

Circles In The Air

A Corroborative Exposition of the Second of the Three Parts of the First (the A) Version of Kant's Transcendental Deduction of the Categories (TDA) from his Critique of Pure Reason and With Special Emphasis on the Last of the Four Sections of the Second Part)

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Note: This is an expanded version of an essay originally appearing in *Kant-Studien* in 1996.

Here is an English translation of the entire [A version of the Deduction](#) itself (Appendix I.2, beginning on or near page 710). And see especially the comments to this Deduction (Appendix II.3, beginning on or near page 802).

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Introduction and the Awakening of Kant by David Hume

Near the end of his highly influential *Enquiry Concerning Human Understanding* David Hume makes a rather candid admission regarding a major deficiency of the empiricist system of knowledge which he had just expounded in that very essay, namely an inability to account for the constancy of the objects of human experience and for their independence from the viewer, one of the most primitive and fundamental facts of human experience, and one which he describes as follows:

"The table, which we see, *seems* to diminish, as we remove farther from it; but the real table, which exists independent of us, suffers no alteration: it was, *therefore*, nothing but its *image*, which was present to the mind."¹

The problem, Hume continues, is that nothing in addition to the images of the table is given to him which might be set in opposition to those images as the table itself on its own, such that he were then able to recognize that what he see is merely an image.² Now the simplest and, by far, the most intuitive course for Hume would be to take the image for the object, i.e., as a thing on its own, a thing which changes shape and size depending on distance. But Hume does not do this (any more than we do), but instead comes up with the notion of a uniformly existing object which is independent of the perceiver; but does so in a way which is inexplicable to him. In a word: Hume cannot account for the very object which is the source of knowledge per his own system, i.e., experience with objects.

It might be quite fruitful to characterize Immanuel Kant's Transcendental Deduction of the Categories as an attempt to solve Hume's problem, and to do so by providing a bridge between the image which is given to us (and indeed which is all that is ever given to us) and the uniformly and independently existing object which is not given to us (and which in fact could be entirely imagined), and the knowledge of which we most certainly have as the necessary basis for making the very distinction between image and object that Hume is referring to; and without recourse to any notion or recognition of an independently existing object, such as a table, which (notion) were with us at birth, i.e., without recourse to traditional rationalism, which both Hume and Kant had already independently rejected as inadequate for other reasons.

In his earlier days Kant would most certainly have utilized the rationalist assertion (per Wolff and Leibniz) of an innate knowledge of specific objects, e.g., table, in order to recognize that Hume's table were enduring and unchanging and that what was in view were merely a confusion of the senses. But subsequently, after realizing the incapacity of the rationalist to differenti-

¹ *Enquiry Concerning Human Understanding*, XII.118, 3rd paragraph; emphasis added.

² One might think that a drawing of the table would serve as an example for Hume; but the drawing (or color photograph for us today), subjectively speaking, is no different from a host of actual sightings of the table, each of which is slightly different. Indeed, according to the parallax theory of stereographic sight, once an object is some 50 meters away, depth perception vanishes and the mental image is as flat as any drawing, and thus is no more similar to the same table close up than is the drawing.

ate the left and right hands,³ he conceived of a rather ingenious, middle path between empiricism and rationalism in which the objects of the world appeared in space and time (independently of the intellect) and then were joined by the intellect into systems of objects through the application of certain, general laws of our understanding (which could be abstracted and enunciated by attending to the actual workings of the mind in experience). This called for a subjugation of the objects of sense to the intellect by means of these laws. Eventually Kant gave formal expression to this theory in his *Inaugural Dissertation*.⁴ But shortly after publication of this dissertation, Kant recalled the devastating attack on the assumptions of such subjugation in Hume's *Enquiry* and rethought and reformulated his entire system over the next several years to a degree where the senses no longer presented objects, but only empirical elements (Hume's "images") which, when subjected to a certain connective treatment (called synthesis), were mentally provided with an object (subjectively a product of the human imagination) and thereby transformed representationally into sightings or appearances of that object. The details of this system are outlined in that section of his *Critique of Pure Reason* (*CPR*, Appendix I.2 on or about page 710) called the Transcendental Deduction of the Categories (a category being one of the mental modes for combining these elements into objects and into systems of these objects, and also of thinking about these combinations, e.g., total, substance, causation, possibility). It is to the exposition of the Transcendental Deduction in the first (A) version of the *CPR* (TDA), and more particularly to the second of the three parts of that work (TDA 2nd Section⁵) that this essay is dedicated.

Appearances

A certain, preliminary grasp of the pre-object world conceived of by Kant is utterly necessary in order to understand his argument in the TDA. One of the most suggestive terms for what we are initially faced with (speaking subjectively, from the standpoint of a perceiving subject) is ap-

³ The description of each of a person's two hands fits the other equally well, which means that the two are indistinguishable, intellectually speaking, and yet the two are obviously different, but which difference can only be discerned via a perspective in space, i.e., it is an *internal* difference but which can only be discerned by an *external* perspective. But space is a non-thing, according to the rationalist (Leibniz), and entirely a relationship among actual things (like hands), and hence is not available within that system for making this left-right distinction, i.e., by taking a look. Incidentally for another utilization of Kant's left and right hand concept, see [The Trinity Is No More Absurd The Left And Right Versions Of Hand](#).

⁴ This [Dissertation](#) was composed in conjunction with Kant's elevation to the chair of Ordinary Professor of Logic and Metaphysics at the University of Königsberg and was presented to the school in August, 1770.

⁵ Appendix I.2, 2nd Section, beginning on or near page 710.

pearance⁶ (*Erscheinung*), and precisely because what we see, as Hume noted above, does not exist on its own in the way we see it, but is more like a ghost which exists only in our brainariums.⁷ The real table that Hume never sees (and thus can only think) presents only appearances to his eye which vary according to the distance and angle and illumination of his looking. That these appearances change shape and size with his every move is one of the clearest and most intuitively appealing impressions of our senses. It is only through judgment and thinking that we let these appearances represent objects to us, instead of being things on their own as they appear. Thus the quickest way, perhaps, to grasp the notion of appearance is to eliminate from the impressions of the senses all references of judgment, especially the terms "appear" or "look like" or "seem." According to this procedure telephone poles will not simply *seem* to expand and move toward us as we move toward them, they will actually do so on their own.⁸ And my tongue will not merely *seem* like a serpent darting in and about rows of whitish stones (my teeth) when the cave (my mouth) opens beneath the frog (nose) clinging to the front of my head below the two cave-encased snails (eyes), but be one, etc.⁹ One helpful rule in this regard is to consider whatever appears as different to be different, i.e., a totally different thing. In this way, accordingly, I before a bath and after a bath, and myself in a blue suit and then in a

⁶ And not "image," which is not quite accurate. The "table" on my retina is called an image for it corresponds to an actual table which stands before me, but the rainbow (to use Kant's own example) in the eye (or in the camera) has no corresponding object in the rain and vanishes as I change my distance from the rain and even as I blink my eyes) and, therefore, is not an image but merely an appearance. And so while all images are appearances, not all appearances are images. The term is well chosen, for as the rainbow does not exist except in the perceiver and is dependent upon a particular position of viewing or perspective of the rain, so Kant generalizes and speaks of the appearance, which (transcendentally speaking) includes the rain itself, as that the existence of which is dependent upon perception. Thus the various images of Hume's table (or of the rain) have no existence apart from a perceiving mind (which, at first glance, *seems* to bring us back to the idealism of Bishop [Berkeley](#) [although, as will become clear, actually does not]).

⁷ This term "brainarium" was not used by Kant and was suggested through my readings of Arthur Schopenhauer. The term is best understood in this way: light from a source, e.g., the sun, strikes an object, e.g., a tree, and some light is absorbed by the tree and the rest is reflected. Some of the reflected light enters my eye and is projected via the lens onto the retina with the left and right, and the up and down reversed, respectively. At the retina the light is changed into impulses which travel along the two optical nerves (also with a reversal, i.e., the right eye impulses going to the left side of the brain, etc.). Within the brain a correction is made for all of the reversals and an image of the tree arises in a panorama which encompasses the universe of my sight, ranging from the Big Dipper to the tree to a table within my house. This panorama within the brain I call the brainarium. It is similar to a planetarium, except the brainarium is far more extensive.

⁸ I sometimes consider such as this to be the animal take on appearances, i.e., appearances are considered as real things just as they appear, and contrast this with the human take on or perspective of appearances, i.e., where the appearances are not treated as real things, but only as the representation of real things, how real things appear to us via our perspective.

⁹ The marvelous paintings of Giuseppe [Arcimboldo](#) (1527-1593) strongly suggest this way of looking at things. In his "Water" a human face, upon closer inspection, reduces entirely to a swarm of diverse sea creatures. Likewise a very emphatic example of spectral data is obtained by watching high speed traffic from an overpass; when about 50 meters or so from one's vantage point there is a dramatic, sudden and even humorous alteration in the size and shape of the vehicles (as perceived).

brown suit will be different beings.¹⁰ Conversely we will take whatever appears the same to be the same, i.e., the very same. Thus instead of appealing to any mistaken identity, where someone looks like me from a particular angle (which is also like noticing that a child has the nose of the father and the chin of the mother), we shall now for the moment treat chins and noses and eyes and profiles as things on their own which flutter about and alight here and there.¹¹ The result of all this, briefly stated, is the abolition of all objects of human experience in favor of sheer appearances (which [like the images of Hume's table] do not even themselves exist on their own, but only within us, i.e., within our brainarium).¹²

Perspective (*Anschauung*)

Another concept which is critical for an understanding of the TDA (and which will also shed light on the meaning of appearance) is that of perspective or "take" (*Anschauung*, the at- or on-look and usually rendered in English translations of Kant by "intuition"¹³). For a rapid grasp of this term we might draw a [Necker Cube](#). Now I say that whether someone sees the drawn figure as flat or in space depends upon that person's perspective or take; and if in space, then it is also a perspective or viewing as to whether the drawing is seen as the outside or the inside of a box-like structure. Generally speaking when someone looks at some object, the perspective/*Anschauung* is what that object represents to the onlooker.

This exercise exemplifies some of the essential aspects of the perspective, e.g., that there are various ways of looking at something. And, as we might expect, it also indicates that there is no

¹⁰ A very interesting consideration! For accordingly it might be easier mentally to associate me when in a blue suit with my father or brother or even a stranger in a blue suit than with my own self (naked) at bath or in brown suit and, therefore, it might easily be possible that some beings, e.g., dogs, never realize that many of the appearances of myself are one and the same person at all, but rather see a world of countless similar and yet still distinct persons (or even twins or clones [but who, it so happens, never appear together at the same time!]): some tall (close up), some small (far away), some smelling this way (before a bath), some smelling that way (after a bath), etc., *ad infinitum*, but with enough similarity to induce a fairly constant sense of ease among all of this diversity. Hume's notion of family resemblance is highly provocative in this regard.

¹¹ I may suddenly see a 5 meter long lizard by a river bank and then notice upon closer inspection that the lizard has vanished and has been replaced by a log remotely shaped like a lizard. And only time will tell what the log/lizard will turn into next (according to this way of thinking about things); for nothing in the lizard/log picture suggests any ultimate reality before my eyes any more than my skin appears as some sort of ultimate garment in comparison to the layers of clothing I might be wearing. The computer technique of morphing, e.g., replacing one face with another without perceivable interruption, models this psychological phenomenon especially well.

¹² And which the reader must thoroughly grasp (conceptually) in order to expect progress in understanding the TDA.

¹³ The original and published essay of "[Circles In The Air](#)" (1996) utilized "perspective" for the Kant's "*Anschauung*". I have thought the term particularly appropriate due to the suggestion of "putting a face on something", sort of "en-face", as it were, e.g., to en-face a cloud; and far more so than the more traditionally rendered "intuition" which, regarding a face in the cloud, might even be misleading. Intuition can work, of course, if we understand it to mean what we glean or take from some sighting, e.g., our take on the cloud. For more on this see [Kant and the meaning of the *Anschauung*](#) which can be very helpful in comprehending what the Germans and Kant mean with the *Anschauung*.

guarantee that any two persons will ever be able to see things in the same way.¹⁴ I may spy a face in a cloud and describe it and point it out to you with great precision and yet you may never be able to see that face. Perspective needs also to suggest here the suddenness of a particular representation. If you are finally able to spy the cloud face, the viewed object suddenly arises in the same way that the "box" that was drawn above ([Necker Cube](#)) suddenly pops up and comes into sight. Furthermore a perspective of an object will always comprise a manifold which is seen as a singularity where, for example, the lines of the sketched box in the example or the various elements of the cloud face (or any face) or the seven stars of the Big Dipper are all components of a single object, respectively. Finally there is a certain forcefulness and naturalness to the perspective. When the Big Dipper or the face in the cloud comes into sight, it is seen quite clearly and as though it were actually there objectively in the sky or the cloud on its own, respectively, and where I simply had not been looking "in the right way" earlier. And so it is with the "box"; and although I know that my imagination is at work in whether the box protrudes out toward me or away from me, I do not simply imagine that I see it in the way I do; for the appearance is quite clear and, once spied, (almost) unavoidable.¹⁵

Surely the most profound perspective, and one that is common to all humans (and which may even be unique to them), is seeing things in space and time. It is certainly a perspective (a way of looking at something) as to whether I see two objects as merely different (colored differently, perhaps), or whether I also see one of them to the left of the other;¹⁶ or whether I see a table or an empty table. And it is equally a perspective as to whether I notice the cup of coffee in my hand and nothing else, or whether I notice that it is the third cup this morning, or the first after having heard the sound of my children scurrying about, etc. Once I begin to see things in space and time (and that will have occurred suddenly) the perspective of that is so forceful that it will be almost impossible to see them in any other way or even to imagine a world in which things did not so appear; which prompts the very natural conclusion that things are in space and time

¹⁴ This constitutes a major task for the [CPR](#), namely to explain how it is that an objective perspective is attained which, therefore, were object-based, but where there are no objects in sight as things on their own, but only appearances (*Erscheinungen*); for the appearance is an object only as a representation, in the same way that a dream can be an object (of conversation or inquiry), but not otherwise (see [CPR](#), §3, paragraph 3, 2nd sentence, on or near page 717).

¹⁵ I sometimes tell my friends that when I discipline my dog with a rolled up newspaper she looks at the newspaper as acting on its own, while my hand (which normally pats and rubs her so nicely) is trying to restrain the newspaper and protect her. My friends laugh at this and think I am silly. But once they come to understand the meaning of the perspective/*Anschauung*, they realize that it might not be so silly after all, and that if different beings can see different things in the clouds, they might very well look at all things quite differently. Thus originally for us (and perhaps always for the animals) a person will not be seen to go through a room, but rather a head and a shirt and a hand, etc., will glide by individually such that they are actually independent of each other and, at most, subject to (a subjectively seated and perceived) association but not to any necessary connection. Spectrally speaking these (garments and parts of my body) are all quite independent of each other and, as far as I might know, able to go their separate ways on their own, like individual birds in a flock. In fact we might think of them as such with this one difference: here (with the parts of my body and my clothing) it is birds of an *unlike* feather that flock together.

¹⁶ Imagine two people, who don't realize that perspective is essentially subjective; then it is easy to think of them as arguing about which of the two is here and which is there, for each will insist that he or she is here and the other is there.

on their own even as it seems that the face spied in the cloud is actually in the cloud (although we know [as experienced adults] that it is not).¹⁷ Now if space and time were really the "containers" that Newton and the empiricists (and perhaps even a younger Kant) would have had them be, i.e., which really "existed" on their own apart from us, then unless there were an intuition of these two, infinite, all-reality-containing, non-existing things (a rather bizarre use of the term "intuition"¹⁸), it would be impossible ever to take notice of them. And therefore, even granting (for the sake of argument) the actuality of a space and a time which were independently real on their own, our own knowledge of them could only arise if they also were perspectives embedded in our sensitivity.¹⁹ An analogy here might be the light in the refrigerator which comes on every time the door is opened, prompting the thought that it is on all the time. Likewise every time we look at anything we are seeing it in space and/or time, and so it is easy to think that space and time are always present whether we are looking at something or not.

In a close parallel to this consideration, we (like Hume) are all very certain of the existence of Hume's table as a thing which is independent of our looking, and yet such information could not possibly have arisen in experience, for all we ever have from that quarter are the ever changing appearances of the table. Our certitude, therefore (as Kant will endeavor to establish), will be based on some undertaking by the mind; but this is not to say that the independence of the table is an illusion or only imagined; the table truly exists as a uniform object and independently of the perceiver, but (and this is the point) we know this not because of some intuition, as it were, but rather because we imagine it to exist in that way and, thereby, are able to explain and see (by looking at) the appearances as sightings of that (imagined) really existing table. Thus we paradoxically imagine something which is (imagined to be) independent of our imagination and

¹⁷ As Kant himself observed (*Dissertation*, II 404), if we wished to mentally fabricate a world which were not in space (as we have just been doing in this essay in an attempt to grasp an appreciation of the concepts of appearance and perspective), we would still have to utilize the concept of space as a means to do that. When I, for example, imagine that things actually grow smaller as they get further away, the "further away" and the "smaller" are themselves, of course, spatial expressions. (A humorous consideration of a different way of looking at things can be found in the short addendum to the Appendix II.2 in the [CPR](#), entitled Captain Hook and the Rainbow).

¹⁸ [CPR](#) Aesthetic, No. 8, General Remarks, sentence 9.6, on or near page 77.

¹⁹ It is interesting that Kant in earlier and later works (but not in the [CPR](#) itself) stressed that it would be impossible to discern the various regions or directions of space without reference to one's own body. For example we can notice that things are in front of us or behind us, and that they are above us or below us and that they are to our left or to our right. Now (in an effort to make this clearer) suppose we could not discern or notice left and right; then we would still see that a waterfall, for example, were in front of us and below us in a valley, but we would not be able to discern that something were to the left of the waterfall, but only that that something were here or there (pointing) or to the side of the waterfall. This discerning of regions is both subjective and objective in that we are able at any time to divide the world into the eight regions corresponding to the three dyads of up-down, front-back, left-right, and are able to correlate our regions with those of another person, e.g., her left might be to my right. We formalize this by picturing and perspective (via our imagination) three planes at right angles to each other. And this is the basis of geometry and all figuring in space and geography.

perception, a so-called transcendental or critical idealism.²⁰ And the explanation of this work of our productive imagination, and how it is that it is nonetheless objective and can produce an objective perspective of an object, even though imagination, is one of the primary tasks of the Transcendental Deduction.

All thinking, Kant informs us, is aimed at producing a perspective of an object, for the perspective is the (very forceful and natural) evidence of the object itself, the immediate contact with it and what we actually see when we take a look at the object (*CPR*, Aesthetic, on or near page 45). The correspondence of a concept (of some object) with a perspective is called a recognition or knowledge (*Erkenntnis*) of that object (*CPR*, Transition to the Transcendental Deduction of the Categories, on or near page 123). When I look at an outstretched index finger, I can see any number of things depending on my perspective: a finger, a scratch, a color, a finger nail, an index finger, a representation of the number one (or perhaps the number 11 when counting from 7),²¹ a pointing finger (where the finger serves as the first of two segments of a straight line, i.e., a ray, the second of which is not only entirely imaginary, but the far end point of which "touches" some distant object), and so on ad infinitum.²² When what I am looking at (a perspective) corresponds to what I am looking for (a concept), then I recognize an object (thus which is thought via the concept and seen in the perspective, and where the concept is validated by the appearance in the perspective).

Recognitions

A recognition (also: objective perception) is either pure (and hence also a priori--advance of experience), or it is a priori and not pure (thus having an empirical component), or it is entirely a posteriori (based on observation). For example, I can picture the imaginary plane outlined by the frame of an open door and constituting the boundary between an inside and an outside of a

²⁰ Which, since the objects are thought to be independent of perception and, therefore, also independent even of the perception of God, is quite different from the dogmatic idealism of [Berkeley](#) for whom there was no (external) object at all, but merely diverse perceptions which might be referred indiscriminately to the same term, e.g., table. According to the transcendental idealism of Kant, on the other hand, we dream up an object which is conceived to be a non-representation (not dreamed up), but rather a real, independently existing object which then in turn becomes the basis for a perspective in which we actually spy that object, but always only as it appears in space and time, as Hume did with his table. So the table really does exist (empirically speaking), but which existence (transcendentally speaking) is merely a representation, but, again, of a non-representation (all of which is obviously very difficult to express and hopefully will become clearer as we proceed).

²¹ Letting the little finger represent 8, for different cultures denominate the fingers differently.

²² This consideration belies the empiricist's assertion that knowledge of the object arises merely from an exposure to the object, for what is seen as object is always a function of the perspective, which is within us individually. Everything we know relates back to the *Anschauung*/perspective/looking-at.

room as a pure recognition, i.e., devoid of all empirical content;²³ the actual entry (movement) of an object into the room (through that imaginary boundary/plane) as an a priori recognition (but not pure, due to the need for the moving object); and the physical capacity of that object to make such movement (which constitutes an experience with that object) as an a posteriori recognition.²⁴

The Transcendental Deduction of the Categories, Version A, 2nd Section

I now turn to the TDA proper and will give an example of the recognition of an object via a pure perspective in order to exemplify the subjective components of a recognition generally as delineated in [CPR](#)) The object will be a circle (loosely speaking--more precisely: a plane loop) drawn in midair with the tip of a finger. I call such an object a "pantomimic" and in this case will use the analogy of a traditional (analog) clock to illustrate the mechanics of the construction.

1. Synthesis of the Apprehension in the Perspective²⁵

The first, subjective step in seeing a pantomimic circle (our object) is to apprehend the elements, and this calls for a certain differentiation of time. I must ignore the movement of the finger tip (during the time) as it moves to the 12 o'clock position (all in midair), and then attend to it as it moves from the 12 to the 1 o'clock position and on back around to 12; after which I must again ignore it. This is obviously an action of the self where the capacity for understanding determines the inner sense in distinguishing between the relevant and the irrelevant in relations of time. Without this capacity and the mental action issuing from it there would be no beginning, expanse and end to the object, subjectively considered, and thus no apprehension.

²³ This imaginary plane can actually be "seen" by looking at its position in space within the door frame, i.e., where the door would be if closed; this usually calls for a sighting which feels slightly cross-eyed.

²⁴ These examples also provide us with an easy distinction between space as the way we look at and see things, e.g., in relations of space where the entering object goes from one side of the door, and then through the doorway to the other side (which relations are entirely Ideal); and space as a perspective in its own right, as an object (also entirely Ideal), which is exemplified here by the invisible plane delineated by the door frame and by means of which alone any reference to the two "sides" of the room (the inside and the outside) is meaningful, and upon which also figures might be "drawn", as we shall shortly endeavor to do.

²⁵ Appendix I.2, 2nd Section, 1. beginning on or near page 713 of the [CPR](#).

2. Synthesis of the Reproduction in the Imagination²⁶

Secondly I must keep the apprehended elements in mind, remembering and recalling the 12 position when at 1, and the 12 and the 1 when at 2, and so on. And this is more than a recall of a cluster of positions, a 6 (position) and a 1 and a 10, etc.; it is an *ordered* grouping of the elements, i.e., it is the path of the finger.²⁷ This retention not only enables me actually to apprehend all the elements as a group (thus facilitating the apprehension itself), but independently of this (and very importantly) provides a fodder, as it were, for the machinations of the productive imagination in the next step toward recognition.^{28 29}

3. Synthesis of the Recognition [Rekognition] in the Concept³⁰

Thirdly (and finally) I must not only keep all these elements in mind, I must remain aware of what I am doing, i.e., I must grasp all these elements together as a unity or total, which requires a certain presence of mind;³¹ in other words I must conceive of (dream up via the productive imagination) an object such that the elements apprehended and reproduced are necessitated, i.e., the elements of this thus far only subjectively valid and tenuous manifold (held together at first by rote, as it were) are transformed into components of an object. Hence the object must be provided,³² i.e., conceived of. This comes in the form of a concept called the circle (which denotes a unified consciousness of the otherwise disparate elements, a critically important aspect which will be discussed shortly in some detail). This concept is merely a rule for producing such a perspective, and it encompasses all the manifold attributable to it. We might call the figure a uni-

²⁶ Appendix I.1, 2nd Section, 2., beginning on or near page 714 of the [CPR](#).

²⁷ Paradoxically I must actually ignore the finger (the only empirical object present); for as long as I concentrate on the finger I miss the circle. I have to look at the "plane" on which the circle is being "drawn" or pointed to (and which here is entirely imaginary, a pure perspective).

²⁸ Incidentally we have here a pure manifold (*reine Mannigfaltigkeit*), a grouping or plurality which is sensitively, but not empirically, provided, namely the path of the tracing finger.

²⁹ There is another element here which is not presented until Par 9 of the 3rd Section of the TDA, namely that I don't simply reproduce, but also associate in an attempt to come to a synthesis which then can be necessitated by the introduction of the object in the recognition in 3. below. For example, I may hear a honking horn and turn to see an automobile, but I don't reproduce these in this order, but rather realized that the automobile must be first and then the honking. I touch on this in the second paragraph of page 23 below.

³⁰ On or near page 716 of the [CPR](#).

³¹ Such that when I have finished, my mind is not simply focused on the last element as the last of several, but rather I must understand that a total (unification) has been achieved. In counting to 12, for example, the 12 is not simply to be the last of a series of numbers, but rather, if we are talking about addition, is to encompass all of the others as a unity, i.e., not the 12th of 12 items, but the total of 12, i.e., all of them together. This prompts a recall of Hobbes' "village idiot" who, upon the striking of the clock for the third hour, is able to state quite correctly, "one one one," but not "one two three".

³² The rather remarkable principle underlying all of this, namely that there is more here than meets the eye and, therefore, more than a mere finger or even a moving finger, will be discussed later when we come to the notion of empirical objects.

form plane line without endpoints which encloses a space,³³ e.g., "starting here we begin drawing and continue on around until we come back where we started," to which sounds or words nothing corresponds except a pure perspective.

Briefly then: we apprehend and retain and associate a manifold (which as such is only arbitrary, a merely subjectively valid perspective); we work on this manifold via the productive imagination and arrive at a synthesizing object (the concept/rule) such that we can both necessitate the manifold (transforming the otherwise independent elements into elements of the object) and identify an object in the perspective (making an example or sighting out of the manifold); whereupon finally we see and recognize the object (the circle) and a "light goes on" much as when we finally and suddenly see a face in the cloud that others have tried to point out to us. The subjective perspective has become objective (a recognition) by the addition of the object (which really is the comprising concept) to encompass or embody, i.e., necessitate, the manifold of the perspective and to enable us to point it out in space as a singularity. For we actually do "see" the circle and are able to show others (which is a mark of objectivity), and if someone else cannot see it, we say they are not "looking right;" and all the while admitting that there is nothing there. Indeed it is a pure perspective which differs from a face in the cloud (or even a face on the front³⁴ of a person's head) only by the face, as an empirical object, being constituted by certain textures, shadows and contours which are entirely absent with the pantomimic.³⁵

Turning from a pantomimic with its pure manifold to an empirical object we can now also imagine how Hume might have formulated and thereby first recognized a table. In an exact (though empirical) parallel to the provision and subsequent recognition of a pantomimic circle, he will (while a child) have noticed the use of the term "table" when certain appearances were in sight, and will have slowly associated and isolated and apprehended a particular manifold (through trial and error), and eventually will have conceived of a rule for the assembly of a flatish surface and some columns into an object called a table, whereof these elements (a manifold) became the top and legs, respectively.³⁶ The result of this concept/rule would be (1) the necessitation of the manifold in his perspective by mentally transforming them into parts of the table,

³³ If we did not include "encloses a space" this definition would also hold for an infinite straight line.

³⁴ And "front" itself is an Anschauung/perspective, a way of looking at someone's head. It is not contained in the head itself, but only in the way we look at or view the head. And actually the same thing holds for "head".

³⁵ And for which reason we say that while both are sensitive, the pantomimic circle is pure (being rendered through merely one of the forms of the looking, space) while a human or cloud face, with its textures and shadings, is empirical.

³⁶ Hume will likely have confused chair and table at first, and (as a result of confirmatory trials and experiments) will have heard such comments as, "No, that's a chair; see the back; tables don't have backs," whereby he would have realized that what he thought was a table was actually another piece of furniture, and examples of which were tables and chairs. (Also we see here the provision of an empirical manifold before the object, and thus presumably the solution to a problem involving an unsynthesized manifold which was raised by [Robert Paul Wolff](#) in *Kant's Theory of Mental Activity*, pp. 157-9.)

where before they were joined merely arbitrarily and contingently,³⁷ and, of equal importance, (2) the capacity to make an identification of a table among the appearances and thereby to recognize it, and indeed as independent of the perceiver.³⁸

Generally speaking (and this per Par. 5 of this No. 3 part of the 2nd Section) we recognize an object when we have effected synthetic unity in the manifold of the perspective, and this in turn is only possible if the perspective can be produced according to a rule through such a function of synthesis that makes the reproduction of the manifold necessary a priori, and a concept uniting the manifold possible. The circle is a plane and uniform line which has no endpoints and encloses a space. This determines the manifold (given in the apprehension and reproduction) and limits it to conditions which make the unity of apperception possible and the concept of this unity is the representation of the object via the predicates of the circle. Likewise the rule/concept for the table, i.e., an elevated flat surface convenient for human use, determines the manifold and limits it to conditions of the unity of apperception, and the concept of this unity is the representation of the object (originally something in general = X) via the elements of the table.³⁹

Now once given an object, e.g., a table, it becomes possible to develop experiences with that object. In the same way that the young Hume will have accumulated, retained and unified the elements of table, transforming them thereby into parts of the table (by mentally providing the table itself to his perspective via a concept), he will have noticed certain relationships of the table through experimentation and trial and error, and will have discovered not only that the top is always up (a perception), but also must be up (which is an experience with, and not contained in the just developed concept of table).⁴⁰ This further necessitation beyond that embedded in the concept of the table itself, which is added synthetically to that concept, would have arisen when he learned (realized) that a table serves to support items at a height suitable for certain human activities, e.g., dining, and, therefore, must of necessity be upright.

³⁷ Much as we might spy particular configurations of textures and shadows in clouds, but to which no object corresponding to them comes to mind (in contrast to the face in the cloud which is a determined relationship of nose, eyes, etc., due to the empirical concept of face) and which, therefore, never make a strong and lasting impression, but rather tend to be immediately dismissed as sheer imagination and forgotten.

³⁸ What is generally called the subjective deduction ends with paragraph 2 of the 2nd Section, 3. And now with paragraph 3 we begin the so-called objective deduction. See the [CPR](#) Appendix I.2, beginning on or near page 716.

³⁹ We would originally be conscious of each portion of the circle and likewise of the legs and surface of the table. By means of the rules we unified the elements of each into a single consciousness, respectively, where the perspectives now represent the two objects, i.e., circle and table.

⁴⁰ A critically important distinction, touching the heart of this article, and which will be discussed below.

The result of the necessitation (be it of the object or of the experience with the object) is a given and fixed manifold from which, oddly enough, deviations can then occur.⁴¹ The object of the empiricist, in contrast, is a constantly developing and shifting mean or average of all observations ascribed to the object (based on felt similarity). Thus there can be no deviation but only a variation about this developing mean. For example, no table can be broken and in need of repair, according to strict empiricist thinking, for the wobbly state of a(n actually broken) table would be merely one of the several observations going (continuously) into the conceptual makeup of the object in the first place, e.g., while sometimes the table is stable, at other times it is wobbly.⁴² It is only through (the concept of) a determined, definite object that a deviation can occur, e.g., that a table can be broken and in need of repair. And so, paradoxically speaking, it is only the necessitated objects of human recognition (sheer representations) that can be "out of whack or kilter" and in need of explanation, e.g., "It's no wonder the table is on its side; one of its legs is broken."

We can see a parallel now between the conception of the object and the extension of knowledge concerning the object (which constitutes experience with the object). We apprehend and treat the spectral elements (appearances) of an empirical perspective by means of a synthesizing concept/rule such that the elements are transformed into parts or elements and thus can be derived from the concept⁴³ and also that an example (a perspective) can be identified. Then we likewise apprehend and treat the elements of an empirical perspective (where the elements now consist of the objects themselves [earlier conceived and recognized], e.g., the relationship of the table to the floor, i.e., that the top is parallel to the floor and holds items at a height convenient for adults when seated), in an equally synthesizing way such that new predicates are attached to the concept with a force of mind equal to that which binds the spectral elements originally in the object by means of the concept; and thus providing a necessitation of the manifold and examples for exemplification in an experience with the object just as did the original synthesis of the spectral elements via an object. [Here, with the experience, the necessitation, since it is empirical, means only that violations are deviations and must be explained, and not that the necessity is apodictic (a prerogative reserved by Kant for the category, and which will be discussed later).]

⁴¹ See [Robert Paul Wolff](#), *Kant's Theory of Mental Activity*, pp. 121-125, for an excellent discussion of rule-directed sequences which provide a norm such that deviations can be recognized.

⁴² One of the more common problems of modern life is having to decide whether a given stop light is broken or merely slow or long on red, but which is not a problem for a strict empiricist who has no reason to assume that some signaling cycles might not take several years to complete, where the Kantian (or transcendental) idealist, in contrast, is able to see (or at least suspect) a broken signal when the red remains for long. This is very subjective, of course.

⁴³ This also makes possible the analytic judgments, i.e., saying something about an object without having to look at the object, e.g., that a table has a top. Curiously Kant makes no mention in the TDA that he is also describing there the source of these analytic statements through the formulation of the concept of the object. That this is the case, however, is clear from a comparison of the comments regarding bodies, which are found in TDA 2nd Section 2, 3. Par 6, TDB 19.2 and also Part IV of the Introduction to the [CPR](#), on or near page 718, 137 and 29, respectively.

[It may be helpful to pause for a moment in this development and seek a overview on Kant's thinking as expressed thus far. In the *Dissertation* Kant imagined the human, firstly, intuiting objects which, while they existed as objects on their own (and had to be in order to be intuited), were only seen in space and time, i.e., merely as appearances; and, secondly, providing a necessitation to the relationships of these objects amongst one another by means of the intellect in prescribing laws (which were to represent the essential, interactive constitution of these objects). This approach would have been unacceptable to Hume who argued irrefutably that since objects were things on their own and entirely dissimilar to the intellect, the latter had no warrant for prescribing laws regarding them.⁴⁴ Kant, momentarily staggered by this argument, finally changed (or rather expanded) the scope of his thinking, though retaining its form. Thus in the *CPR* he abolished the (supposedly intuited) objects and left in their place the sheer elements of which they were comprised, i.e., a manifold of appearances, and then showed that Hume's objects of experience could not arise to be recognized except by means of a unification of these appearances in accordance with universal connections which, in the case of the objects themselves, were called concepts and, with regard to the relationship amongst the (thusly constructed) objects, laws (of experience).⁴⁵ Thus an experience in the *Dissertation* consisted of combining already existing objects via laws; and this notion of experience (as a combination via laws) was not only retained in the *CPR* but even expanded to include the objects themselves, such that the objects of experience are themselves now conceived to be assembled from spectral elements (of a manifold) by means of concepts, which are universalizing expressions analogous to laws. In this way, by providing an indispensable role for the intellect in making these objects possible as objects of experience, Kant also achieves a justification for the action of the intellect with regard to experience and thereby remedies a deficiency of the *Dissertation*. Finally, to add the "icing to the cake," Kant so formulated the notion of perception (the empirical apprehension which I shall shortly introduce as the "second look") that even it could not take place except in accordance with, and pursuit of, a connection (formulated by the productive imagination) in conformity with the categories. The categories thusly become the supreme law of laws (of nature) by means of which we are empowered and prompted to look for empirical connections,

⁴⁴ And indeed who went so far as to suggest that these "laws" merely mirrored and summarized the perceived and usual behavior of the objects through an exposure to them, i.e., a habit of the mind.

⁴⁵ This consideration provides additional support for the writer's contention that the usage of "intuition" for Anschauung is not well advised, for it seems to imply the existence of the objects of experience as things on their own, and which is diametrically opposed to Kant's thesis in the *CPR* (though not entirely so to that of his *Dissertation* where objects existed as such on their own). The only way we come to recognize these things on their own is by virtue of a synthesis of spectral data (our sole source of empirical information) by means of a concept which is the object such that what is perceived (actually only an appearance) is always considered only a sighting or example. The force of the independence of the object is made possible by the determined, i.e., the concept-driven, perspective. Thus I see the table before my eyes (even though I admit that what I actually see is merely a sighting of that table [an image of the table], and not the table itself), and hence obviously the table exists as a thing on its own [empirically speaking, i.e., according to common and to scientific speech, but not in a transcendental sense]).

those being either concepts of objects of experience, e.g., Hume's table, or laws of experience, such as Hume's law of association or Newton's law of the mutual attraction of bodies.^{46]}

Returning now to the TDA (and beginning with the 2nd Section, 3., Par 7⁴⁷) we learn that the concept unifying the elements of the perspective into an object not only provides (1) necessity to the manifold of elements and (2) a determination to a perspective (to be an example of the object), it also represents a unified consciousness. And furthermore, since the object of experience is not a thing on its own, but rather a mental provision to the spectral data (of a perspective) for the purpose of encompassing or embodying that data, and since experience with this object must of necessity await the appearance of the object, this unified consciousness must actually precede the object and indeed provide it to the appearances (as a unifying concept) in order that they might be transformed from things on their own into examples and sightings of objects, with which then experiments can be undertaken, and by means of which then experience becomes possible. This preceding unity of consciousness is called the original apperception, and it is the means utilized by Kant to provide a pervasive unity to all possible recognitions, and to which we now turn our attention.

Often times I will lock a door while mentally preoccupied and then shortly thereafter not be able to remember whether I had actually done so or not. In order to be sure I must make sure, i.e., I must return to the door and try it. The first situation, that of preoccupation, is indicative of a state of consciousness in which I do or see something without what we might call a mental "registration," i.e., as soon as a new impression arises, any former impression has completely vanished; a condition also expressed as "out of sight, out of mind!"⁴⁸ Much, perhaps most, of our lives can be characterized by this vague, dispersed sort of consciousness which Kant includes under the denomination of "unconscious representations."⁴⁹

⁴⁶ The details of Kant's argument for the subjugation of perception to the category are given after this, and so this assertion is really only a preview at this point. This is the most important task for Kant in this deduction, namely to show that Hume's perceptions, the basis for his entire system of knowledge (where all knowledge is entirely contingent), are themselves subject to the categories.

⁴⁷ See [Appendix I.2](#), beginning on or near page 717.

⁴⁸ This does not describe a representation but rather merely a sequence of mental states where upon A, B arises (as in the recitation of the alphabet), and upon B, C arises, and in each case the preceding vanishes. It also describes association, where A does not represent B but rather is replaced by it in a rather mechanical way. A representation (*Vorstellung*) denotes an awareness of a "standing for" or "in place of," and thus of A and B together in a certain relationship called denotation. This will be discussed below in a more appropriate context.

⁴⁹ Which, at first glance, seems an obvious contradiction, for one of the marks of any representation is that it is formulated consciously (TDA 3rd Section, 3, Par 3 in [Appendix I.3](#), beginning on or near page 717). But once formulated, it can arise without consciousness as in the example just cited of locking the door. Indeed one of the most common instances of this phenomenon has probably already been experienced by the reader of this article, namely a realization that every word in a given paragraph was read and nothing at all registered or retained due to some mental preoccupation, and that the paragraph had to be read again with consciousness, i.e., with attention.

The second state, checking the lock to make sure, is a clear and focused consciousness. It is sometimes described as "presence of mind" or "paying attention" and often admonished by "watch (or think about) what you are doing." This same consciousness is represented by the "double take" (caricatured by the slapstick comic) which we might call the "making sure" consciousness, or the "second look." This second look (when its content is empirical) is also an expression of what Kant calls a perception (*Wahrnehmung* or "careful-taking").^{50 51}

This latter consciousness Kant calls the transcendental apperception, and it is that consciousness which can and does precede experience and indeed all objects (subjectively speaking), and by means of which both the experience and the objects of experience are made possible as representations. It is that state of mind, for example, which precedes the sighting of the pantomimic circle as we pay attention to the movement of the finger in the expectation of discerning something which is neither obvious nor immediately (empirically) present, and which is expected to result in a culmination and synthesis and recognition.⁵²

Kant conceived of this apperception as an edifice of interrelated and component parts (consciousnesses) which together make up an integrated system; but originally, before any exposure to appearances and their synthesis has taken place, it is merely a capacity for, and form of, a system, a potentiality. The actual contents of a given individual's consciousness will be gleaned from that person's exposure to appearances through the perspective and then by the treatment (synthesis) of the apprehension of those appearances by the person's productive imagination, all of which finally results in a recognition of an object or an experience with that object (as was described above regarding the table). The synthesis by the productive imagination is undertaken in light of the form of the apperception; and recognitions arise only when a synthesis has been achieved which accords (1) with the appearances and (2) with the form of apperceptual unity, i.e., the category; which together constitute Kant's two-prong touchstone of truth. The process of integration into consciousness is itself a conscious activity which, since there is no object provided by the senses which might be looked at in the cursory sort of way of the first state of consciousness described above (other than a sheer appearance like Hume's "ballooning" table [which expands as we approach it]), calls for a deliberate awareness in order to "find" (actually

⁵⁰ Hence perception is a careful and deliberate look which is directed toward making sure of the data and which is always empirical. Accordingly the apprehension of the elements of the pantomimic circle was not a perception, but only because the data was pure (even if sensitive) and not empirical, and thus had to be apprehended on the "first look."

⁵¹ I am indebted to [Werner Pluhar](#) for suggesting the "care" or "caution" rendering for the German "Wahr" rather than the more obvious "true". I observe merely that the reason we might think "true taking" is due to the care that is actually taken in making sure. In any case the validity of the perception is to be understood as based on the careful input of data.

⁵² And since the category is the means for any unified synthesis, we see here that Kant's main intention is accomplished, namely to show that even Hume's vaunted perception (as the foundation of his system) is itself dependent upon the category.

mentally to place) the object in the appearance such that the appearance then represents that object to the viewer.⁵³

The form of apperceptual unity (by means of the category) might be described as a system of universals and laws. All recognitions are conceived of as universal expressions or as modifications of universals. I never learn that a specific appearance is this or that, but only that objects are this or that. When, for example, I perceive that a piece of iron sinks in water, and even though I do have “certified data” (a fact) for the productive imagination, I have not made a net addition to my consciousness, nor will I, until I can recognize that iron sinks, i.e., all iron;⁵⁴ barring that I have a perception (of data) but not a recognition (comprehension).⁵⁵ [This will be covered more completely in a subsequent example. Presently we imagine a consciousness which is a formal unity, i.e., preceding even the first perception and the first recognition, and where this unity, upon the receipt of data, is expressed empirically in terms of universals, and which merely preserves itself as a complete unity as perceptions are introduced (via appearances) and recognitions attained (via concepts and laws).]

[Concerning the consciousness of self, Kant observes that the a priori and transcendental (i.e., recognition-enabling) apperception is merely a capacity for recognitions and does not per se itself provide any sense of self. Like empirical objects, the self must reveal itself as an appearance (via a perspective in some synthesis) in order to be recognized. Thus a synthesis of spectral data into some object will be necessary in order for the self to arise to sight or consciousness as a something which engages in synthesis. Once some synthesis has been achieved, there is a something, an actual (empirically) unified consciousness, which then in turn can be noticed and then denominated the self.

[In this consideration (which is found [albeit dimly] in TDA 2nd Section, 3., Par 7.1-10.3⁵⁶) there is already a hint of Kant's ultimate intention with regard to the TDA, namely the subjugation of perception to the category. For since the self can only be aware of its own self by means

⁵³ Kant notes that while this synthesis is a conscious activity we are usually not aware of the undertaking and settle for the ensuing recognition. Normally we are not focused on the activity but only on the anticipated outcome and conclusion.

⁵⁴ Although, since the object is empirical, this universalized experience is still contingent, and I will later learn that not all iron sinks (or rather that iron does not always sink) and the equally important and modifying lesson that the shape of the material is one of the determinants as to whether it will float or not, e.g., iron floats when in the shape of a vessel.

⁵⁵ This is quite different from the mental edifices of Leibniz and the rationalists. They pictured the mind as actually and in advance possessing concepts of individual classes of objects, e.g., iron, boats, tables, which were then prompted to the mental forefront (a form of remembrance) upon the sighting of some (more or less) correspondence in the impressions (which constituted a "confused" rendering of the object). Kant hypothesizes instead merely a capacity for universalizing (= concepts and laws) such that the appearances become the content, with the object being the conceived form; hence without any preconception of specifics. This universalization is either the concept of the object itself, such that all tables, for example, have tops; or else it is some law concerning the behavior of the object, e.g., that a table falls when the legs are removed, or that air expands when heated.

⁵⁶ [Appendix I.2](#), and beginning on or around page 717.

of a preceding synthesis, and since the synthesis must consist of the provision of an object to the appearances, and since there is no indication in advance as to which appearances are to represent an object (as examples or sightings and perspectives) such that the apprehension described with the pantomimic circle (or Hume's table) might ensue, it follows that there must be an a priori principle that *all appearances are subject to the conditions of apperceptual unity* in order then that any appearance be subjected to the synthesis which alone leads to an object whereupon then the self incidentally provides a material, as it were (i.e., its own synthesizing results), for self recognition and empirical self awareness.^{57]}

We are now poised at TDA 2nd Section, 3. Par 10.4⁵⁸, where we begin the descent to the category by a final consideration of the object of representations. A representation is a consciousness which refers to something else, its object.⁵⁹ The term "table" refers to the concept of table which, in turn, may refer to an appearance, e.g., this (present sighting of a) table, or to a pure perspective (a line drawing or a pantomimic description of a table), and may in turn for its part also be the object of (example for) the concept of furniture, and that in turn of a household article or even a thing in general, etc. The appearance is the only object which is given to us immediately and to which we may stand passively. The object we actually see is a product of the perspective as in the case of the finger we considered earlier where it could be anything from the number one, to a length, to a pointer. But in all of this there is one pervasive and fundamental outlook regarding the appearance which is profound in its implications, namely: we know that the appearance is not a thing on its own but rather refers to, i.e., represents, an object which it-

⁵⁷ This consideration is interesting and is remotely analogous to the thinking of the founder of the 18th Century Methodist movement, John Wesley, an Anglican priest. He experienced what he considered to be a new attitude which, if authentic, could only come from God and would represent a real and present communion with God, but which, according to John Calvin's doctrine of a limitation to the scope of God's love and a constant (time-independent) status before God (and therefore: "damned at death; then always damned") might only be a self delusion which would not be discerned until later, and, therefore, his supposed transformation could not be certified unless also experienced at the point of death. In order for an assurance of salvation to arise before one's deathbed and, therefore, for the promise of the Christian gospel to be meaningful, Wesley felt compelled to assert the universal love of God whereby then his experience (which was already authenticated subjectively by an inspection of the sincere desire of his heart) was objectively validated as the work of an all-loving and all-pursuing God. Furthermore any given person might now be prompted by this principle to expect (anticipate), and hence to look for, such a transformation and thereby have a real basis for the faith which was called saving, and which, according to Wesley, was necessary in order for this work of God to have any effect. In a like manner, Kant asserts that the only way that a connection might be sought in any given case were for connectability (associability) to be in fact assumed in advance for all cases. This is also the affinity of all appearances, i.e., direct or indirect connection.

⁵⁸ [Appendix I.2](#), and beginning on or around page 720.

⁵⁹ A representation is always a signification that one thing is to have for another, e.g., the word "red" stands for a color, and thus requires at least the possibility of having in mind at once both the term and the sensation. This is different from what may pass for representation among the animals which is a form of association where one state, A, prompts another, B, but then vanishes upon the awareness of B, much as the preceding letter is forgotten upon the recitation of the following one of the alphabet. This is a subtle, though critical, distinction which underscores a certain, necessary role of the apperception in the apprehension and integration of spectral data (appearances), i.e., perception and then recognition. (Incidentally, if I hear the whirl of an electric fan, for example, while feeling the touch of a pen in my hand, then as I concentrate on either, the awareness of the other recedes and even vanishes; and thus only one can be in mind [vividly] at any one time, and the more to concentrate on the one the less I am aware of the other.)

self cannot be seen (for only individual appearances are ever open to sensing); this object is called the Transcendental Object = X (TO=X). [This consideration will facilitate an understanding of the deduction of the valid application of the category to appearances, for the proof will hinge upon whether the appearance is considered to represent an object of human experience or be a thing on its own; if the latter, there will be no use for the category, but if the former, then the category is not only useful, but indeed indispensable, for the provision of the object which the appearance is to exemplify and represent (even as any given appearance of the table exemplified the object, table, to Hume from a given position in space and time, i.e., as its look).]

Now (TDA 2nd Section, 3., Par 11⁶⁰) since the concept of this TO=X is general and encompasses all appearances whatsoever (those which are eventually assigned to bodies, those which are found to be internal states, e.g., memories and thoughts, and those which, like the rainbow, remain mere appearances), it does not directly produce or identify of any perspective (in contrast to the empirical concept/object or pure pantomimic), but rather serves merely to require and insure a uniformity and consistency among all recognitions about any given object, e.g., the size of a table, its color, its position, its strength.⁶¹

Now since (1) this TO=X is the only object ever possible for us, to the extent that the appearance is thought to be merely the representation of an object (and not a thing on its own),⁶² and since (2) this concept of something = X is the means whereby the appearance is found merely to represent an object (for the object [the empirical concept] is a production of the apperception [by means of the productive imagination as constrained by the form of the apperception]),⁶³ it follows that this TO=X will require that the data entering into the makeup of the object (the original concept of any specific object, by means of which analytic statements may be made) as well as the data to be used subsequently for making judgments about the object (synthetic judgments through experience) be apprehended in accordance with a principle which insures complete uniformity of the empirical consciousness which is the entire and ever consistent edifice erected by means of the a priori and transcendental apperception (per the understanding itself) with the materials provided by the senses in conformity, of course, with the form of the sensitivity, i.e., space and time.

⁶⁰ [Appendix I.2](#), and beginning on or around page 719.

⁶¹ And insures that our recognitions are not arbitrary or sheer fancy per TDA 2nd Section, 3. Par 4, [Appendix I.2](#), and beginning on or around page 716.

⁶² The reader is reminded that any appearance can be called an object in a grammatical sense when, for example, I say that the appearance of Hume's diminishing table is an object of our discussion. The German for object (*Gegenstand*) also means subject matter. But if we take the appearance (as it appears to us) for the object of experience (and not merely a representation of the object), then we treat the appearance as a thing on its own, at which point inquiry ceases and we are faced merely with trying to memorize and second guess the antics of this thing, whatever it might be.

⁶³ This form, as we shall discover below, means a dependence of the apperception upon the category for a "fit" of the data into a unified, empirical consciousness.

We are now gradually approaching Kant's primary thesis that the appearance, though given independently of the intellectual, connective concepts of the apperception, is nonetheless subject to these concepts. As a preface to an examination of Kant's presentation and proof of this thesis in TDA 2nd Section, 4.⁶⁴, which constitutes the heart of the Deduction, I wish to speculate briefly on an experience, the results of which (though not the details) are described by Hume in the following passage from his *Enquiry*:

"When a child has felt the sensation of pain from touching the flame of a candle, he will be careful not to put his hand near any candle; but will expect a similar effect from a cause which is similar in its sensible qualities and appearance."⁶⁵

I will imagine a grown person capable of rational thought, but without experience, somewhat as Hume did with the figure of Adam in the *Enquiry*.⁶⁶ I assume that this Adam has already had sufficient exposure to lighted candles to conceive of an object, i.e., a flame, as a bright, dancing and even curious and enticing topping or "hat" to some candles. This concept and the recognition of the flame provide him with the capacity to make analytic statements about flaming candles in general, i.e., without having to take a look at any particular one, e.g., that it is bright and that it moves slightly. But now Adam is about to embark upon an experiment with these flames (based perhaps on sheer curiosity), namely the determination that the flame is not only bright, but also hot; and so Adam reaches out to touch the flame.

Upon noticing the painful heat coincident with the touch, Adam will indeed reflexively withdraw his finger, but then will wonder: did the heat come from the flame, or did that just happen at the same time (= a fluke, i.e., a sheer coincidence)? In order to make sure, and at some point in time, Adam, in full awareness (paying close attention), will carefully and slowly let his hand approach the flame again (and indeed will move it back and forth more than once) and will notice the increase in heat as his hand draws nearer to the flame, i.e., he will notice the correlation of the rise in heat with the reduction of distance and that the change in the heat happens only in this way (in this experiment). It is this careful and attentive "second look" which first constitutes a perception, properly speaking, i.e., a careful look at, and apprehension of, empirical data for the purpose of the assembly and certification of facts, i.e., that whereof we are certain.⁶⁷

⁶⁴ [Appendix I.2](#), and beginning on or around page 721.

⁶⁵ Hume, *Enquiry Concerning Human Understanding*, Section IV, paragraph 33(b).

⁶⁶ *Ibid.* Section IV., subsection 23.

⁶⁷ Incidentally, we can see from this theoretical example that the perception, as the so-called second look, is obviously predicated upon the principle that the future resembles the past which, therefore, is not derived from experience but rather precedes it and makes it possible by making the perception possible. The difference between a pure perspective (like the pantomimic circle) and an empirical one (which, when carefully apprehended, is called a perception) lies in the necessity of this principle for the latter, for it is certainly not needed when the manifold is purely given as with the pantomimic circle.

Upon consideration of the elements, the bright flame and the correlation of heat and distance, Adam will at some point spontaneously conceive of an explanation, i.e., a necessitation to require (universally so, i.e., a recognition) what he has just found in this specific case to be (a perception); namely that

1. the flame itself is hot, i.e., on its own, and hence always so; and, of equal importance,
2. the reason that it does not always feel hot is due to its distance from Adam, thus the intensity of the feeling is in inverse proportion to the distance of the hand from the flame, i.e., the greater the distance, the less the heat.

This latter fact is actually an empirical law, a universal expression which is necessary for the explanation of the present phenomenon, but also which Adam will express eventually as a law of dissipation of qualities in general, e.g., sounds, heat, light, etc.⁶⁸ Thus Adam is not satisfied in knowing that this particular flame is hot,⁶⁹ for that was given to him by the perception (the determination of the facts), but rather insists (per the nature of his apperception) to speak universally, and has now established (through the conception of a law [essentially a figment of his productive imagination consistent with the form of understanding]) that all flames are hot, whereby then this particular flame/heat relationship can be derived from (necessitated by) that general law.⁷⁰ This is the completion of the experience: a new predicate is attached synthetically to the concept, namely the flaming candle is not only bright (an analytic statement),⁷¹ but also hot (a synthetic statement), and while the empirical data (the heat) is a posteriori, the form of the experience (the deliberate and directed search for a cause, which is called a perception) is a priori. The general object that is presupposed (a sheer representation invented by Adam's mind) is that of nature, i.e., an orderly arrangement of, and actual interaction among, the objects of the

⁶⁸ His productive imagination will very likely have fashioned, suddenly, a corollary schematic, e.g., a series of concentric circles or spheres with a common center. And to this mental diagram, he will think: the flame is the center and the figures are the feelings of heat in inverse proportion to their size, i.e., the larger is the weaker, and thus express the form of an empirical perspective to which the present case corresponds and which can be used in the future to determine other perspectives and thus provide additional examples of this law of dissipation over distance.

⁶⁹ Which would most surely have required at least one confirmatory replication with another candle (and thus again presupposing the replicability of the experiments).

⁷⁰ This concept of experience was first expressed in the [Dissertation](#), namely the positioning of the sensation in time and space (observation of the spatial and qualitative [warmth] correlations) on the one hand, and then the binding or connecting of the positioning via natural laws on the other. In the [CPR](#) Kant expands the concept to bind the spectral elements into objects and simultaneously warrants the utilization of laws of the intellect through making both the objects of experience and the laws of their interaction (their nature) possible by means of these contributions of the intellect (called the categories) which then in turn and in this way guarantee the pervasive unity of empirical consciousness in general.

⁷¹ Taken from the original concept itself, though which was originally conceived (synthetically) in order to provide an object such that certain spectral data might be unified and singularized (if I might be permitted that term).

world (and merely represented by the appearances), which is independent of the perceiver, and which, therefore, can be observed and replicated and expressed as an experience.

[It is worth a moment to remind ourselves that the necessity attaching to the relationship of heat and candle flame is empirical, and thus, unlike the necessity provided via the category (which is inviolable and will be discussed shortly), situations may arise where no heat is found with the candle, in which case Adam will discover, perhaps, that a cold glass has just been placed around the candle, or that it is a fake candle or a mirror image of the candle (both of the latter being very difficult concepts for the strict empiricist). Thus deviations will occur, but which are nothing more than prompts for the discovery of an explanation (which is presupposed through the concept of a nature and the so-called affinity of all appearances).]

In order to support the reasonableness of this speculation, I will present some details of an actual and personal experience with a motorbike involving occasional faltering and stoppage. For several days after purchasing my new motorbike it did not perform properly (I had already long ago gone from treating some sighting of a bike as a thing on its own to the concept of the bike, and thus to a bike as an empirical thing (per common and scientific speech⁷²) on its own, i.e., under empirical necessitation whereby then I knew [according to a method very similar to that utilized by Adam] that a certain performance was called for). I eventually took notice that the bike usually hesitated and faltered in cool weather and drove very well in hot weather. The facts of this perception also constituted an aggravating (and intriguing) problem until one hot afternoon while removing the gas tank cap to check the fuel level I heard a loud hissing sound. Before I could even think the words I "saw" the object:⁷³ the gravity-fed fuel system (the fuel tank sits above the engine) was unvented (a faulty cap, I learned later). Gasoline is highly elastic and contracts in cold weather (and thus a vacuum would form and the engine would falter due to the lack of fuel being able to descend into the engine) and expands when heated (and thus would be forced into the engine for outstanding performance during warm weather). That was the cause of the hissing sound: the gasoline had expanded under the afternoon sun and the tank was pressurized. My sudden grasp of the situation was expressed by an instantaneous, schematic production of my imagination: a straight line descending from a circular sort of figure, the former representing the descending fuel line and the figure the tank. To this schematic I was able to think what I just explained above (although, at the time, I did not think that expressly, but was merely

⁷² Only philosophers distinguish the thing on its own (a thing apart from any perspective) and the object of experience. In common and scientific talk the latter is considered as the thing on its own. This is made clearer in the next paragraph. This duality of terms is of extreme importance later in the Dialectic section of the *Critique*.

⁷³ Which, psychologically, is very much like suddenly seeing a face in a cloud that others have been pointing to, but which you had not yet been able to make out.

conscious of an ability to do so).⁷⁴ [The production of this schematic as the means for directing and ordering the reproductive imagination (and thereby distinguishing the subjective apprehension from the objective)⁷⁵ and as the sensitive correspondence (and thus also application) of the category, can often be discerned upon introspection when facing a problem calling for a solution. There is frequently a "trial and error" approach on the part of the productive imagination in putting the spectral elements together, and which is described in the TDA 2nd Section, 2.⁷⁶]

By way of comparing these two experiences, Adam and I both had already developed concepts of our respective objects and had already earlier recognized them (candle and bike). Thus for the two of us they existed as things on their own (which is the way we describe the object [empirically] and the result of our recognitions of them). The flame, as a(n empirical) thing on its own, neither included nor excluded the further concept of heat; but the bike, in contrast, did already include the further predicate of a certain performance which had been added to it earlier in the same general way that the predicate of heat was added by Adam to the concept of the flame. Thus while the heat originally associated with the flame offered no conflict with the concept of the flame, the performance of the bike was a contradiction of the empirical necessity supplied through the concept of the bike and its engineering and of its subsequently added predicate (but which, though appended later, still supplies the same necessity [subsequently] as the concept of the object does [originally] to the components of the object, e.g., the brightness of the flame and the parts of the motor bike engine). Thus (and in an effort to make clear a rather subtle point) while the object is provided synthetically to the spectral data (the flame, the motorbike itself), it does not cease to be spectral (an appearance), although, for the purposes of our human understanding, the recognition of the object, which is supplied by the mind transcendently (for the sake of producing a recognition), means that we look upon the object as a thing on its own, pre-existing and which needed merely to be sighted, in an exact parallel to seeing the face in the cloud, except in the latter case, even though the impression of the sighting is that the face was always there and that we had not looked properly earlier, we know that it was not (that it is a sheer perspective with no existence apart from the viewing), and we make this distinction by contrasting the face in the cloud, as sheer appearance, from the face on a human head which, for us and relatively speaking, is there on its own (but which originally is a result of a prior conception of a something, the $TO=X$, which denotes an existence independently

⁷⁴ This schematic is for Kant the sensitive object itself, a very interesting concept which is described in the next part of the [CPR](#), dealing with the Schema. He calls it the phenomenon and, in a sense, it provides continuing (though modified) validation to the earlier [Dissertation](#) which dealt with the observation and connection of phenomena in space and time, for experience consists in this very connection. But it is in the [CPR](#) that he first describes how it is that these phenomena (objects of experience) arise out of spectral data, namely by the phenomenon (a schematic [image provider] of the concept) being the empirical thing on its own and the basis for the recognition of the object through the spectral data. The phenomenon or empirical thing on its own is also a representation of the $TO=X$ (as a specific object) and is provided entirely gratis by the mind in order to have an object which the appearances then represent empirically as sightings.

⁷⁵ To be clarified below.

⁷⁶ [Appendix I.2](#), beginning on or near page 713.

of our looking). Thus the concept of the thing on its own has a proper (and even necessary) meaning as long as we are speaking empirically and in common and scientific talk (and not in a transcendental sense).⁷⁷

The preliminary point to be made with regard to the details of the two experiences (in anticipation of the forthcoming commentary on TDA, 2nd Section, 4.⁷⁸) is this: the certification of the faulty performance of the motorbike was a perception,⁷⁹ but not yet a recognition (technically speaking), and thus it was a problem (intellectually speaking) for it was impossible that it might be admitted into a general, empirical consciousness (which, as we will remember, is a system of interrelated components, all of which fit as elements of a unity [one of the most emphatic points of the TDA, and to which end the TO=X serves], i.e., a single nature). The motor bike was an example of a(n earlier developed) concept which included necessity, i.e., it had to function in a certain way (per a preceding synthesis) and the currently observed faulty performance was a contradiction of the general concept of a motorbike. The perception of the circumstances of the actual, erratic performance, i.e., cool weather/bad and hot weather/good, was merely the establishment of the facts in pursuit of a solution (a recognition) and not the end supposed by the empiricists. The law of the expansion of fluids provided a means of explaining the apparent failure of another law, namely that of the natural descent of fluids (in a gravity system), and did so in a manner which was entirely consistent with both laws.

One other point concerning the two experiments will be important before we return to the TDA proper. The recognition necessitates the details of the empirical apprehension (perception), and does so by distinguishing the objective apprehension from the subjective, and thus denotes the object's independence from the perceiver. As I accumulated data regarding the bike I may have noticed the engine's hesitation before noticing the coolness of the weather on any given morning or evening, and likewise may have simply accepted the good performance as a welcomed part of a nice (warm!) day; but upon discovery of the object (the sealed tank), I saw that the factors of the perception were merely subjectively valid, e.g., that I merely happened to notice the cool weather after sensing the hesitation, and that in fact the cool weather preceded the hesitation and indeed necessarily so, i.e., as its cause, and could have been so noticed.⁸⁰ Indeed (and to harken back to the TDA 2nd Section, 2) while dealing with the bike and making observations, I would also be seeking not only to reproduce the elements of the situation, but also to associate

⁷⁷ As mentioned briefly in an earlier footnote, there is a transcendental meaning to the notion of a thing on its own, which is in contrast to objects of experience which are essentially composites of appearances. But this distinction is not at play in this essay.

⁷⁸ [Appendix I.2](#), and beginning on or around page 721.

⁷⁹ It was carefully perused and noted, which is what a (subjective) perception is all about. The recognition (objective perception) does not arise until the perspective is incorporated into the apprehension by means of the categories.

⁸⁰ This consideration is actually an anticipation of Kant's discussion of the Second Analogy from the [CPR](#) beginning on or near page 208.

these elements in search of a possible connection. And so while I noticed first the hesitation of the bike before noticing the weather, I eventually put them together so that the cool weather preceded the hesitation.

4. Preliminary Explanation of the Possibility of Categories as A Priori Recognitions⁸¹

We turn now to TDA 2nd Section, 4., and will utilize these experiences to fathom Kant's logic. His goal here is to show that even though the appearances are given independently of the understanding and intellect, still, by virtue of the fact that the apprehension of an object is dependent upon the perceiving subject and is undertaken for the sole purpose of discerning an object (supplied by the productive imagination) in and among the appearances (so that they not be things on their own), and the fact that the apprehension of empirical data is merely another word for perception, we will find that all appearances and all perceptions are subject to the conditions of apperceptual unity, and that those conditions will be expressed via the productive imagination in putting appearances together in various ways (via a schematic) which is a search for an objective apprehension (a recognition) from which the subjective (actual) apprehension (the perception) might be derived,⁸² and that a recognition arises then (and only then) when the schematic corresponds to a category of pure thought. (We will follow Kant's argument in TDA 2nd Section, 4.⁸³ by paragraph).

Paragraph 1.

There is only a single, thoroughly inclusive and pervasive experience, and its components are the perceptions (which, in the vernacular [and not in a transcendental sense], are themselves called experiences). These perceptions are connected in an all-encompassing, mental edifice called the empirical consciousness and in that way form a profound unity by means of connective and synthesizing concepts such as mutual causation where, for example, the parts of an engine must interact in such a way that a certain effect (called performance) is rendered. This unity reflects the notion of the $TO=X$, the function of which is to insure such unity not only with regard to all judgments about a given object, but also (by virtue of the representation of na-

⁸¹ [Appendix I.2](#), 2nd Section, 4. beginning on or around page 721.

⁸² In the case of the motorbike, the objective apprehension (recognition) arose upon the discovery of the sealed tank, whereby then, in conjunction with the law of the expansion of liquids, the perception of hot weather/good performance and cold weather/bad performance could be derived. Regarding the candle, the recognition that the candle was hot (the objective apprehension being first the candle and then the feeling of heat) was based on a law, formulated at that moment, concerning the dissipation of qualities, here heat, over space. From this the subjective apprehension of: first no heat (hand at a great distance from the candle) and gradual increase in heat (hand approaching), could be derived and explained.

⁸³ [Appendix I.2](#), beginning on or around page 721.

ture itself as an object) with regard to all (empirical) judgments in general, i.e., about all objects.⁸⁴

Paragraph 2.

These connecting concepts cannot be empirical, for, as we have established, there is always the possibility of a deviation from an empirical concept (even though it must be explained), e.g., even though the motor bike must function in a certain way, it did not always do so (due to a faulty gas tank cap). In other words, the empirical necessity is such that deviations can occur (although the necessity is still valid in that an explanation must be provided); but this means that the basis of this empirical necessity (that which provides this [albeit only empirical] necessity) cannot itself be empirical, for that would mean that deviations could arise and be permitted for which no explanation were required, i.e., a deviation from necessity itself (= no necessity).⁸⁵

Paragraph 3.

The means of the connection necessary to produce the comprehensive unity of empirical consciousness is the category and it serves as well for experience with objects as for the objects of experience themselves. Thus the objects of experience themselves are unified (from spectral data, i.e., appearances) by the same set of categories⁸⁶ which makes possible the necessary connection (of the thusly assembled objects) which characterizes experience and which we have seen in the case of the heat of the candle flame and the gravity-fed, motorbike gas tank and cap.

Paragraph 4.

The unity of apperception, as an empirical (and self discernible) phenomenon itself, can only arise to a sighting or perspective ("prove itself") when there is a necessitation of representations, and this in turn is a function of a synthesis of appearances in and through various modes of time. The concept of causation, for example, indicates a connection through time such that two representations are unified, and together make up or represent a single span of time whereby not only does each denote the other necessarily, but then also in a certain order or temporal direction whereby one precedes and the other follows, i.e., it provides a universally valid determina-

⁸⁴ The use here of the parts of an engine to exemplify the category of reciprocity or mutual effect also serves, incidentally, as an analogy for the empirical consciousness (experience), which is an assembly of perceptions (interrelated parts) which together constitute a (mutually supportive and interlocking) whole, i.e., more than a mere conglomeration; a thesis which hearkens back to the [Dissertation](#) (II 390-391). See also this [metaphor concerning perceptions and recognitions](#).

⁸⁵ This is similar to Wesley's argument against Calvin alluded in an earlier footnote. If God could exclude even one person from his love, that one might be Wesley himself and hence Wesley's experience of a transformed heart would lose its certitude because it could then constitute a self-delusion. Thus for Wesley's certitude regarding his own relationship to God, it was necessary that the universal love of God be a first principle in his theological system.

⁸⁶ The categories are actually specialized. Those of quantity and quality focus on the representation of the object of experience, and those of relationship deal with experiences with the object and the final ones of modality with the relationship of recognitions to the general experience.

tion of time.⁸⁷ Thus the concept of a vacuum and the law of the expansion of fluids served to necessitate the erratic performance of the motorbike, an otherwise inexplicable phenomenon in light of the general experience with bikes and engines; and this understanding in turn means that the good performance had to follow upon the hot weather, and the poor upon the cold. It was for this reason alone that the psychological "click" took place which is called a recognition, much as that which arises upon the sighting of the face in the cloud, especially after a bit of searching and trying due to the insistence of others. Thus upon the removal of the universal and absolute form of connection (through time, and which is here called causation), we would have nothing more than the (otherwise inexplicable) perception of the balky bike.⁸⁸ Indeed, as Kant indicates in what it is either sheer hyperbole or possibly the most provocative and profound statement in the entire *Critique*: without the category our lives as understanding beings would be less orderly even than a dream.

[It might be helpful momentarily to interrupt Kant's argument in TDA 2nd Section, 4., and consider this statement regarding dreams.⁸⁹ This final sentence of TDA 2nd Section, 4., Par. 4 actually harkens back to TDA 2nd Section, 2.⁹⁰, which is otherwise a very strange passage, even for Kant. There we are told that the law of association explains mental phenomena (much as the law of the expansion of fluids explains many physical phenomena, including the balky bike). But then, Kant goes on to say, this law is predicated on the appearances actually relating in a regular sort of fashion, without which there would not be any basis for the reproductive imagination to picture or think of something else as a result of the prompt of some object. But this object does not exist on its own, but merely as a result of a synthesis. Therefore, the synthesis precedes, etc. Now (I say) without that synthesis we would presumably be in the same state as the animals. With them (again presumably) there would be no association with consciousness, i.e., where one thing stands for or represents another (= a representation), but rather merely the substitution of one mental state by another, e.g., when A arises, then B not only follows but also annihilates A, etc., much as the common recitation of the ABC's demonstrates.⁹¹ Thus there must be a preceding consciousness, for a retention of elements and a synthesis into objects, before the possibility of a recognition of the law of association as an explanation of mental phe-

⁸⁷ Such a determination of time is called an objective apprehension in contrast to the perception which is merely subjectively valid, i.e., accumulation of aspects or elements, but without any unification, although the unification is anticipated in order to proceed with the apprehension of the aspects. Indeed, as we have already noted, the point of the objective apprehension is to provide a derivation for the subjective apprehension, and is what we call a recognition.

⁸⁸ Stated so here only for the sake of argument and contrast, for, as we shall shortly see, even this perception can only arise in pursuit, and therefore as an anticipatory function, of the TO=X, and hence of the category as the means for insuring a priori the pervasive consistency called for by the concept of this object (X).

⁸⁹ The reader may be interested in this essay entitled: "[Kant On The Recognition Of Dreams And The Affinity Of All Appearances.](#)"

⁹⁰ [Appendix I.2](#), beginning on or around page 715.

⁹¹ Which is essentially the now proverbial situation where each of ten persons possesses (only) a different one of the ten words of a sentence, i.e., there is no unified consciousness, and thus, according to Kant, no consciousness of self.

nomena can arise, and with it any experience with that phenomenon. And thus it is that without a connective possibility for the perceptions, they would never represent objects and thus never be anything more than dispersed and independent sequences; (indeed not even that, for a sequence, i.e., the awareness of that, requires a retention which is made possible by the apperception in search of recognition [and which, therefore, is category-driven]); and, therefore, the actual perspectives of which would not be nearly as orderly as dreams which are based on objects of experience.^{92]}

Paragraph 5.

Now since the category, e.g., that of causation (as our current focus), is necessary in order that there even be a (self-)discernible, empirical consciousness, which can only arise through the necessary connection of perceptions into components of objects (which are provided via the original and transcendental [though, as such, originally not discernible] apperception), and, therefore, since the categories are necessary for objects ever to come into a sighting/perspective (be recognized) in and through the appearances (particularly as we distinguish internal objects, e.g., imagination, from external objects, e.g., bodies),⁹³ it is obviously inane to seek the origin of the categories in any exposure to objects.

But given that, still Hume raises a critical challenge: if the categories originate independently of experience and even though they may be necessary for experience to arise, by what authority can we say that all appearances are subject to human experience (law making) and thus can be included (= must be includable) in that universal edifice of consciousness called experience? For it could well be that (all or, at least, some) appearances might abound without being subject to assembly into objects of human recognition, i.e., objects of experience.

The categories relating to experience are applied to appearances by means of rules of empirical association. One of these rules reflects causation and directs us to look in the past in order to

⁹² Our dreams, while often "crazy," are never wild (at least not with memory). In one of my dreams I am having trouble starting my motor bike and then notice that the tire is flat whereupon a "light goes on" and I "see" why the engine failed to start; an absurd conclusion (given an experience with a bike), but which exemplifies the surrealist state of dreams. But still I am dealing with objects even if they exhibit the sort of behavior more consistent with Alice's Wonderland. In a world of non-objects, on the other hand, where faces and smiles and whatnot appeared randomly and disjointedly, then the world becomes truly insane (per our present, rational standpoint) for we would take sheer appearances as things on their own, e.g., letting the size and shape of Hume's table hold as things on their own, i.e., becoming physically smaller at a greater distance.

⁹³ We must certainly imagine (via the TO=X), and then recognize, an independent, external world in order ever to recognize even the least aspect of ourselves, e.g., that we sleep or daydream or overlook things, e.g., that a sought object was in a place I had surveyed earlier and I had simply not seen it during my search (and which search then I realize was less than careful). See Kant's Refutation of Idealism beginning with the B edition of the [CPR](#), on or around page 244.

necessitate the present.⁹⁴ ⁹⁵ This rule of association, which directed my search in anticipation of an explanation for the hesitation of the bike, was premised on the so-called affinity of the appearances, namely that the appearances were subject to universal, connective laws (and were not independent things on their own) and that the hesitations of the motorbike could be reproduced and, therefore, experiments and observations undertaken (such as restarting the motor bike with an eye to a careful perusal of its performance and the circumstances surrounding that, which is the very meaning of perception, i.e., that careful, perusing look [paying attention] which can only occur a priori, even though the data is empirical and provided a posteriori).

But how can such a judgment be made in advance of the data, i.e., that the appearances are joined in an affinity such that there are laws of nature (making experimentation and replication possible, and which essentially are products of our connective, human understanding), and that the perception in search of factors is relevant and meaningful? This is, of course, the great question of the [CPR](#); Kant's answer is given in the next paragraph.

Paragraph 6.

All appearances, to the extent they are to represent something, i.e., to the extent that they are not thought to be things on their own, are subject to an incorporation into a single, numerically identical consciousness (for there is no other way that they might represent something [as opposed merely to being what they are, sensations, which would, at most, provide unconscious associations, i.e., upon mental state A, mental state B arises to, and A vanishes from, consciousness]). As such their apprehension is subject to the requirements of the synthesis of the unifying and incorporating apperception. This means they must be integrated into that single, empirical consciousness in accordance with the categories, for, as was established in TDA 2nd Section, 4. Par 4,⁹⁶ the category is the means of a universal time determination or connection (such that the concept of a single, all encompassing span of time arises to include all spectral existence [all appearances], and which represents objective reality). And, therefore and in this way, the appearances are subject to the categories as the conditions of an integrated and singular, empirical

⁹⁴ After originally perceiving a faltering of the motorbike, I racked my brain for clues as to what the problem might be. I had just filled the tank and, therefore, (I say, based on the empirical rule of association) I wondered if perhaps the fuel had been contaminated. I noticed the bike faltered once upon climbing a hill; could that be it? Etc. This empirical rule of association, an empirical manifestation of the category of causation, directed me in my search. Random representations were dismissed as I looked for something which had come about such that the faltering of the bike could be associated with it for a possible connection. For example, although I will have noticed traffic control signs, still, consistent with the rule, I will have ignored them with regard to my problem, for they would be present during good and bad performance. Thus the rule (reflecting causation) helped me decide what to consider and what to ignore, and this (relatively) a priori. This is discussed at length in the Second Analogy in the [CPR](#). (Another rule of empirical association reflects community and reciprocity and is discussed in the Third Analogy.)

⁹⁵ Incidentally, it is easy and confusing to identify Hume's law of association with Kant's rule of association, the former explaining mental phenomena in the same sort of way that Newton's law of gravity explains physical phenomena, while the latter is a rule which directs investigation in search of an explanation. Thus Hume's law of association (as well as Newton's) would have been originally conceived as a result of an investigation utilizing Kant's rule of association.

⁹⁶ [Appendix 1.2](#), beginning on or around page 722.

consciousness, i.e., to laws which are sought out by the productive imagination (under the auspices, as it were, of these categories) in order to provide a universality to connection, e.g., the law of association or the law of the expansion of fluids, for it is only by means of laws that the objective apprehension and universal time determination can be expressed, from which the perception is then derived (= explained as occurring under subjectively valid conditions), which is the very hallmark of recognition, e.g., due to the law of the elasticity of fluids and the happenstance of the sealed fuel tank, the hesitation of the bike in cool weather (a perception) was inevitable (necessitated), and thus explained.

What would be the situation if I did not insist in advance upon an integration of the appearances with my empirical consciousness (as a systematic edifice)?⁹⁷ If I did not insist in advance upon a reason (explanation) for the hesitation of the bike, then I would accept its hesitation into the same general and empirical consciousness with a preceding recognition concerning the nature of motorbikes, namely that they function in a certain way. And this would constitute a conflict in my consciousness, namely that bikes must perform in a certain way and that this bike does not perform in that way.⁹⁸ This would be similar to a situation where my consciousness were composed of fight songs of two competing ball teams which were in present conflict, and upon hearing either team's song begin, I would join in lustily and not be conscious of singing in conflict with what I had just sung earlier. Or suppose the expression "log floats" brought to mind images of floating logs, and the expression "log sinks" produced the memory of a (waterlogged) log on the bottom of a lake, and I would assert the validity of each expression in an alternating way and without any appreciation of a conflict. Such a state would constitute complete, intellectual fragmentation much, perhaps, as some who are called mentally challenged and who can focus on one thing, but not relate it to something else; hence, a complete lack of even the possibility of any mental conflict. Such a split consciousness is a thorough contradiction because the only way that the "my" can arise to be a part of a meaningful "my perception" is for there to be a thoroughly unified and singular consciousness.

The consequence of this a priori insistence upon associability (in pursuit of connectability) is exemplified by what did in fact happen with me in the case of the hesitating bike, for there the perceptions (of the hesitation and surrounding circumstances) were considered merely a problem awaiting a solution (which is patently predicated on the concept of an orderly world, i.e., one which makes sense, which is an expression of the TO=X applied to a global object [= nature]); but in no case was there any even apparent integration of a sheer perception into an em-

⁹⁷ This question is actually treated in this fashion only in TDA 3rd Section, Pars 7-11, beginning on or around page 727.

⁹⁸ Or, and especially originally before any recognition, I would assemble its inexplicable behavior with equally inexplicable behaviors of other appearances in disjointed memories.

pirical consciousness (composed of recognitions).⁹⁹ And thusly are all appearances subject to the category, i.e., by being withheld from integration into the general consciousness, called experience, until such a necessitation (and universal connection) is discovered, i.e., until the objective apprehension is discerned which, therefore, is presupposed (as a possibility) and to the discovery of which the perception is originally undertaken and directed, and therefore to which it is subject.¹⁰⁰

Paragraph 7.

The lynchpin to all this is the realization that the appearance is not a thing on its own, but merely a play of the representational capacity of the mind. Thus for any object to arise to a sighting/perspective, e.g., Hume's unvarying table or the constantly hot candle or the properly functioning bike, a synthesis is required. Since all appearances are considered to manifest objects (and not rather to be things on their own),¹⁰¹ there is ultimately only one object, in pursuit of which the human is constantly engaged, namely nature (= universal order, or "everything makes sense", or "every thing is connected"), and it is the attainment of the recognition of this object that the understanding is dedicated (and perceptions, i.e., careful, "second looks" at data, are sought and are even possible).¹⁰²

And thusly do we have Kant's answer to the question concerning the possibility of judgments in advance of the spectral data (appearances) which make up the content or material of those judgments: such judgments (as expressions of the category) are necessary in order that even the first perception of the spectral data (the so-called second look) can be made, for the very *raison d'être* of the perception itself is to facilitate these judgments and to make them possible. And

⁹⁹ Indeed, the first awareness of a possibility of a problem was thought to be possibly a fluke (happenstance) and called for a careful focus on the subsequent performance of the bike, in which case the perception of the problem, as I (a being of understanding) actually must consider it, first arose.

¹⁰⁰ The fact that the actual performance of the bike conflicted with the (conceptually) required performance should not be allowed to obscure the role of the category. Its function is original and efficacious even before a perception is seen as a problem, i.e., before recognitions have been established such that a possible conflict might then arise; for a perception is still not a recognition until it has been subsumed under a category such that a unified (TO=X mandated and schematically expressed) time is attained. Thus the unity of apperception is original (albeit only formal) and merely maintained (empirically).

¹⁰¹ This statement, I suppose, is the highest in human cognition, for based upon it all appearances are to represent some object and thus be subject to the unifying and transcendental role of the apperception (expressed by TDA 2nd Section, 4. Par 6.1 in [Appendix I.2](#), beginning on or near page 723), namely that all appearances are to be included in the empirical consciousness, i.e., as objects or elements of objects.

¹⁰² [Robert Paul Wolff](#) in *Kant's Theory of Mental Activity* expresses concern (p. 163) that Kant overstates his case by asserting that all appearances are connected (an assertion Kant modifies, but retains, in TDA 3rd Section, Par 11, beginning on or near page 730). But this concern is unwarranted, in my opinion, for it is only under such an assumption that I can be certain that any given appearance is subject to the affinity and thus to investigation via experimentation (the "Wesley argument" per above). The perspective presents all tentative configurations to which then the understanding can be applied if there is any curiosity. To assume that everything is connected does not mean that I set off on a rampage, as it were, to discover the connection of all appearances at once. In fact the affinity of all appearances is either direct or it is indirect and remote.

specifically then Kant answers Hume's question as to how the understanding (a product of our mind) is able to join perceptions (based on the sensitivity and sensations) into a unified edifice of nature including causation and called experience, for now we see that even Hume's perceptions themselves, the foundation of his system, are dependent upon the categories of human understanding, i.e., they are prompts of the categorical understanding itself when dealing with objects of perspective.

Brief Summary and Overview of the Text of TDA 2nd Section, 4.

In TDA 2nd Section, 1.-3.,¹⁰³ Kant presents the concept of the object and its (mental) formation and recognition, i.e., the apprehension, reproduction/association and unification of a tentative manifold which then renders a necessitation of the manifold and a determined perception (sighting) of the (unifying) object in space and time. In TDA 2nd Section, 4., Pars. 1-2,¹⁰⁴ he gives briefly the concept of experience with the object, i.e., perceptions of diverse objects which are necessitated with the same forcefulness as the "welding" of the pre-object spectral data into objects (as just stated). In TDA 2nd Section, 4., Par 3 Kant identifies the category as the condition for experience with objects as well as the condition for the very objects of experience themselves. In TDA 2nd Section, 4., Par 4 we learn that the category is the only means of providing the universality and necessity which are expressed relative to the objects (by the concept) and to the experience (by means of laws), and which exemplify and represent a universal, cohesive, empirical consciousness, i.e., that the category provides a universal (and thus also necessary) connection such that all objects, e.g., tables and motor bikes and burning candles, are constituted in a certain way and also behave in a certain way (in accordance with certain laws). In TDA 2nd Section, 4., Par 5 we see that these categories cannot be derived from experience and then, due to that very fact, i.e., that they are independent of experience, we must face Hume's question as to how they then can apply to all objects of the senses (the appearances) in advance. The solution to this problem Kant gives in TDA 2nd Section, 4. Par 6: the apprehension of the spectral data (appearances) is the only means for the incorporation of that data into the (single, unified, empirical) consciousness whereby alone an appearance can objectively represent something rather than be a thing on its own; and, therefore, since all appearances are to be considered as mere representations (and thereby enabling us to avoid the illusion and absurdities of the alternative [Hume's table itself physically getting larger and smaller]), all appearances must be incorporated (or incorporable) into the consciousness and, therefore, via the apprehension and hence thereby be subject to the conditions of an objective apprehension (recognition), for the sake of which, and in pursuit of which, the perception first arises as a (merely) preliminary step. Finally, in TDA 2nd Section, 4., Par 7, Kant reiterates that the problem really is how to assign objects to sheer appearances, and that the ultimate object for which all perception is directed as

¹⁰³ [Appendix 1.2](#), beginning on or around page 713.

¹⁰⁴ [Appendix 1.2](#), beginning on or around page 721.

means is nature, a systematic edifice (as consciousness) of absolutely cohesive elements (perceptions) and reflective of the form of understanding, i.e., the categories.

Effect of *The Critique Of Pure Reason* on Kant's Earlier Dissertation

In very general terms then (and looking for an historical point of view): in the *Dissertation* Kant conceived of a mental process such that intuited, pre-existent objects were mentally placed in a system (nature) according to laws provided by the intellect and reflecting objective reality. In the *CPR*, by having the intellect play the additional and critical part in the very formation of the objects themselves, Kant is able to retain that *Dissertation* role for the intellect as the agent for placing these objects into a system. In this way Kant established a bond between the intellect and experience (which was lacking in the earlier work) by subjecting all objects of the senses to the combinatory action of the intellect on the appearances (the pre-objects [elements] actually given in and through the senses) through which Hume's objects first arose as objects of experience). But in so doing Kant had to eliminate the link between the intellect and that so-called ultimate reality and instead was forced to constrain the intellect to spectral data, i.e., appearances. Thus in order to establish an intellectual connection with an empirical thing on its own (a necessary aspect of experience and one part of his *Dissertation* thesis [though inadequately conceived at that time]) Kant had to give up all contact with a transcendental thing on its own (the other part of the *Dissertation*).

A Speculation on Adam's Experiment Regarding the Constancy of Hume's Table

In a final recapitulation I would like to speculate very briefly as to the experiments which Hume's Adam might have undertaken in order to determine that Hume's table does not change size with the changes in the position of the viewer. In the first place I note that Adam originally will have been able to see himself as here and the table as there, a spatial perspective (which is entirely independent of the intellect). He will then have carefully noted the regularity in the change in size and shape of the table per the change in his distance from the table (also a perspective). [This perception (= consciously {and carefully} apprehended perspective) is curious and singular, and the capacity for which may belong to the human alone.] To model this situation, i.e., the spatial positions of himself and the table (which thus far are merely a here and a there), Adam will let his two hands stand for that here and there, respectively, in the singular, all encompassing space, and then, beginning with the hands outstretched, will slowly bring each in turn to his eye (the other remains outstretched) while being aware of the gradual change in size and the relationship of that change to the distance covered,¹⁰⁵ and mentally take the place of

¹⁰⁵ Perhaps Adam will also note the lack of sensation related to the change in (apparent) size, which might be correlated to an earlier experiment in which he noticed the relationship of visual change and difference in feeling related to balling up his hand into a fist and then extending the fingers.]

each in turn as a "viewer" of the other (looking through his fingers of the hand nearest his eye), and will conceive of the object, i.e., the perceiver and the perceived and the perception in space, and the constancy in size of the objects, from which then the appearances and perception can be derived. The recognition of this constancy, and indeed even the perception itself leading to this recognition, will have been predicated upon a notion of the $TO=X$ (a figment of the productive imagination of the human), which then is merely represented or modeled by the appearances according to a human world-perspective/concept, and specifically in this case to the category of substance with its particular schema for the world, namely that the quantity of matter is neither increased nor decreased (the first of Kant's three Analogies of Experience¹⁰⁶). The result of the experiment is the concept of an object in space in general which retains its shape and size regardless of the location of the viewer and merely looks different depending upon that particular location.^{107 108}

Conclusions

Hume, in an effort to discredit the metaphysics of his time, denied any compulsion or necessitation to the concept of causation. Instead he asserted that what we call cause and effect was nothing more than an association of different perceptions, e.g., that lightning is followed by the sound of thunder. The only thing that was certain were the past perceptions of the lightning and those of the thunder and their sequence. There was no more connection between lightning and thunder than between A and B of the alphabet, i.e., having heard the alphabet recited so many times, the sound of A immediately brought forth the thought of B. Consequently the alleged necessary connection was merely a habit based on exposure and there could be no certain ex-

¹⁰⁶ Per Kant's system there is no need for this experimentation with the size and distance of the hands, for once an object has been recognized, e.g., the table or the hands, the First Analogy ([CPR](#), beginning on or around page 203) kicks in and we already recognize that the quantity of that object does not change, i.e., Hume's table doesn't get smaller, and so where the experiment with the hands would be more of a search for the reason of the *apparent* change, and which we then discover to be the makeup of the eye. (It was the thesis of Schopenhauer that the eye was the first object of human experience, indicating that all we could ever spy and see were a function of our brainarium. And Schopenhauer also taught that the Second Analogy (cause and effect) was sufficient for discerning that objects did not change size per distance from the viewer, such that the First Analogy could be dispensed with.)

¹⁰⁷ David Hume should have no qualms regarding this experiment, for its conclusion is not derived from the cited principle of the constancy of the quantity of matter per se (and thus is not dependent upon any rationalist concept [an anathema to Hume {as well as to Kant}], but rather is dependent upon that principle only to the extent of the prompt to the experiment (just hypothesized) whereby then the conclusion is achieved experientially.

¹⁰⁸ It would seem then that the two most fundamental recognitions which we humans bring a priori to experience are (1) that the things about us are appearances (functions of our own perspective) and not things on their own*; and (2) that all things make sense (that sense being expressed for us via the categories as the form of the apperception and its pervasive unity, and thereby the prompt for experiments and the "second look" perceptions), or as Kant puts it: all appearances are connected in an affinity.]

* As of cir. 2009 I no longer consider this recognition of appearances to be primary and think now that it can be derived from the second recognition of a pervasive nature which includes all things, i.e., all appearances, and as connected in one way or the other. See essay: [Kant in a Nutshell](#).

pectation of a repeat of the sequence. Essentially then what we call human understanding was made up only of perceptions which can only be joined through intense or repeated exposure, and never with any compulsion. And so everything was merely subjective. And thus without any necessity to such concepts as cause and effect there is no basis for any metaphysics.

Kant agreed with Hume that the notions of cause and effect as a necessary connection could not have been arrived at via exposure and experience. Instead he considered that these notions were products of the categorical, connective makeup of the human understanding itself and thus were produced and realized independently of all exposure to objects.

But then the question arises: if these connective categories were derived independently of all exposure to objects, as Kant maintained, by what right can we expect the appearances, which for their part arise through the sensitivity and independently of the understanding, to be subject to them? For viewing things and thinking things are quite different, and yet a union between them is necessary for recognitions of experience.

Kant's solution to Hume's quandary proceeded in this manner: experience is indeed a connection of various perceptions by means of the categories of the understanding, but furthermore the very perceived objects of Hume's system were themselves also subject to the categories in order to be perceived as objects, such that the perceptions utilized in Hume's concept of human experience were only possible by means of the categories. And so without the categories there would be no perceptions, and in this way Hume's system, based entirely upon perceptions, collapses.

Kant then goes on to show that while our perceptions and experiences are very valid, there is no basis to the assertions of metaphysics for there is no way to perceive the objects of metaphysics, e.g., immortality, freewill and God, and they remain merely thinking without a perspective to supply them with any existence. They are thoughts without a corresponding perspective, i.e., they are unverifiable objects.

Then Kant goes on with the [Critique of Practical Reason](#) to provide a basis for the assertion of the reality of immortality of the soul, freewill and God.

Kant's Genius

Kant found science caught between two warring sides, the empiricists and the rationalists, but instead of choosing either one of these to champion, he raised a banner which incorporated the standards of each and thus sought reconciliation of both rather than the capitulation of either. All knowledge arises through experience, but not all comes from experience, for the mind itself produces the form of experience as well as that of the object of experience (but not the content of either, which is entirely empirical and dependent upon the perspective). Essentially then, in

the *CPR* Kant took his original compromise of the *Dissertation* (where he attempted a reconciliation of empirical and rational sources of knowledge) and, upon the insightful insistence of Hume, expanded it from experience with objects (against which Hume, given the existence of the objects, had raised what seemed to be insurmountable objections) to the assembly, and therefore, subjectively speaking, the very existence (in consciousness) of the objects of experience (for which purpose the categories were absolutely necessary) and in that way will not only have satisfied Hume, but also secured what was valid on each of the two warring sides (and even established the validity of experience itself [which Hume, unbeknownst to himself, had merely assumed]) and placed philosophy and the way we look at the world in an entirely different light. Metaphorically then, while Kant and Hume and Leibniz and Newton (and all of us) were focusing on the object, Kant (perhaps driven by an incredible desperation) suddenly turned around and looked instead at the viewers (à la Copernicus¹⁰⁹) with the result that the object disappeared in a cloud of appearances within the eye of each, and philosophy was changed forever.

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¹⁰⁹ Kant himself actually admitted as much in the Preface to the B version of the *CPR*, Par 11, on or around page 6.