2008(1), p. 545)

<sup>124</sup> (Kemp Smith, 1962, p. 364)

<sup>125</sup> Reason is the mental process of thinking whereby we form judgements inferred from a logical process of deduction. Gardiner explains that Kant also uses reason in a technical sense where it, "refer[s] to conceptual elements in cognition which we bring to experience and which are not derived from it." (Gardner, 1999, p. 23) As Hume notes, "The sole end of logic is to explain the principles and operations of our reasoning faculty" [T Intro.4/xvi]. This process is not grounded in empirical observation, but being an intellectual process, is entirely *a priori*. If the logical process of deduction is sound, then the resulting judgement is certain, and not contingent, i.e. the conclusion cannot be otherwise. For Kant therefore, sound logical reasoning, since it is *a priori*, is necessary, where "necessity is existence of an object at all times"

“[Hume] occupied himself exclusively with the synthetic proposition regarding the connection of an effect with its cause (*principium causalitatis*),<sup>126</sup> and he believed himself to have shown that such an *a priori* proposition is entirely impossible” [B 19-20]. However, as Manfred Kuehn notes in his *Kant, A Biography*, “From the fact that the causal relation cannot be shown by reason to be *a priori*, it does not follow that it cannot be shown to be *a priori* in some other way.”<sup>127</sup>

It is in the Second Analogy where we find Kant’s proof of the objective validity of the general principle of causality, what Allison, following Lewis White Beck, refers to as “every-event-some-cause principle.”<sup>128</sup> This to be contrasted with particular causal laws which rely on empirical judgements, or “same-cause-same-effect principle,”<sup>129</sup> which may not necessarily be *a priori*. The position I shall argue is that Kant was successful in establishing the general principle of causality: when we perceive something that has occurred, we presuppose that this follows a previous state of affairs according to a rule. The presupposition is that the previous state of affairs (the cause) is necessarily connected to the current state of affairs (the effect) according to a rule. While Hume argues that the idea or concept of a causal relation (the necessary connection between a

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[A145/B184]; one which is universally and objectively valid. Since knowledge is a judgement of reason, then “*there can be no a priori knowledge except of objects of possible experience*” [B166]. While pure reason (reason uncontaminated by sensory intuition) can have flights of fancy, it cannot be knowledge unless the reasoning is founded on objects given to us through sensory cognition. Hume, on the other hand argues that “tis custom alone, not reason, which determines us to make it the standard of our future judgments” [A 25/657]. For Hume, this is because synthetic judgements cannot be made using reason alone. We have to rely on our experience of conjoined objects or events, which through habit, form the custom which becomes the “standard of our future judgements.” As I have stated previously, the distinction between the two approaches (Hume *versus* Kant) is the exclusion or inclusion of *a priori* concepts in judgements.

<sup>126</sup> Principle of causality (Google translator)

<sup>127</sup> (Kuehn, *Kant A Biography*, 2001, p. 257)

<sup>128</sup> (Allison H. E., 2008(1), p. 4)

<sup>129</sup> (Allison H. E., 2008(1), p. 4)

cause and its effect) is as result of the determination of the mind perceiving constantly conjoined events, I will argue that Kant was successful in demonstrating that the concept of cause is presupposed in constantly conjoined events. If we can know that one event is necessarily connected to a second event in a causal relationship, it is because we presuppose, upon having such a perception, that the events being necessarily connected are determined by universal causal laws. We may not know which particular causal law is effective, that is for the realm of scientific investigation, but the pure *a priori* concepts of the understanding (Kant's categories) provides the warrant for such a belief to be true. This means that Hume, when stating that “the knowledge of this relation [cause and effect] is not, in any instance, attained by reasonings *a priori*; but arises entirely from experience” [E4.6/27], is clearly at variance to Kant's position.<sup>130</sup>

This chapter is divided into three sections. In the first section, I present Hume's two definitions as the culmination of his work on this subject. The reason for this is to provide a reference for comparing Kant's arguments for cause. While the derivation of the deduction of the *a priori* concept of cause as a category, and the justification of its application to sensible appearances is beyond the scope of this paper, I present an abridged version of the Metaphysical and Transcendental deductions as a foundation for the Second Analogy. As I have already discussed synthetic *a priori* thought, this discussion will mostly follow Beatrice Longuenesse's interpretation of the logical structure Kantian hypothetical reasoning of causality. The last section will be a detailed

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<sup>130</sup> “Kant maintains that some representation of causal relation, rather than *resulting*—as Hume claimed—from the repeated perception of generically identical successions of events, is *presupposed* in the very representation of any particular objective succession of states of a thing.” (Longuenesse, 2005, p. 2)

discussion of the Second Analogy highlighting the contrast with Hume's definitions. One of the concerns that follows from this argument is the distinction "between the general principle of causality of the Second Analogy—the principle that every event *b* must have a cause *a*—and particular causal laws: particular instantiations of the claim that all events of type *A* must always be followed by events of type *B*."<sup>131</sup> Following Graciela De Pierris and Michael Friedman, I will provide a possible explanation for particular causal relations.

### Section I David Hume's Definitions of Causality

David Hume identified three conditions that are required for the relation between a cause and its effect. These conditions are succession in time, contiguity in time and space, and a necessary connection between a cause and its effect. As I have shown, Hume argued for two definitions for a causal relation. The first, which for Hume is a *philosophical* relation, is "a cause [is] *an object precedent and contiguous to another, and where all the objects resembling the former are plac'd in a like relation of priority and contiguity to those objects, that resemble the latter*" [T1.3.14.35/173]. This definition is what some writers have qualified as the external definition or the result from an *impression of sensation*. It defines how we experience cause and effect as a constant conjunction between two objects or events. However, as I have argued, Hume's concern is that some would find this definition defective due to the absence of the condition of a necessary connection from a cause to its effect. To accommodate this condition, he adds a second definition, which he refers to as a *natural* relation, which is, "*An object precedent*

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<sup>131</sup> (De Pierris, May 2002, p. 22)

*and contiguous to another, and so united with it in the imagination, 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”* [T1.3.14.35/173]. This definition identifies the condition of necessary connection between cause and effect as an inner sentiment or an *impression of reflexion*.

While there is considerable controversy over the validity of Hume’s two definitions, I am taking the position that both definitions are necessary; that is, not correlated with each other, (in need of co-extension) but are co-dependent. Both definitions are required to fully comprehend Hume’s notion of a causal relation. Hume, not unlike Kant, binds a sensory impression (constant conjunction) with an inner impression of reflexion (the necessity of the determination of the mind) in order to provide a full explanation of a causal relation. As Hume notes, it is both “the constant conjunction of objects, along with the determination of the mind, which constitutes a physical necessity” [T1.3.14.33/172]. The difference is the origin of necessity: is it from experience, or *a priori* concepts? So, my position going forward is that there are two very similar approaches to understanding causation using two very similar (though not identical) epistemic sources: sensation (impressions of sensation) and the intellect (impressions of reflection).<sup>132,133</sup>

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<sup>132</sup> Granted, Kant’s intellect is not exactly like Hume’s sensation of reflection, but both are inner sources of epistemic warrant.

<sup>133</sup> It is interesting to note that Hume, not unlike Kant, binds a sensory impression (constant conjunction) with an inner impression of reflexion (the necessity of the determination of the mind) in order to have the full explanation of a causal relation. The difference, of course, is the origin of necessity: from experience for Hume, and *a priori* concepts for Kant.

For Hume, there are two spheres of enquiry into causality. The first deals with the general notion of a causal relation where for every event there must be a cause. As I have shown, Hume argues that we don't have an *a priori* justification to hold this belief. The second is that for every particular event, there is a particular cause. Hume notes a problem with the first approach when he states, "whether every object, which begins to exist, must owe its existence to a cause; ... this I assert neither to be intuitively nor demonstratively certain" [T 1.3.3.8/83]. In the second approach, perceiving the constant conjunction of particular effects with particular causes is how we hold the idea of a causal relation. However, as Hume notes, "Reason can never shew us the connexion of one object with another, tho' aided by experience, and the observation of their constant conjunction in all past instances" [T1.3.6.12/93]. Even though two events are constantly conjoined, reason cannot discern an idea that necessarily connects one event with its conjoined event.

In investigating sensory impressions Hume reasons that while it is necessary for an effect to be contiguous and follow its cause, it is not sufficient for a causal relation. There must also be a connection between the two events that is necessary. As Hume notes, an "object may be contiguous and prior to another, without being consider'd as its cause. There is a *necessary connexion* to be taken into consideration" [T1.3.2.11/77]. However, a sensory impression of a necessary connection cannot be discovered by inspection of conjoined objects. Kant agrees that the connection in a causal relation must be necessary, and, following Hume, reason alone cannot discover it when he writes, "He [Hume] indisputably proved that it is wholly impossible for reason to think such a connection *a priori* and from concepts, because this connection contains necessity; and it

is simply not to be seen how it could be, that because something is, something else necessarily must also be, and therefore how the concept of such a connection could be introduced *a priori*” [4:257]. Such an inspection is empirical, and since empirical observations are matters of fact, and matters of fact are contingent, no necessity can be found in them.

In Hume’s case, since an impression of sensation cannot be the source of a necessary causal connection then it may be an impression of reflection.<sup>134</sup> After observing a number of events that are constantly conjoined, Longuenesse observes, “our idea of a necessary connection between two events or states of affairs, then, reflects nothing but our own *subjective propensity* to expect the second [effect] from perceiving the first [cause].”<sup>135</sup> This becomes for Hume, how he reasons that an idea of necessary connection is possible, and becomes the basis for his second definition for causality. In this definition, necessity is based on a belief that if we repeatedly perceive a particular constant conjunction, then our minds are determined “to form the idea of the other”, but “no amount of evidence provided by our memory and senses is sufficient to justify such a belief.”<sup>136</sup>

Hume did not empirically discover necessity in a causal relation through the observation of events. Hume’s grounding the idea of necessary connection in an

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<sup>134</sup> For Hume, “impressions of reflection, [are] passions, desires, and emotions, which principally deserve our attention, [and] arise mostly from ideas” [T 1.1.2.1/9]. So if I have a lively enough idea, one that constitutes as a belief, from the liveliness of this idea there is an expectation, a feeling, associated with this idea. This idea “produces the new impressions of desire and aversion, hope and fear [i.e. feeling], which may properly be called impressions of reflexion” [T 1.1.2.1/9]. From this impression of reflexion, a new idea can be copied.

<sup>135</sup> (Longuenesse, 2005, p. 5)

<sup>136</sup> (Longuenesse, 2005, p. 5)

impression of reflexion is, for Kant a subjective necessity when he observes, “the concept would be altogether lost if we attempted to derive it, as Hume has done, from a repeated association of that which happens with that which precedes, and from a custom of connecting representations, a custom originating in this repeated association, and constituting therefore a merely subjective necessity” [B5]. A subjective determination of the mind cannot be taken as objective, and for there to be knowledge,<sup>137</sup> one needs the facts of the matter to be objective. However, for Kant, “the very concept of a cause ... contains the concept of a necessity of connection with an effect and of the strict universality of the rule” [B5], which means Kant not only argues that there is a necessary connection between a cause and its effect, but that it also contains “strict universality.”<sup>138</sup> While both recognize that the concept of cause “is founded solely in the relation of the understanding to experience,” Kant argues that the concept of cause is “not, however, in such a way that [it is] derived from experience, but that experience is derived from [the concept of cause], a completely reversed type of connection that never occurred to *Hume*” [4:313].

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<sup>137</sup> As I have noted elsewhere, knowledge for Kant is “work[ing] up the raw material of the sensible impressions into that knowledge of objects which is entitled experience” [B1]. This is done by taking what is given by sensible intuition, synthesizing it with pure concepts of the understanding (Categories) to justify believing in a sensory impression so that the sensory perception becomes a universal object of experience. As Allison explains “the categories (the rules) are epistemic conditions in the sense they provide the rules for validating a synthesis of representations.... They ground the normative claim of such a synthesis (or judgement).” (Allison H. , 2004, p. 205)

<sup>138</sup> ‘Strict universality’ is defined by Kant to mean: “a judgment is thought with strict universality, that is, in such manner that no exception is allowed as possible, it is not derived from experience, but is valid absolutely *a priori*” [B4]. This is contrasted with “comparative *universality*, [which is found] through induction” [B4]. So, a judgement of strict universality holds under *a priori* reasoning and is *necessary*, while a judgement of comparative universality holds under empirical reasoning and is *contingent*.

## Section II - Kant's Understanding of Causal Relations

To help us understand Kant's arguments in the Second Analogy regarding causation, I shall make reference to an example Kant presented in a footnote in the *Prolegomena*:

If the sun shines on the stone, it becomes warm. This judgment is a mere judgment of perception and contains no necessity, however often I and others also have perceived this; the perceptions are only usually found so conjoined. But if I say: the sun *warms* the stone, then beyond the perception is added the understanding's concept of cause, which connects *necessarily* the concept of sunshine with that of heat, and the synthetic judgment becomes necessarily universally valid, hence objective, and changes from a perception into experience [4:302n].

I also cite this quote because Beatrice Longuenesse refers to this example in her paper, "Kant on Causation" which I also refer to below.

As Kant writes, the "judgement of perception" ('the sun warming stones') becomes a "judgement of experience" (the sun causes the stones to become warm), i.e. there is a necessary connection between the sunshine and warm stones. Kant explains how this works by stating, "Now before a judgment of experience can arise from a judgment of perception, it is first required: that the perception be subsumed under a concept of the understanding" [4:301].<sup>139</sup>

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<sup>139</sup> Kant explains that a 'judgement of perception' has "subjective validity; it is merely a connection of perceptions with in my mental state, without reference to the object" [4:300]. A 'judgement of experience',

Here Kant is presenting the synthetic *a priori* judgement I discussed earlier in Chapter 2. A sensory intuition of the sun shining on stones and warming them is subjective, that is, true for only me. For this representation (the sun shining on stones) to become objective, that is, true for everyone, it needs to be thought in the understanding where it is spontaneously synthesized or combined with the pure concept of cause, which provides the representation with objective validity or necessity. It is this judgement that turns the sensory appearance into a necessary universally valid judgement, which Kant considers experience or an object of knowledge.

To understand how Kant formulates the concept of cause and effect as a logical form, we have to refer to the first *Critique*. Here, corresponding to “Causality and Dependence” [A80/B106] in the Table of Categories under Of Relation, the equivalent logical form of judgement found in the In the Table of Judgments under Relation [A70/B95] is a hypothetical judgement. So, for Kant, the logical form for a causal relation is a hypothetical proposition. In making reference to *Jäsche Logic*<sup>140</sup> Longuenesse points out that the basic form of a judgement is that of predication which takes the form of the categorical proposition (A is B).<sup>141</sup> In this form there are universal propositions (All A are B); existential propositions (Some A are B) and particular propositions ([one] A is/are B). In citing *Jäsche Logic*, Longuenesse notes that in “the *matter of hypothetical* judgments consists of two judgments that are connected with one

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on the other hand, “signifies nothing other than its necessary universal validity” [4:298]. A judgement of perception is true only for me, i.e. subjectively valid, while a judgement of experience is true for everyone, i.e. an object of knowledge.

<sup>140</sup> *Jäsche Logic* is Kant’s Logic Text used in his lectures.

<sup>141</sup> (Longuenesse, 2005, p. 7)

another as ground and consequence.”<sup>142</sup> Building on this, we find that the logical form of judgement for cause and effect is “If A is B, then C is D.”

Unlike material hypothetical judgements, where the truth of the propositions is determined by a truth table, for Kant, it is the relation between the antecedent and the consequence that determines the truth of the proposition. This is what Longuenesse identifies as a relation of *Konsequenz*, and explains that, for example, there is no relation between the antecedent and the consequence in the hypothetical proposition, “If Ottawa is the capital of Canada, then New York is in the United States.” This proposition would be materially true, but for Kant, since there is no relation between the antecedent and the consequence, i.e. there no relation of *Konsequenz*, then the proposition is false. As Longuenesse notes, “the meaning of the connective [if – then] is *not* fixed by its truth conditions, but, on the contrary, the truth conditions are fixed by the meaning of the connective.”<sup>143</sup>

A categorical syllogism has two propositions and a conclusion. They usually are of the form “All M are P (major premise); Some S are M (minor premise); therefore Some S are P.” In this argument form, the middle term “M” is found in both the major and minor premises. In a hypothetical syllogism the form is “If A is B, then C is D (major premise); A is B (minor premise); therefore C is D.” The minor premise is the antecedent categorical judgement, and the consequence is the conclusion. It becomes clear that there must be a true relation of *Konsequenz* between the antecedent and the consequence for

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<sup>142</sup> (Longuenesse, 2005, p. 7)

<sup>143</sup> (Longuenesse, 2005, p. 8)

this argument to obtain. The necessity presupposed in this form can be seen from “If there is a cause, then, necessarily, there is an effect.”

In the *Prolegomena*, Kant reformulates Hume’s causal maxim as, “if it is posited, something else necessarily must thereby also be posited; for that is what the concept of cause says” [4:257]. This clearly shows that Kant identifies the causal relation as a hypothetical judgement. For Kant, this is important because, “the very concept of a cause ... manifestly contains the concept of a necessity of connection with an effect and of the strict universality of the rule” [B5]. It is the term ‘strict universality’ that Longuenesse reformulates the hypothetical proposition “If the sun shines on the stone, it becomes warm” [4:302n] into a universal hypothetical syllogism as; “All stones, if lit by the sun, get warm; the stones along the river are lit by the sun; therefore, they get warm.” Such a syllogism combines features of a universal categorical proposition (subsumption<sup>144</sup> of the subject of the conclusion under the subject of the major premise) and a hypothetical syllogism (assertion in the minor premise of the antecedent of the major premise).<sup>145</sup> Accordingly, Longuenesse argues “when Kant talks of the “strict universality of a rule” contained in the concept of cause, what he has in mind is precisely this kind of mixed premise.”<sup>146</sup> This is why the proposition inherent in this syllogism can be stated as “the

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<sup>144</sup> Subsumption: as “used in the traditional theory of judgement, namely, to designate the relation between a class concept and the particulars falling under it.” (Allison H. , 2004, p. 211)

<sup>145</sup> (Longuenesse, 2005, p. 9) In explaining Kant’s use of subsumption he states, “it is to call attention to a set of synthetic *a priori judgements* (the Principle of Pure Understanding), which unlike ordinary judgements of experience, do not merely make use of the categories but actually subsume all appearances under them.” (Allison H. , 2004, p. 212)

<sup>146</sup> (Longuenesse, 2005, p. 9)

sun by its light *causes* the stones to become hot,”<sup>147</sup> which contains the strict universality of a causal rule.

The hypothetical construction of this proposition presupposes a causal connection between perceiving the ‘sun light’ and ‘warming stones’. As Longuenesse observes, “We presuppose, in other words, that appearances are in themselves, as empirical objects, connected by a chain of causal connections.”<sup>148</sup> The presumption is that for something to happen, there must be a reason for it to happen, that is, we presuppose a causal connection between something that happened and something that caused it to happen. In the A-edition of the *Critique* this is just how Kant expresses this supposition when he states, “Everything that happens, that is, begins to be, presupposes something upon which it follows according to a rule” [A189]. When we perceive particular instances such as when we feel the sun’s warmth, and we feel the warmth of stones lying in the sunshine, and we spontaneously (or as Allison<sup>149</sup> and Longuenesse<sup>150</sup> propound, a discursivity of the mind) seek a solution as to why when one thing happens (the sun shines on the stones) and a second completely separate event happen (we perceive the stones becoming warm in the sunlight). We do this because, according to Kant, we have built in discursive structures that spontaneously provide objective validity to our thought. So, “when ...

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<sup>147</sup> Op. cit.

<sup>148</sup> (Longuenesse, 2005, p. 11)

<sup>149</sup> (Allison H. , 2004, p. 77) See Chapter 4 “Discursivity and Judgment” in *Kant’s Transcendental Idealism* for Allison’s explanation of Kant’s idealistic epistemic conditions for the discursive nature of human cognition. Allison identifies three conditions for this thesis: “(1) that cognition of any kind requires that an object be given; (2) that since a finite mind like ours is receptive rather than creative, its intuition must be sensible, resting on an affection of objects; (3) that sensible intuition, of itself, is insufficient to yield cognition of objects and requires the cooperation of the spontaneity of the understanding.

<sup>150</sup> (Longuenesse, 2005) Longuenesse makes frequent references to the “discursive model” she uses which is the awareness that comes from the spontaneity of synthesizing intuition with pure concepts of the understanding so that knowledge can be possible.

strict universality is essential to a judgment, this indicates a special source of knowledge, namely, a faculty of *a priori* knowledge. Necessity and strict universality are thus sure criteria of *a priori* knowledge, and are inseparable from one another” [B4].

In the Second Analogy, as we will see below, Kant argues for a general causal necessity. He argues that there is a concept of cause, and that it is inherent in our faculty of thought; the understanding. What I have been just describing is a particular causal relationship, of the sunlight warming stones. This is a synthetic *a posteriori* judgement, and upon perceiving such a relation, no necessity is found. De Pierris and Friedman claim that “there is a fundamental difference between a mere “empirical rule” (heat follows illumination by the sun) and a genuine objective law (the sun is through its light the cause of heat) arrived at by adding the *a priori* concept of cause to the merely inductive rule.”<sup>151</sup> When Kant argues that a particular event follows a particular cause according to a rule, the rule does not refer strictly to the pure concept of cause, “but rather a particular law connecting a given cause [sunlight] to a given effect [warm stones] which is itself strictly universal and necessary.”<sup>152</sup> As Kant explains, “In conformity with such a rule there must lie in that which precedes an event the condition of a rule according to which this event invariably and necessarily follows” [A193/B239].

I think that augmenting a synthetic *a posteriori*, or empirical rule with the necessity of a universal rule is beyond what I believe Kant can prove. As we will see below, I agree that Kant can prove that there is a universal and valid concept of cause in our understanding and that every alteration of a change in a substance is subject to the

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<sup>151</sup> (De Pierris and Friedman, 2013, p. 22)

<sup>152</sup> (De Pierris and Friedman, 2013, p. 23)

“law of the connection cause and effect” [A189/B232]. However, in any particular state of affairs, it becomes a subject of inductive study and reasoning as to what is responsible for the necessary connection between a cause and its effect. Because, as I show below, we can know that such causal relations are a part of the furniture of the universe, any attempt to make a particular state of affairs universally valid in a particular instance is an attempt to take something that appears to be and transform it into what one thinks it should be. Granted, there is an epistemic warrant in using cause as a pure concept of the understanding so that we may have objective knowledge or a Kantian form of experience. While, according to De Pierris and Friedman, Kant does argue for the “necessity and strict universality of particular causal laws,”<sup>153</sup> I think the best he can prove is that the concept of cause is integral to our discursive thought. We do apply the concept of cause to causal situations, but to determine empirical intuition, the natural law that is necessitated by *a priori* synthesis, is something I do not think Kant proved. There is no doubt, that there is an objectively valid causal relation, but to profess to know the particular causal law in play is doubtful.

### Section III - the Second Analogy

The Second Analogy is where Kant argues for a general formulation for the principle of cause. In Kant’s formulation of this principle in the B-edition, he is very clear that the connection is one of a cause and an effect. This is presented as “All alterations<sup>154</sup> take place in conformity with the law of the connection of cause and effect”

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<sup>153</sup> (De Pierris and Friedman, 2013, p. 22)

<sup>154</sup> An alteration is any change in the attributes of a substance. This builds on Kant’s principle of substance, something that is a subject and never a predicate. It is expressed in the First Analogy of Experience as “In all change of appearances substance is permanent; its quantum in nature is neither increased nor diminished

[B232]. In this formulation, the stone becoming warm as an effect, presupposes a cause. Longuenesse expresses this beautifully when she writes, “Because we make such a presupposition, we allow ourselves, on repeated observation of similar events, to move from such repeated observation to a causal judgment (a hypothetical for which we claim the “strict universality of a rule”).”<sup>155</sup> Note she makes reference to repeated observations, repeatedly perceiving the sunshine and warm stones. We not only make a hypothetical connection between the two events, but we also presuppose an *a priori* causal rule that necessitates the connection between the two. As Kant argues in the Second Analogy, this is because there is a “strict universality of a rule” for any alteration. I can reformulate this conceptually as: there is a logical judgement (hypothetical syllogism) that synthesizes the pure (*a priori*) concept of the understanding (cause) with the perception of the sun shining on stones making the causal relation universal, or objectively valid for all cases of the sun shining on stones.

To determine whether or not Kant was successful in the arguments of the Second Analogy, following Longuenesse, it will be tested against these three questions:

1. Is it the case that we in fact presuppose the truth of the causal principle?
2. Supposing we do presuppose its truth, is it in fact true, that is, do we have the right to presuppose its truth?
3. Supposing we do presuppose the truth of the causal principle, and supposing the principle is indeed true, how does this general

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[B224]. For example, when a stone becomes warm, it is a substance whose attributes have been altered. Also, as Allison notes, “every event is an alteration, and every alteration an event.” (Allison H. , 2004, p. 247)

<sup>155</sup> (Longuenesse, 2005, p. 11 of 34)

presupposition warrant in any *particular* case the transition from observing a mere regularity (what Kant calls a “judgment of perception”) to asserting a causal connection, which we claim holds “for all, and at all times” because it holds of the (empirical) objects themselves, and is thus what Kant calls a “judgment of experience?”<sup>156</sup>

As Norman Kemp Smith states in his commentary on Kant’s *Critique of Pure Reason*, “This section [The Second Analogy] as Kant very rightly felt, contains one of the most important and fundamental arguments of the entire *Critique*.”<sup>157</sup> Allison, along with Kemp Smith, agrees that “commentators have distinguished as many as six [proofs], including the one added in the second editions.”<sup>158</sup> Kemp Smith, while noting its importance also states that it is “crabbedly, diffusely, and even confusedly stated,”<sup>159</sup> while Longuenesse notes that each of the five arguments are “each of them quite tortuous.”<sup>160</sup> I can only agree.

All agree that there is a similar theme running through each of Kant’s arguments. This theme is that when we have a subjective appearances of an irreversible succession of events, we order these events necessarily in time. This does not occur in our intuition. The only way the succession can be necessary is if we synthesize the appearances of the succession of events with a pure concept of the understanding. The relation that can relate

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<sup>156</sup> (Longuenesse, 2005, p. 11 of 34) Question 1 & 2 relate to the general causal maxim; question 3, to particular causal events.

<sup>157</sup> (Kemp Smith, 1962, p. 363)

<sup>158</sup> (Allison H. , 2004, p. 249), (Kemp Smith, 1962, p. 363) Longuenesse identifies “five different expositions.” (Longuenesse, 2005, p. 12 of 34)

<sup>159</sup> (Kemp Smith, 1962, p. 364)

<sup>160</sup> (Longuenesse, 2005, p. 12 of 34)

one appearance to another is the *a priori* concept of cause and effect.<sup>161</sup> The only way experience (empirical knowledge of appearances) is possible is to subsume all appearances or changes in perception of objects under the *a priori* rule of cause and effect. When appearances conform to the rule of cause and effect, it is the only time they can become objects of experience.

The first argument in the A-edition exemplifies this theme and begins at A189/B234 and proceeds to A194/B239. Here, Kant compares the undetermined order of appearances of a house with the objective apprehension of a ship sailing down a stream. The argument in summary is:

All our perceptions, i.e. sensory representations, are apprehended successively in time. The only way we can perceive that there is a succession occurring in time is when the appearance we are perceiving is not the same as the one we perceived previously, that is, “something, or some state which did not previously exist, comes to be, cannot be perceived unless it is preceded by an appearance which does not contain in itself this state” [A191-2/B236-7]. So, for every event to be a perception, it follows a previous perception of an event.

However, this happens with any apprehension. In the case of perceiving parts of a house, there is no determinate order in which I must perceive the house. I can apprehend different parts of the house in any order. I can start at the bottom and proceed to the roof or from one side to the other. There is nothing that determines how I perceive the house.

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<sup>161</sup> It should be remembered that by the time Kant is discussing the Second Analogy in the first *Critique*, Kant feels that he has successfully established the existence of pure concepts of the understanding (the Categories) and that they can be synthesized or combined with representations of the sensible intuition.

In the case of ship sailing down a stream, each apprehension of the appearance of the ship changes from the preceding one. The first time I see the ship it is located in a specific position in the river. At some later time the ship has moved to a different location. Perceiving the order of the house is subjective, I am the one making the decision which part to see first then second, etc. In the case of the ship, however, the order of my perceptions, though still subjective, are objectively determined by what is happening with the appearance of the ship. As Allison notes, the two different perceptions do “not provide a basis for *distinguishing* (my emphasis) between successive perceptions of a state of affairs (e.g., a house) and successive perceptions of successive states on an object (e.g., a ship sailing downstream).<sup>162</sup>

The distinction between the two perceptions is one of “irreversibility.”<sup>163</sup> The order of perception of the ship sailing downstream cannot be reversed, otherwise it would be a different perception. (If the ship moved upstream, this would be a difference perceptual experience from the one I had). I cannot change the order of my perception of the ship’s positions. However, in the case of the house, I can willingly change the order in which I perceive the house. As Kant presents this example, the ship was previously at location A and it is now at location B, so, “B can be apprehended only as following upon A; the perception A cannot follow upon B but only precede it” [A192/B237]. This is still a judgement of perception. For it to become an objective succession, it must become a

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<sup>162</sup> (Allison H. E., 2008(1), p. 539)

<sup>163</sup> As Allison points out (Allison H. , 2004, p. 251), the concept of irreversibility is quite contentious. All perceptions are irreversible. What differentiates the house succession from the ship succession irreversibility is thought through the schema of causality; “the succession of the manifold (all parts of the ship) insofar as it is subject to a rule” [A144/B183]. The perception of the ship changes according to a rule. The house doesn’t.

judgement of experience. “The objective succession will therefore consist in that order of the manifold of appearance according to which, in conformity with a rule, the apprehension of that which happens follows upon the apprehension of that which precedes” [A192/B237].<sup>164</sup> As Allison explains this process, “This irreversibility results from subjecting the succession of perceptions to an *a priori* rule.”<sup>165</sup>

While both perceptions are subjective manifolds of appearance, the appearance of the ship whose position is irreversibly determined in time has a necessary order and therefore is an “objective succession.” The order of appearances is objective due to being subject to a rule, “[t]he objective succession will therefore consist in that order of the manifold of appearance according to which, in conformity with a rule, the apprehension of that which happens follows upon the apprehension of that which precedes” [A193/B238]. Since such an alteration (event) is determined to occur successively in time, and since this succession is necessary and cannot be otherwise, then this succession is objectively determined “according to a rule.” (Necessary is used here (metaphysically) in the sense of being strictly universal, or invariable). This is what Kant wishes to demonstrate. As Kant notes, “I render my subjective synthesis of apprehension objective only by reference to a rule in accordance with which the appearances in their succession, that is, as they happen, are determined by the preceding state” [A195/B240].

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<sup>164</sup> It seems to be the case that Kant is taking a subjective perception, and arguing that this determined order infers an objective succession. This comes primarily from him stating, “The order in which the perceptions succeed one another in apprehension is in this instance determined, and to this order apprehension is bound down” [A192/B237]. The suggestion is that by being “bound down” then the order is causally determined. As Allison notes, among other things, “if this is the case, then Kant is hopelessly confused, since it would commit him to the empirical idealism he adamantly rejects.” (Allison H. , 2004, p. 251) This is not what Kant is saying. He simply means that the judgement of perception is such that there is a perceived order to the relationship, and that this relationship is only valid according to a rule.

<sup>165</sup> (Allison H. E., 2008(1), p. 540)

In the B-edition, an argument is placed right at the beginning of the Second Analogy that, in my opinion, is much more lucid than some of the others. It does not make specific reference to particular perceptions, but argues for a more general understanding of the concept of cause. It begins at B233 and ends at B234. My interpretation of the argument is as follows:

When we perceive two separate things happening, we are aware that they occur at different points in time. Although we cannot experience time directly, we automatically connect events in our mind; ordered in a temporal succession, thereby determining that the first thing that happened occurred before the second thing. In other words, there is a temporal order to these events; they cannot occur any other way.

However, there are no characteristics or attributes that can be empirically perceived within the appearance of either event that can determine how one event could be connected to the other. It is our intellect that determines how appearances are connected and the objective order of our perceptions. Since that which determines the order of appearances in time cannot be found in the appearances themselves, then our mind must make this determination, that is, our mind must possess the conceptual structure to order our perceptions in time. The conceptual structure<sup>166</sup> that orders and connects our perceptions in time “is the concept of the *relation of cause and effect*” [B234]. The initial event is the cause, followed in time by the consequent event, the effect. This relation, not being found in empirical appearances, must be immanent within our intellect, that is, it must be an *a priori* concept. Therefore, it is the *a priori* concept of

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<sup>166</sup> The conceptual structure that I refer to here are the Categories, specifically, the category of relation, as well as the schema of causation.

cause and effect that is the rule for the connection and the objective ordering of our perceptions in time.

For Kant, the concept of cause and effect has far reaching ramifications for all knowledge. “Experience itself in other words, empirical knowledge of appearances is thus possible only insofar as we subject the succession of appearances, and therefore all alteration, to the law of causality; and, as likewise follows, the appearances, as objects of experience, are themselves possible only in conformity with the law” [B234]. It is not just the connection and the sequencing of specific events, but for all perceptions to become knowledge of objects, or experience, then all perceptions are subsumed under the concept of the relation of cause and effect.

I now return to the three questions which test the Second Analogy to see if it indeed meets with Kant’s proof of causation. The first question asked “Do we presuppose the truth of the proposition “everything that happens follows on something else according to a rule?”<sup>167</sup> The answer is yes, we do since for a succession of perceptions to be an objective succession we must presuppose that the mind possesses the immanent structure of a concept of cause under which the all appearances of events are subject according to a rule. This proposition stated in another way means that we do have the pure concept of the understanding of causality. Since this is true, the next question asks if we have the right to presuppose the principle that “everything that happens presupposes something else which follows according to a rule.” Is it true that there is a principle that states that if a moving ship is in position A, then it must follow that the ship would move to position B

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<sup>167</sup> (Longuenesse, 2005, p. 22)

according to a rule? As Kemp Smith explains, “the principle of causality, as deduced by Kant ... is the quite general principle that every event must have *some* cause in what immediately precedes it.”<sup>168</sup>

We do not have to know what the specific cause is, just that the general principle of causation is applicable. The argument from the B-edition brings this out clearly since it is an argument for the general concept of a causal connection of appearances, when Kant writes, “objects of experience, are themselves possible only in conformity with the law [of cause and effect]” [B234]. As Longuenesse explains, “the complete determination of the spatio-temporal position of objects and their states is achieved only by the universal correlation of appearances determining each other's state, according to rules.”<sup>169</sup> So, Kant was successful in proving the principle of causality in the Second Analogy, if we consider that he was only trying to demonstrate the general concept of a causal principle.

The third question deals with the particular form of the principle of causation; the same-cause-same-effect principle. Given that we have an *a priori* concept of causality that we can apply to any given appearance, is it true that we can presuppose, that from given perceived regularity (such as sunshine warming stones), we can assert universal causal law (such as sunshine causes stone to become warm)? Kant never really stated that we could determine causal laws since there is no guarantee that an empirical regularity can inductively validate a necessary connection. That there is a necessary connection is Kant’s argument in the Second Analogy, just not that a particular regularity can determine a universal causal law. As Longuenesse states, “what the principle does tell us

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<sup>168</sup> (Kemp Smith, 1962, p. 364)

<sup>169</sup> (Longuenesse, 2005, p. 22 )

is that all events do obey such necessary connections, because without them there would be no unity or continuity of empirically real time, and no complete determination of empirical events (no individuation in time).”<sup>170</sup> Kemp Smith explains this well when he states, “What each special case the cause may be, can only be empirically discovered; and that any selected event is really the cause can never be absolutely certain.”<sup>171</sup> In this, both Hume and Kant are in complete agreement.

So what Kant has achieved is that the Causal Maxim (*whatever begins to exist, must have a cause of existence* [T1.3.3.1/71]), for which Hume could not find any *a priori* foundation because it was a synthetic matter of fact, has been successfully proved to be a true presupposition for all events in time. What was a subjective propensity of custom for Hume, is an *a priori* condition for the possibility of knowledge for Kant. In my opinion, Kant was successful in arguing for cause to be one of the synthetic *a priori* conditions for the possibility of experience.

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<sup>170</sup> (Longuenesse, 2005, p. 22 )

<sup>171</sup> (Kemp Smith, 1962, p. 364)

### Concluding Remarks

I think it is interesting to note that David Hume, not unlike Immanuel Kant, binds a sensory impression (constant conjunction) with an inner impression of reflection (the necessity of the determination of the mind) in order to provide a full explanation for the necessary connection in a causal relation. The difference, of course, is the origin of necessity.

Since Hume believes passion governs our thought more than reason, the idea of the necessary connection between a cause and its effect must be born of an emotional determination; a feeling. Upon experiencing the idea of a constant conjunction of a causal event with its effect, we experience a feeling as a determination of the mind; a feeling that allows us to move from the idea of a cause inevitably to its effect. Both the sensory impression of the constant conjunction and the impression of reflection of necessary connection of a causal relation are required in order to fully appreciate the nature of a cause.

Kant also argues for two faculties responsible for knowledge: sensation and intellect. The faculty of sensation provides the sensible object of the intuition. The intellect provides the *a priori* concepts of the understanding: the faculty of thought. Both are required before there can be the possibility of knowledge. So to understand that a causal event has taken place we must first be given a sensible intuition of such an event, then this *given* is combined with the category of cause, one of the *a priori* concepts of the understanding, which necessarily connects the effect to a previous causal state of affairs. By cognizing an event in this manner, experience is possible.

Both Kant and Hume require a sensible perception to be combined with an internal operation of the mind before we can fully appreciate the experience of a causal event. The origin of the necessary connection for Hume was passion, for Kant, an *a priori* concept in the understanding. I have argued that the *a priori* concept that Kant espouses provides a more plausible and objectively valid reason for understanding the concept of cause.

In the Second Analogy, Kant argued for the *a priori* nature of the necessary connection between a cause and its effect. What was a subjective propensity of custom for Hume, is an *a priori* condition of objective validity for the possibility of knowledge for Kant. The Metaphysical Deduction argues for the *a priori* concept of cause in our faculty of thought, the understanding. The Transcendental Deduction argues for the synthesis of pure concepts of the understanding, such as cause, to sensible appearances so that these appearances can become objects of knowledge. The Second Analogy, in its attempt to describe how this may occur, weakens the notion of necessity. Although Kant's arguments in the Second Analogy may not have established a clear necessity between a cause and its effect, I believe he was successful in arguing for the general concept of cause to be one of the synthetic *a priori* conditions for the possibility of experience.

While I think Kant came close to establishing the fact that we can think an objectively valid causal relation, I do not think that we can profess to know the particular applicable causal law. In any particular state of affairs, it becomes a subject of inductive study and reasoning for what is responsible for the necessary connection between a cause and its effect. Any attempt to make a particular state of affairs universally valid is an

attempt to take something that appears to be and transform it into what one thinks it ought to be. While the category of cause may provide an epistemic warrant for the necessity of a causal event, it cannot determine which rule is applicable in a particular state of affairs. That is a subject for science, not metaphysics.

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