

Sunday, April 15, 2012

## Answering Dustin Segers' Presuppositionalism, Part IIIb: The Problem of Induction

Here is Part IIIb of my response to Dustin Segers' [four questions for atheists](#).

Previous responses to Segers can be found here:

[Answering Dustin Segers' Presuppositionalism, Part I: Intro and the Nature of Truth](#)

[Answering Dustin Segers' Presuppositionalism, Part II: The Nature of Logic](#)

[Answering Dustin Segers' Presuppositionalism, Part IIIa: The Uniformity of Nature](#)

In this entry, I continue my response to Segers' third question, which is:

3. Science - "How do you answer the problem of induction from a secular perspective?"

In [my previous blog entry](#), I provided the first part of my answer to this question. In that previous entry, I addressed an area of concern which typically accompanies the presuppositionalist's questions about induction, namely the uniformity of nature. I explained that, on the *objective* view, the uniformity we observe in nature is *inherent* in nature and obtains independently of conscious activity, while on the *subjective* view, any uniformity which we observe in nature is thought to be the product of some act of consciousness. Given the stark antithesis of these two contrasting positions, I recommend that rational individuals who encounter presuppositionalists raising the issue of the uniformity of nature as a debating point, ask the apologists to state explicitly whether or not they think the uniformity we observe in nature is a product of conscious activity, or if it is inherent in nature and obtains independent of any conscious activity. Watch for any reluctance to answer this question; watch for consistency with the apologists' professed worldview in any answer that is given.

Now let's turn our attention to induction and see if Objectivism, the Philosophy of Reason, can shed even further light in answering the presuppositionalist.

The Scottish philosopher David Hume is well known for raising the problem of induction and developing it as a full-fledged philosophical issue. Though Hume himself did not identify the process we now understand as induction with the word 'induction', he did describe it in his exploration of the issue. In [An Enquiry Concerning Human Understanding](#), Hume writes:

It may, therefore, be a subject worthy of curiosity, to enquire what is the nature of that evidence which assures us of any real existence and matter of fact, beyond the present testimony of our senses, or the records of our memory.

In essence, Hume is here wondering how the human mind expands its consciousness beyond that which one immediately perceives or remembers. Though he didn't realize it, Hume was wondering how the human mind forms *concepts*. For it is the *conceptual level of consciousness* which expands man's consciousness beyond what he can immediately perceive and remember; concepts extend his awareness beyond what he personally experiences.

Perception gives us immediate, present-tense conscious access to what exists, while memory retains what we have perceived. But what gives us awareness of "the future"? Indeed, to \*what\* does the concept 'future' refer? What does "the future" denote? Also, what gives us awareness of things in the past that we have not personally experienced and thereby retained in our own memories? What gives us awareness of things that exist elsewhere, beyond the range of our perception, beyond the range of our own personal experiences?

The rational answer to this, as we shall see, is: *concepts* give us this awareness.

To set the tone of this exploration, let us ask:

*If conceptual awareness does not give us the ability to project the future, what does?*

Let this be one of the defining questions for the philosophical concern which has come to be known as “the problem of induction,” particularly *as presuppositionalists employ it in their apologetic*.

It would be interesting to know how presuppositionalists answer this question. Or, can they?

Of course, Christians can be expected ultimately to say that “faith” gives a person such awareness, specifically their faith in “God.” And yet, in stating this, they would be implying that the answer which I have proposed (namely *concepts*) is insufficient to the task, while simultaneously making use of concepts! Presumably the concept ‘faith’ has meaning, does it not? If the Christian assumes that the terms he uses have meaning, then he’s on the turf of concepts whether he knows it or not, for meaning is a property of concepts (as I show [here](#)).

Can it be that Christians (and Christian apologists in particular) have a hard time grasping these fundamental truths because the worldview which they’ve adopted provides them with no understanding of concepts in the first place? I submit that this is indeed the case. Where, for instance, will the Christian turn to for an understanding of concepts and the process by which they are formed? Certainly not the Old and New Testaments!

Curiously, David Hume seems to have had a similar problem: his skeptical view of induction can be traced in part to his faulty understanding of concepts. (Another area where Hume’s worldview sabotaged his understanding of induction and led him to his skeptical view of it, is in his erroneous view of causality. I have already given this matter a treatment here: [Humean Causality and Presuppositionalism](#).)

In framing his problem with drawing generalizations from samples available only to perception and memory, Hume took his own worldview’s faulty epistemology for granted, and came to the only conclusion he could, given his reliance on those faulty premises. Hume’s epistemology makes many crucial mistakes, and several of them work together to compel his skeptical conclusion regarding induction.

Briefly, Hume’s key mistakes include (but are not limited to):

1. the premise that man’s cognition begins with *sensation* (in fact, it begins with *perception*);
2. the premise that the mind assembles perceptions from sensations *volitionally* (in fact, perceptions are assembled from sensations *automatically*, *not* as a result of a consciously directed process of selection);
3. the premise that concepts can only be *arbitrary* constructs (in fact, concepts can and should be formed *objectively*, by a process of abstraction from relevant inputs and completed by definition);
4. the premise that causality is essentially a relationship between *events* (in fact, causality is a relationship between an *entity* and its *own actions*; again, see [here](#));
5. the premise (owing to mistake no. 4 above) that the connection between cause and effect cannot be observed - that, for Hume, “all events seem loose entirely loose and separate. One event follows another; but we never can observe any tie between them. They seem *conjoined*, but never *connected* ([An Enquiry Concerning Human Understanding](#)), which implies that any particular effect just *happens* to follow from some prior effect completely *by chance* (in fact, since causality is the identity of an action, and we can perceive entities in action, we can and do perceive causality all the time);
6. the premise that causality is *not* a necessary relationship (in fact, the relationship between an entity and its actions is a relationship of direct *dependence*, and therefore it is a *necessary* relationship);
7. the premise that induction requires *repetition* (in fact, one can induce general truths from a single instance without the need to repeat an action - e.g., consider touching a hot stove with your hand - you don’t need to do this over and over again to recognize that touching it will result in pain);
8. the premise that the only means available to us in determining whether or not a causal connection is necessary is ultimately by *imagining* (as Hume himself puts it: “This connexion, therefore, which we *feel* in the mind, this customary transition of the imagination from one object to its usual attendant, is the sentiment or impression from which we form the idea of power or necessary connexion” - [Of the Idea of](#)

[Necessary Connexion](#)) (in fact, imagination is not a means of discovering the facts of reality, but on the contrary a process of rearranging in the psychological confines of one's own mind what he has observed in reality)

So already we have a fundamental point to make in response to the presuppositionalist:

*Since Hume's metaphysics and epistemology contain some very significant errors, his conclusions are not trustworthy.*

So why does the presuppositionalist treat Hume as an authority before whom we should bow? Blank out.

We should also point out by way of reply to the presuppositionalist, that Objectivism avoids the errors of Hume's worldview (by not making them in the first place) and provides the epistemological basis necessary for a sound theory of induction.

It is noteworthy that presuppositionalists who cite Hume in raising the problem of induction, typically do not question the premises of Hume's argument. For instance, they do not question Hume's event-based conception of causality (as I have shown [here](#)), and they seem quite unaware of the fact that Hume's epistemology suffers from a faulty view of concepts (which presuppositionalists themselves demonstrate whenever they invoke Hume as an authority on induction to begin with).

In order to get the presuppositionalist to make his position unequivocally clear, we should ask them if they think Hume's argument against inductive reliability is a *sound* argument. If they say that Hume's argument *is* sound, then they admit to endorsing a long series of highly faulty premises (such as the ones I've listed above); if they say that Hume's argument is *not* sound, then what's the problem? Of course, Segers provides no indication that he is prepared to engage the issue in this manner. Presuppositionalists are more concerned about how Hume's skeptical conclusion can be used as an apologetic device than they are about the quality of his argument and its presuppositions!

I would also point out that presuppositionalists have uncritically adopted a rather naïve conception of induction. This is evident in most cases when they raise the problem to begin with. Typically they conceive of induction as means of knowing, with or without certainty, about the future based on the past, as if induction's principle value is in its ability to give man the gift of prophecy. Presuppositionalists will often ask, "How do you know that the future will be like the past?"

For example, in his paper [Secular Responses to the Problem of Induction](#), presuppositional theorist James Anderson, likely drawing from secular sources himself (he surely did not get this from the book of Isaiah) states the problem of induction thusly:

Hume's conclusion was that, regrettably, we have no good reason to think that such inductive inferences are justified. The problem of induction, then, is the problem of answering Hume by giving good reasons for thinking that the 'inductive principle' (i.e., the principle that future unobserved instances will resemble past observed instances) is true.

Notice that Anderson defines "the 'inductive principle'" as "the principle that *future* unobserved instances will resemble *past* observed instances." (Notice also that when Anderson proceeds to examine various secular treatments of the problem of induction, he does *not* consider anything in the Objectivist corpus on induction, even though there have been several available long before Anderson wrote his paper, including David Kelley's *Universals and Induction* (1988); Peikoff's series *Objectivism by Induction* (1998), and even Ayn Rand's own *Introduction to Objectivist Epistemology* (1990), which outlines her theory of concepts (pp. 5-87), indicates - albeit briefly - her theory's implications for induction (p. 28), and includes an extended section from her philosophical workshops dedicated to a discussion of induction (pp. 295-304).)

Presuppositional apologist Brian Knapp goes even further than this, stating that

induction is *primarily* thought of in the relation of past events to future events. ("Induction and the Unbeliever," *The Portable Presuppositionalist*, p. 122n.5, emphasis added).

While induction does in fact lend itself elegantly to making forecasts about outcomes given known circumstances, this is not induction's primary form, its most common application or its only purpose. But presuppositionalists continually seem to think it's each of these, even though certain things they say about induction suggest otherwise.

For instance, when introducing the topic of [his paper](#), James Anderson writes:

The basic problem can be summarised as follows. Suppose that we observe a large number of objects with characteristic *A*, noting that all of them also possess characteristic *B*. It is natural for us to conclude that, in all probability, *all* objects with *A* also possess *B* – including those objects with *A* that have yet to be observed (or cannot be observed). The question posed by Hume is: What *rational* justification is there for making this inference? More generally, what reason do we have to believe that our conclusions about observed instances may be extended (even with probability) to include unobserved instances?

Here we have a description of induction that is *not* in terms of future vs. past instances. As it is described in this passage here, which does not contain either the word 'past' or the word 'future', induction is conceived of as a process of *generalizing* about an entire class of things ("*all* objects with [characteristic] *A*"), however many that might happen to be, from the members of that class which we actually *observe*.

Similarly, in his [debate with Edward Tabash](#), Greg Bahnsen gives the following indication of his own understanding of induction:

The method of generalizing from observed cases to all cases of the same kind is called induction. The basic guiding principle here is that future cases will be like past cases - that similar things will behave similarly.

While it is at least roughly true that "the method of generalizing from observed cases to all cases of the same kind is called induction," the "basic guiding principle" behind this operation is *not*, contrary to Bahnsen, "that future cases will be like past cases" (indeed, future cases may be different from past cases) or "that similar things will behave similarly." Rather, the basic guiding principle behind induction is even more fundamental than these concerns, and is involved in the very action of forming concepts in the first place. This is where we turn to Ayn Rand's theory of concepts, for it is the only thing that can rescue us from the grasping clutches of Hume's skepticism.

Rand's insight that "[t]he process of observing the facts of reality and integrating them into concepts is, in essence, a process of induction" (*Introduction to Objectivist Epistemology*, p. 28) is spot on and crucially relevant to any serious discussion of the problem of induction. Comparisons between objects which can be immediately observed in the present hold primacy over comparisons over a period of time (e.g., from past to present) in forming any concept, for they are not only immediate, but also in a position to be most accurate (until of course we have a standardized means of measurement). So to the extent that similarity is an issue in induction (and certainly it is, given commensurability), any similarity between past and future instances is not primary, nor is it the basis for induction (since "future instances" are not *observed* in the first place, and thus not available for purposes of comparison). But there's much more to say about temporal relations as they factor into induction, and we'll get to that in good time!

As we saw above, Rand holds that the process of concept-formation is in itself inductive in nature. *If this is true, then induction as such is in fact more (indeed, much more) fundamental than estimating future outcomes on the basis of known past precedents.*

So why suppose that concept-formation is essentially an inductive process?

The reason for this is because concept-formation is a cognitive process of generating open-ended integrations based on a small quantity of (ultimately perceptual) input. By 'open-ended integrations' we mean mental classifications of objects whose quantity of included units is not limited to any specific number. They are "universal" in the sense that they include *all* of the members of that class, however many that may be (we will never know), with the potential to continue adding more *ad infinitum*. The concept 'man', for instance, includes all men who are living now, who have lived, and who will ever live.

Why this is the case is due to the nature of the action of forming concepts and the nature of the product of that

action. Rand defines 'concept' as "*a mental integration of two or more units possessing the same distinguishing characteristic(s), with their particular measurements omitted* (*Introduction to Objectivist Epistemology*, p. 13; italics original). The action which the mind performs in forming concepts, begins with immediate awareness (by means of perception) of two or more objects which are isolated (selected) from among everything else in that awareness and integrated by a process of abstraction. The basic selection criterion initiating this process is the presence of some similarity between the two or more objects so isolated which is available in the subject's awareness. A child may be at a playground and perceive sand, playground equipment, trees, grass, sunshine, clouds in the sky, houses in the distance, and two other human individuals in his presence. The similarity between these two individuals as against the differences between them and everything else in his awareness is perceptually self-evident, and thus this similarity provides an *objective* basis for integrating them into a single mental unit.

The process of integrating these isolated individuals into a single mental unit involves an operation which Rand called *measurement-omission*. The individuals which the child actually perceives are generally similar - they are both self-propelling objects standing upright and walking on two legs, possessing a torso attached to which are two arms and a head with eyes, mouth and nose on top, wearing clothing and walking in shoes, and making verbal sounds back and forth from their mouths. They are both human beings. But aside from these general similarities, they are different from each other, as can be seen directly by the different characteristics which stand out as they are compared side by side. For instance: one is taller than the other; one's hair is longer than the other; one seems to have more right angles in its shape, the other having a more curvy shape; one's voice is low-pitched, the other's is high-pitched; etc. Each has its own characteristics, and those characteristics are specific - i.e., they have specific *measurements*. Measurement-omission is a process by which these characteristics are integrated along with the general similarities the child observes between both individuals, but without assigning any particular measurement to them.

Rand stresses that

the term "measurements omitted" does not mean, in this context, that measurements are regarded as non-existent; it means that *measurements exist, but are not specified*. That measurements *must* exist is an essential part of the process. The principle is: the relevant measurements must exist in *some* quantity, but may exist in *any* quantity. (*Introduction to Objectivist Epistemology*, p. 12)

The result of this process of measurement-omission allows the child to continue integrating additional members into the object class so formed. When he sees the two individuals he observed at the playground joined by another individual possessing generally similar features, he has already formed a concept into which he can subsume this new individual as a new member to the class it denotes. There is no quantitative limit to how many he can continue subsuming into the concept's range of reference, and he will continue to expand this concept for the rest of his life as he integrates new members into it. The concept is thus available, once a perceptual symbol has been applied to it for the sake of retention and distinction from other concepts so formed, to be used as a single cognitive unit denoting an open-ended class of individuals. He has essentially formed a universal class by observing only a few actual concretes. That is induction, and it couldn't have been done without the process of *measurement-omission*.

So it should be clear now that there's a lot more to induction than simply "accounting for" the uniformity of nature. On the one hand, there are the metaphysical constants which underlie and are in fact preconditions to our conscious experience. On the other, there is the cognitive activity which the human mind performs in partitioning that experience into classes which can be applied throughout experience. Saying, in the words of presuppositionalist Brian Knapp, that there is

a God who has created the universe in which we live... and who sovereignly maintains it as we find it to be ... This God is personal and involved... [and] has a plan for his creation..., not the least part of which is revealing himself to it... [whose] revelation involves creating and sustaining the universe in such a way that his creatures are able to learn about it and function within it... [which] ultimately points back to God and demonstrates his nature... It is this purposeful demonstration of God that is ultimately the solution to the Problem of Induction ("Induction and the Unbeliever," *The Portable Presuppositionalist*, p. 132)

simply does not address the problem at all. It only tells us that the universe is not *inherently* uniform (which can only mean that it is ultimately chaotic), subject to supernatural whim, and leaves the cognitive process by which

man does in fact generalize from his finite experience completely out of the picture. How is that suitable as an answer to the problem of induction?

Now let's look at induction as it is applied in estimating future outcomes. First, in response to the question, "How do you know that the future will be like the past?" I would retort: I have not claimed that the future will be like the past. In the past, I was 25 years old. I do not expect to be 25 years again in the future. In the past, I was able to fit size 28 jeans; I have no presumption that will be the case in the future. Back in the 1980s, I had to use a typewriter to produce typed text; now I use a computer and a printer. I don't think I'll ever have to use a typewriter again for this. In the past, a gallon of gas cost US\$0.25. Now I understand it is US\$5.00 in some places, and may very well go higher. I certainly don't expect to see gas at twenty-five cents again in the future! Many things do in fact change, and given my recognition of this fact, I acknowledge that many things in the future will not be like the past.

But of course in response to this the presuppositionalist will reply by clarifying his question. He may point out that, just as in the past I was *some* age, I will in the future also be *some* age; that while I may never fit size 28 jeans again, I will still wear some kind of clothing in the future (provided it fits!); that just as in the past I had to use *some* kind of device in order to produce typewritten text, I will in the future likewise use *some* device to do this, however different it may be from the typewriter I used in my college days, etc. And I would readily agree. Indeed, he might even ask something along the lines of: "How do you know that touching a hot stove with your bare hands will result in pain in the future as it did in the past?" And indeed, I certainly do know that this would be the case.

A general point to keep in mind when we're speaking about the future, is the fact that we are still (at least presumably) still speaking about *existence*, at least in terms of what is yet to come. Keeping this point in mind is the aim behind the questions I presented earlier, namely:

To \*what\* does the concept 'future' refer? What does "the future" denote?

In my view, the concept 'future' essentially refers to the continuation of existence from the present. This is consistent with the Objectivist principle of the primacy of existence and also its conception of time, which holds that existence is a precondition for time. Given this, the facts that obtain in the present are fundamentally relevant to any cognitive project of estimating future outcomes. The point this is driving at is the fact that the concepts which Objectivism designates as *axiomatic* (namely the concepts 'existence', 'identity' and 'consciousness') denote the metaphysical constants involved in any act of cognition, including making predictions about the future. The concept 'future' presupposes the concept 'existence' since "future," as in the present and in the past, things will exist and act, and action will still be the action of *some thing* which exists. Similarly the concept 'future' presupposes the concept 'identity' since, just as it presupposes the concept 'existence', it could only be meaningful if it is understood that the objects involved in future projections had their own natures, that they were distinct from one another, and that their actions also had identity (as anyone who uses verbs to denote actions implicitly agrees). Moreover, the concept 'future' presupposes the concept of 'consciousness', for consciousness is necessarily involved in considering what may or will happen in the future, in using facts to generate fact-based imaginative scenarios about what could happen if certain conditions are in place (e.g., I can rationally imagine that on some evening in June of next year, when my wife is cooking dinner, if I put my hand to the hot stove, it's going to hurt!).

In regard to the cognitive undercurrent made possible by the axiomatic concepts and its role in estimating the future, Rand points out that:

It isn't only that what you call existence today you will also call existence tomorrow, but also that in all future processes of cognition the axiomatic concepts are directing that process. (*Introduction to Objectivist Epistemology*, p. 257)

So asking about how one knows what will happen in the future *right here on earth* is not akin to asking how one knows what is happening on some planet orbiting a distant star. The objective conception of induction does not leave us so profoundly disadvantaged as the presuppositionalist would like to mislead us into believing.

Rand makes another relevant point which is key to the relationship between conceptual integration and inductive generalization. She writes:

When you form a concept, it is independent of time. (Ibid., p. 256)

Consider again the concept 'man'. Since it was formed by integrating all the characteristics of individual men while omitting the specific measurements in which those characteristics exist, we see that omitting measurements is the key to generalizing on the basis of specific concretes which we actually perceive. But hair color, height, weight, facial hair (or lack thereof), shape of physique (or lack thereof!), shoe size, waist size, etc., are not the only characteristics whose specific measurements are omitted in this process. Another form of characteristic is included without specific measurement, namely *time*. That's right, when we form a concept, *time is an omitted measurement*.

Recall that the concept 'man' includes *all* men who live, who have lived, and who will live. Right here we see the result of omitting the measurement of time from a concept. It is a concept's independence of time which allows us to include all men without regard for *when* they live. This means that we can use the same concept in speaking about the future as well as about the present and the past. It means that the *meaning* of the constant is *stable*, regardless of *when* - the *particular* time - it is understood to refer. Because of this, when we speak about men in the future, we mean generally the same thing we mean about men in the present and men in the past. Why? Because time is an omitted measurement.

So one of the chief inductive implications of forming a concept is, in a word, *time-transcendence*. Conceptual meaning is not time-bound, which means: a concept's general meaning maintains cognitive integrity regardless of when the units it subsumes in any particular usage are thought to exist.

But wait! There's more!

Time is not the only dimensional measurement which is omitted in forming a concept. We also omit measurements tying a concept's units to a particular *place*. That's right, *place too is an omitted measurement*. Just as the concept 'man' includes every man who presently lives, who has lived, and who will live (since time is an omitted measurement), the same concept includes every man regardless of *where* he lives or happens to be at any specific moment (since place is an omitted measurement). Just as the concept 'man' includes the man watching TV in his living room now, the man who was riding a horse 1400 years ago, and the man who will be climbing Mt. Everest 30 years from now, the concept 'man' includes the man working in his yard across the street, the man plowing his field in central Vietnam, the man setting a drill bit on an oil rig in the North Sea, and the man piloting an orbiter above the earth. Since both time and place are measurements which the formation of the concept 'man' omits as part of the abstraction process, the meaning of the concept 'man' is not bound to any particular time or place. Indeed, with concepts, we've come a long way from the immediate-boundedness of perceptual awareness!

So now a very bright picture should be starting to emerge with regard to the problem of induction. Induction begins with the formation of our first concepts of things we perceive in the world around us. This is because we form concepts by a process which omits the specific measurements of the things we actually do perceive. The omission of these measurements not only allows us to continue subsuming additional members into the range of a concept's scope of reference, but also allows us to bank on the stability of our knowledge once those measurements do become specific. Since time and place are omitted measurements, and the abstraction process integrates individual concretes (or their attributes) into open-ended classes of generally similar units, concepts so formed expand man's awareness far beyond the level of immediate perceptual input and allow him to make inferences about concretes he may never perceive, regardless of when and where they exist or may exist.

If the apologist, then, wants to ask us how we can know, for instance, that human beings will be biological organisms in the future, we can reply that we know this thanks to the abstraction process: since the concept 'future' denotes a continuation from the present and the concept 'man' omits measurements of time, its meaning as it is currently understood is valid regardless of when the units it subsumes are thought to exist, even estimating future projections. There's certainly no question-begging going on here, as the presuppositionalist will likely charge (again, as a matter of habit), since omitting measurements is not a process of proof, nor is it an instance of circular reasoning. When the presuppositionalist asks, "How do you know?" I can safely say, "I know because I've analyzed it."

Now it should be borne in mind that, since definition is "the final step in concept-formation" (Leonard Peikoff,

*Objectivism: The Philosophy of Ayn Rand*, p. 96), definitions play a limiting role in what can and cannot be subsumed as units in our concepts. While this speaks more to the deductive implications of concept-formation (“The process of subsuming new instances under a known concept is, in essence, a process of deduction” - Ayn Rand, *Introduction to Objectivist Epistemology*, p. 28), it is relevant to justifying knowledge claims about the future. Several points about definitions need to be kept in mind:

A definition is a statement that identifies the nature of the units subsumed under a concept... The purpose of a definition is to distinguish a concept from all other concepts and thus to keep its units differentiated from all other existents... A definition is not a description; it *implies*, but does not mention all the characteristics of a concept’s units. If a definition were to list all the characteristics, it would defeat its own purpose: it would provide an indiscriminate, undifferentiated and, in effect, pre-conceptual conglomeration of characteristics which would not serve to distinguish the units from all other existents, nor the concept from all other concepts. A definition must identify the *nature* of the units, i.e., the *essential* characteristics without which the units would not be the kind of existents they are. But it is important to remember that a definition implies *all* the characteristics of the units, since it identifies their *essential*, not their *exhaustive*, characteristics; since it designates *existents*, not their isolated aspects; and since it is a consolidation of, not a substitute for, a wider knowledge of the existents involved. (Ibid., pp. 40, 42)

What does this mean? It means we cannot apply a concept without regard to its meaning, nor can we subsume into a concept’s scope of reference units which are not consistent with the essential nature of those denoted by a concept. And we do not pull definitions out of thin air. On the contrary, they are dictated by facts relevant to the nature of the units they subsume.

The definition of ‘man’, for instance, is *the rational animal*. If the apologist wanted to ask, then, how we could know that men of the future will not be mechanical robots, we can reply that whatever robots may exist in the future, we would be wrong to subsume them under the concept ‘man’ since one of the essential characteristics of the units properly denoted by this concept is *animality*. Robots are mechanical, and animals are biological. So we can know this, not by simply analyzing the concept’s meaning as the analytic philosophers would claim, but by reference to the facts which inform the meaning of the concept in the first place.

But what if the apologist asked how we could know whether or not men will breathe water in the future. How could we know this? The definition of the concept ‘man’, he may note, does not specify that its units must be air-breathing and not water-breathing. And he would be right: the definition of ‘man’ does not specify this. But as we just saw, on the objective theory of concepts, the definition of ‘man’ wouldn’t *have to* specify this; it *implies* this characteristic of the units it subsumes - namely that the general implications of man’s animality is that he is an air-breathing organism. Again, if we were to find organisms which otherwise bore similarities to man, but breathed water instead of air, we would have to create a new concept for them, to differentiate the units subsumed under the concept ‘man’ from those which are different from men in a significant manner (i.e., in a manner bearing on his essential characteristics, namely the type of animality which is common to men).

But as we go down this path with the presuppositionalist, who enjoys indulging in fantasizing alternatives to reality with the specific interest of undermining man’s certainty, it is important to point out the general nature of knowledge: knowledge is not acquired and validated by shooting down imaginative speculations, but by identifying and integrating the facts we discover in reality. We can spend all day imagining scenarios to populate a hypothetical future fantasyland, but since those fantasies thrive on disregarding facts that we already do know, they have no value other than idle entertainment, and should be treated as such.

But something else should be clear now: contrary to the common assumption that induction is unable to deliver conclusions with certainty, many inductive generalizations are incontestably certain. While analytic philosophers will say that such truths are “analytic” in nature, since they seem to be more or less directly related to the definitions of our concepts, Objectivism points out that *definitions are not primaries* which just exist causelessly and independent of the realm of fact. Rather, (good) definitions are formed by an objective process, in keeping with the process of concept-formation and the nature of a concept’s essential characteristic(s), which means: according to the facts.

Since induction is essentially a process of conceptualizing the world around us, then, to deny the validity of



induction is to deny the validity of conceptual knowledge. Thus when skeptics use concepts to deny induction, they commit the fallacy of the stolen concept: they are using concepts to deny the validity of conceptual knowledge. You won't get very far in understanding the nature of knowledge by making such gross errors.

So in a nutshell, the answer to Hume's problem of induction is basically two-fold:

First, correct Hume's fatal errors (most notably the ones listed above), and

Second, understand how conceptual integration (given the analysis of concepts provided by the objective theory of concepts) is essentially the process of forming general classes based on very limited input by means of *measurement-omission*.

Since induction is a cognitive process, any justification for inductive reasoning that may be required of us must take this fact into account. The answer to the problem of induction is not going to be found by pointing to a realm contradicting the one we live in, nor will it be found in using concepts to deny the conceptual level of consciousness. The answer can only be found if we first discover what induction is, and understand it as a conceptual process. Since time and place are omitted measurements in concepts of entities and attributes, applying concepts outside of the present and beyond the range of our perceptual awareness is not problematic. Indeed, that's their very usefulness. In a word, then, the answer to the problem of induction as we've seen presuppositionalists inform it, is to point out time is an omitted measurement, which means: the integrity of our conceptualizations is maintained regardless of the specific temporal parameters of their application, whether past, present or future.

When Nide Corniell (aka "Hezekiah Ahaz," "Robert," "Trinity," "r\_c321," etc.) asks in [a 14 April comment on his blog](#),

What allows you to extract past experiences and make predictions about the present/future?

the answer to questions like this should now be clear. The answer is: Generally, concept-formation allows us to do this; specifically, measurement-omission gives us this ability. The resources we need for this process are all right here in reality, beginning with perception of objects (our most fundamental mode of awareness), retention of perceptions in memory, and the volitional activity of conceptual consciousness. There's no justification for ignoring these elements in the overall process just as there is no justification for pointing to something which we can only imagine in order to fill the vacuum of our ignorance of these elements.

So not only do Hume's faulty premises need to be exposed and corrected, we also need Objectivist epistemology to provide an *objective* "account for" induction. It should be clear that presuppositionalists are not prepared to question Hume's premises, nor is their religious worldview able to equip them to demystify induction given its lack of a theory of concepts (indeed, the *objective* theory of concepts).

So the presuppositionalist's "How do you account for the uniformity of nature?"/"How do you answer the problem of induction?" approach to apologetics is a dead end. Apologists should take care not to raise these questions in the presence of Objectivists. They just might have their hats handed to them.

by Dawson Bethrick