

Book Reviews

Binswanger, Harry. *How We Know: Epistemology on an Objectivist Foundation*. New York: TOF Publications, 2014.

1. Introduction

Harry Binswanger's *How We Know* addresses a topic of immense importance to philosophy as a whole and for developing the implications of Ayn Rand's philosophy of Objectivism. Epistemology forms the bedrock of Objectivism; it is the only subject about which Rand wrote a philosophical treatise.¹ Her new epistemology pervades her thinking and the remainder of her philosophical claims about metaphysics, ethics, politics, and art. Yet she only partially developed her epistemology, offering promising guiding lights for the remainder, but leaving substantial questions for others to address.

In *How We Know*, Binswanger summarizes Rand's epistemology, including her theory of concepts, and discusses two important epistemological issues that she didn't develop: (1) propositions and (2) proof and certainty. Unfortunately, the book only partially lives up to its title and ambitions. Binswanger's reviews of and elaborations on the questions that Rand covered are informative. However, in his attempt to go beyond Rand's work in epistemology, he fails to address some of the most important questions involved. He also misses a number of opportunities to connect his work with ongoing developments in epistemology, psychology, and science.

I will begin with the strongest part of the book: Binswanger's review of the foundation of Objectivist epistemology as well as its theories of perception and concept-formation. Then, I will focus especially on Chapter 5: "Propositions" and Chapter 8: "Proof and Certainty." While his chapters on logic, principles, and free will are important components of epistemology, they are mostly elaborations of the good work of Rand and others on these subjects. Due to space constraints, I shall leave those aside almost entirely in this review.²

¹ Ayn Rand, *Introduction to Objectivist Epistemology* (New York: New American Library, 1979).

² This entire book has been reviewed at great length elsewhere by Robert Campbell; see his, "What Do We Need to Know?" *The Journal of Ayn Rand*

2. Foundations, Perception, and Concept-Formation

One of the strengths of *How We Know* is the frequent reminder that our consciousness and epistemology operate as biological processes and serve biological functions. This begins in Chapter 1: “Foundations,” with connections made between consciousness and the needs of survival of humans and other organisms. Binswanger begins by presenting the first of Rand’s axioms, namely, existence, or the fact that a mind-independent world exists. He then focuses more of the chapter on the axiom of consciousness, the idea that we are aware of existents in the world and can learn about them. It is here that he connects consciousness to survival. In describing the operation and properties of consciousness, he explains that it is embedded in an organism with biological functions, needs, and goals. Consciousness allows organisms that have it to identify and act toward goals in unique ways. Specifically, he identifies three functions that require consciousness—cognition, evaluation, and the initiation of bodily action—all of which conscious animals can do but plants cannot do (p. 39). This perspective has two advantages. First, it treats consciousness like all other biological processes in organisms and judges it on the same standard: its contribution to survival. Second, it directly connects cognition and action, forecasting the is-ought connection in Rand’s ethics.³ Binswanger reminds us that “biologically, seeing is for moving, ideas are for doing, theory is for practice” (p. 41).

After laying down the groundwork with a discussion of axioms, Binswanger moves on to the strongest chapter of the book: Chapter 2: “Perception.” In this chapter, he brings perception to life and offers a vivid elaboration of how it operates. He shows that, unlike sensation, which is “the response to energy impinging on receptors” (p. 60), perception in a “three-dimensional array . . . provides the co-presence of all the entities that the animal can act on or be affected by. We see in one spread the entire scene of entities” (pp. 61-62). He isolates four features of perception: (a) it is “awareness of entities”;

Studies 18, no. 1 (2018), pp. 118-63. I agree with Campbell in his assessments of the sections of the book that were left out of my review as well as his overall take on the book (although not with every point he makes).

³ Ayn Rand, “The Objectivist Ethics,” in Ayn Rand, *The Virtue of Selfishness* (New York: New American Library, 1964).

(b) it presents a “world of entities *arrayed in space*”; (c) we are at the center of our perceptual space; and (d) it is not static, but “a continuous process over time” (pp. 60-63).

Relying in large part on the work of psychologist J. J. Gibson, Binswanger shows how motion is essential to the perception of entities, especially in the case of visual perception (pp. 62-64 and 68-71). As we move in a field, we observe entities moving relative to ourselves, each in a different way depending on where it is in the visual field. The differences in their relative motion contribute to our ability to distinguish them from one another. The studies he discusses help support his claim that “[c]onsciousness is a difference-detector” (p. 68) and show us that perception is radically different from mere sensation—not only in its output, but also in its manner of operation.

For all of its strengths, even Chapter 2 has substantial drawbacks. Binswanger largely ignores the prior work done on perception by other Objectivists. Most notably, in 1986, David Kelley published a book-length treatment of this subject, *The Evidence of the Senses*, covering essentially all of the issues Binswanger covers as well as several others.⁴ Binswanger proceeds as if the book does not exist, yet he makes essentially the same claims as those in Kelley’s book. For example, in defending the validity of perception, Binswanger distinguishes the *object* that is perceived from the *form* in which it is perceived (pp. 78-84). Kelley proposes this distinction in his book, using both “appearance” and “form” where Binswanger uses only “form.”⁵ Perhaps Binswanger sees a distinction between his understanding and that of Kelley, but that would have been useful to bring up and explain. Also, Kelley preceded Binswanger in drawing on the work of J. J. Gibson, yet no mention or credit is given. It is unacceptable to ignore Kelley’s work, of which Binswanger must be aware, when its relevance is so striking.

Binswanger then turns—in Chapter 3: “Concept-Formation” and Chapter 4: “Higher-Level Concepts”—to a thorough description of the Objectivist theory of concepts. He sharpens his description by contrasting it with both Realist and Nominalist theories of concepts. Binswanger explains that in the Objectivist theory, a concept is derived through the *integration* of entities and of attributes that vary in quantity

⁴ David Kelley, *The Evidence of the Senses: A Realist Theory of Perception* (Baton Rouge, LA: University of Louisiana Press, 1986).

⁵ *Ibid.*, pp. 41-42.

along a particular dimension (p. 116). He also offers a refreshing array of examples, rather than relying just on the canonical examples used in Objectivist writings.

When Binswanger goes beyond Rand in an attempt to address the cognitive content of concepts, his proposal is unconvincing. In distinguishing the Objectivist theory from the Realist one, he exaggerates their differences and fails to see any similarities. He explains that on the Moderate Realist theory, concept-formation is in some sense a *subtractive* process; one subtracts the unique features of each particular while maintaining the non-specific essential features (p. 103). On the Objectivist theory, by contrast, the process is additive: “On the Objectivist theory, concepts are formed by contrast and comparison among concretes—i.e., by the conceptualizer adopting a *wider* focus, not a narrower one. It is not a subtractive process, but an additive (integrative) one” (pp. 117-18). This is only partly right. It is true that one widens one’s focus to all referents; however, one also narrows one’s focus to the “Conceptual Common Denominator” (CCD)⁶ and omits the relevant measurements. Take the common example of forming the concept ‘table’ from observing tables. It is true that one widens one’s focus to all tables within one’s field of focus. However, one also focuses narrowly on the features that these table have in common that differentiate them from their surroundings, such as their common shape and purpose. In this narrow sense, the Objectivist approach is similar to the Moderate Realist approach. Their difference lies in the fact that the Objectivist theory recognizes that they have no features *exactly* in common and their similar features are united, instead, by measurement-omission.

Binswanger carries the same error further in Chapter 4: “[C]oncept-formation is integrative, which means that the wider concept contains more cognitive content than any of the narrower ones from which it is formed” (p. 141). He goes on to explain that furniture has more cognitive content than table, because it includes all tables as well as other entities such as chairs and beds. It is true that furniture has more *referents*, but it also has more omitted measurements, and so has fewer features in common. One can see the trouble with this by looking at a more abstract example. The concept *existence* is the broadest concept, so by Binswanger’s argument, it should have the most cognitive content of any concept. However, there is little that can be said about existence as such, because all measurements have been

⁶ Rand, *Introduction to Objectivist Epistemology*, p. 15.

omitted; there is nothing remaining that is universal to all existents other than the fact that they exist. In this way, this concept has *little* cognitive content. In the same way, although ‘furniture’ has more referents than ‘table’, it does not necessarily have more cognitive content, for there may be fewer features that are universal to all furniture than are universal to all tables. The question of what constitutes the cognitive content of a concept in the Objectivist theory is a valuable one, but one that Binswanger attempts to answer too hastily.

3. Propositions

Binswanger moves further into new territory in his chapter on propositions. He provides a number of observations about how propositions operate and their cognitive utility, explaining how some commonly held beliefs about propositions are erroneous. Here, he makes the most innovative claim of the book, namely, that propositions operate by a type of *measurement-inclusion*, as opposed to the *measurement-omission* involved in concept-formation (p. 174). Specifically, the claim is that a proposition has the form “S is P,” where S is the subject and P is the predicate. The identification involved in a proposition is that the measurements of S fall within the measurements of P. Thus, when one says, “This dog is an animal,” one recognizes that the measurements of dog fit within the broader measurements of animal. The proposition then allows one to apply all of the knowledge contained in the concept “animal” to “this dog.”

Within this context, Binswanger then separates propositions into two types: classificatory and descriptive. Classificatory propositions, he says, classify entities (e.g., a car is a vehicle). Descriptive propositions describe a feature of an entity. The examples he gives are “Tom ran,” “Tom is tall,” and “Tom is in the kitchen” (p. 175). Here, what one is describing are Tom’s action, height, and location, respectively, rather than classifying the entirety of Tom. Despite his emphasis on this distinction, however, it’s not clear that it involves a meaningful difference. Descriptive propositions do classify features. When one says that “Tom is tall,” one is classifying Tom’s height within the range of measurements contained in the concept “tall.” Binswanger equivocates on this point. On the one hand, he recognizes that “in a descriptive proposition, there is indeed a classification made” (p. 176). Yet on the other hand, he adds, “we should not attempt to reduce description to a kind of classification” (p.

177), and then, “description is not a disguised classification” (p. 178). This point could use more clarification.

Binswanger next discusses the cognitive role of propositions as well as the differences between propositions and concepts. Here, he makes a number of statements that are difficult to integrate with one another. He claims that propositions cannot be open-ended in the way that concepts are (p. 185). A concept is open-ended both extensively (it refers to all of its units), and intensively (it subsumes all of their characteristics). He allows that some propositions are open-ended extensively, for example, “Water boils at 100 degrees Celsius” is true of all units of water. However, he denies that propositions can be open-ended intensively: “even general propositions are not open-ended intensively: one does not add new information to them over time, with the growth of knowledge” (p. 185). This is a point he makes elsewhere as well: “a proposition says what it says, nothing more. A proposition does *imply* more than it says, but such implications are not necessarily recognized by the person asserting the proposition” (p. 184). This closed-endedness is a significant claim to make with little justification; it also seems inconsistent with claims he makes elsewhere. He states repeatedly that propositions classify or describe an existent, and therefore allow one to apply *all* aspects of the predicate to that existent: “The effect of classificatory propositions is to realize: ‘all that which is true of the Ps is true of this S’” (p. 176). (He adds a similar statement for descriptive propositions.) However, “All that which is true of the Ps” includes more than the proposition says and more than the speaker recognizes at the time.

An example may make this point clearer. Binswanger offers the example “Lassie is a dog,” saying that this example “identifies Lassie’s possession of those canine characteristics that are universal to dogs” (p. 177). However, the “characteristics that are universal to dogs” include all features that are known and unknown. This implies an intensive open-endedness. If one discovers a new property of dogs that one adds to the concept ‘dog’, then that property must apply to Lassie as well. Indeed, he acknowledges this later, when he says that this same proposition “enables us to apply to Lassie all the knowledge of dogs stored in the ‘dog’ file” (p. 187). But isn’t that knowledge open-ended? If it is closed-ended, and only some features of dog apply to Lassie, which features apply and which don’t?

Taking this one step further in the chapter, Binswanger claims that propositions cannot be loci of integration over time, that a proposition “says what it says, nothing more” (p. 184). This claim flies in the face

of a substantial number of scientific and philosophical examples to the contrary. Take these examples:

- (1) “For every action there is an equal and opposite reaction.”⁷
- (2) “We hold these truths to be self-evident, that all men are created equal, that they are endowed by their creator with certain unalienable rights, that among these are life, liberty and the pursuit of happiness.”⁸
- (3) “Man’s mind is his basic means of survival.”⁹

Each of these is a proposition or a combination of propositions, and each has been a locus of substantial study. New knowledge has been added to each of these propositions over time; in fact, there are individuals who have dedicated portions of their careers to studying one of these propositions.

Binswanger discusses a number of such complex propositions in Chapter 9: “Principles,” where he describes the importance of a wide variety of principles, including “A is A,” and “Honesty is a Virtue,” among others. He does not quite mention that each of these is a proposition, and his discussion is at odds with some of his claims about propositions being closed-ended and not loci of integration. For example, he says that the “principle of identity (A is A) underlies and explains the rules of valid deduction, valid induction, proper definition” (p. 307). That sounds intensively open-ended to me.

Thus, there are inconsistencies in this chapter that leave one without a clear sense of how far propositions extend in their content. There are further essential questions about propositions that are left unaddressed or underexplored, such as: What is it about a proposition that allows it to be a complete thought? How do more complex propositions, such as examples (1), (2), and (3) above, operate?

4. Defective Propositions

Binswanger continues his discussion of propositions in a section entitled “logic and propositions” in Chapter 7: “Logic:

⁷ Isaac Newton’s Third Law of Motion.

⁸ United States Declaration of Independence.

⁹ Ayn Rand, “What Is Capitalism?” in Ayn Rand, *Capitalism: The Unknown Ideal* (New York: New American Library, 1967), p. 16.

Practice.” Most of this section is dedicated to discussing what constitutes a valid versus a defective proposition (pp. 241-51). This is an important topic that Objectivists have not yet addressed sufficiently, but his discussion is disappointing. A valid proposition, on his view, (a) must be composed of valid concepts and (b) must involve a proper combination of those concepts (p. 241). So far, so good. However, his discussion of criterion (b), which takes up most of this section, is poor, for it does not quite answer the question he sets out to answer, and it is riddled with unhelpful examples. He proposes three requirements for a proper combination of concepts: (1) grammaticality, (2) consistency, and (3) referentiality (p. 243). Let’s take each of these in turn.

At the outset, grammaticality as such is a strange criterion to attach to valid propositions, for it varies from language to language. Does he have in mind a set of grammatical requirements that are universal among languages? Who knows, for he offers no explanation for what he means. He only goes as far as saying, “philosophical grammar concerns the right use of the metaphysical categories—entity, attribute, action, relationship, etc.” (p. 244). Perhaps, but what is the right use of these categories? No answer. Most of this section is filled with examples of defective propositions, yet some of these examples are defective for reasons other than grammar. One such example comes from Martin Heidegger: “The Nothing nothings” (p. 245). Arguably, the defect in this proposition is not its grammar, for it has a subject and a predicate. The defect is in its referentiality, the fact that it doesn’t refer to anything. Far more intelligible statements also fail to meet his grammaticality requirement, such as Henri Bergson’s claim that “philosophers agree in making a deep distinction between two ways of knowing a thing. The first implies going all around it, the second entering into it” (p. 244). Binswanger goes on to explain the inadequacy of this statement: it is too metaphorical to explain how knowing actually occurs. Most of us would agree. That might make the statement false or insufficiently specified, but ungrammatical? Each of the two propositions fits into proper English grammar, with a subject and a predicate composed of valid concepts.

Binswanger’s consistency requirement is just as troublesome. Once again, he provides a long list of examples in lieu of a description of the requirement (p. 247). The trouble with these examples is that all of them are false rather than invalid. An invalid proposition must be one that is not meaningful and therefore cannot be judged as true or false. Here are some of his examples: “That circle is square,” “Logic is a Western prejudice,” and “The laws of logic are arbitrary.” All three

of these are perfectly intelligible. The first is false because an entity can be a circle or a square but not both (and he says as much later on [p. 253]). The latter two commit the “fallacy of the stolen concept,” which Binswanger correctly identifies, calling it a “contradiction” (p. 247). Yet, a contradiction renders a proposition *false*, not *defective*.

The third criterion—referentiality—is more meaningfully discussed. This criterion is that a proposition “must succeed in designating a subject” (p. 248). Binswanger provides some useful examples of propositions that do and do not designate a subject. Yet the discussion is incomplete, for it still leaves open a number of central questions. Is designating a subject sufficient, since a proposition is more than a subject? Must a proposition designate a predicate as well? What about the relationship between subject and predicate? The statement “Saturday is in bed” designates both a subject and a predicate, yet it does not make an intelligible statement. Thus we are left, after Binswanger’s discussion, with a number of unhelpful statements and not much guidance regarding what makes a proposition valid.

5. Proof and Certainty

Binswanger then turns his attention to a chapter on proof and certainty, which is the weakest in the book, failing to answer most of the important questions about these issues. He reviews some of the previous work done on this topic by Rand, Leonard Peikoff, and others, primarily on the hierarchy of knowledge and on the need to reduce complex knowledge to its basis in the directly perceivable. He brings up a number of other facts about knowledge that are well established in Objectivism, including its interconnected structure and the fact that new knowledge, properly conceived, cannot contradict old knowledge. He also explains that certainty is contextual and requires conclusive evidence. What is missing, though, is a rigorous characterization of what constitutes proof and certainty—the very purpose of the chapter.

Based on the one example in the entire chapter that Binswanger discusses in some depth—that of determining which animal made a given set of foot prints in soil—I gather that he has the following steps in mind for proving and for reaching certainty of a claim. One must first (a) have sufficient general knowledge of the context of the claim in order to (b) develop a reasonable and sufficient set of hypotheses that would explain the observed phenomenon. He says, “A presupposition of attaining certainty on a given topic is that

one knows enough to make a rational delimitation of the hypotheses, so that one knows that the true hypothesis is within that delimited set” (p. 273). One then (c) evaluates these hypotheses against evidence so as (d) to reach the conclusion that only one of the hypotheses is consistent with all of the available evidence (p. 275).

This series of steps might have been a start, had Binswanger stated them at the outset, but they are not new and they leave open too many questions. For example: What constitutes a sufficient general knowledge of the context of a claim? How does one know whether one has developed a sufficient number and variety of hypotheses? How much evidence must be considered before being certain of a hypothesis? Binswanger doesn’t even pose these questions, let alone answer them. Instead, he spends the bulk of this chapter discussing the need for some evidence before a claim can count as a hypothesis. His point, succinctly put as “hypotheses require evidence” (p. 277), is well taken, valid, and true, but this does not serve as a substitute for characterizing the process of proof.

Furthermore, as part of Binswanger’s discussion of hypotheses with no evidence, he dedicates eight pages to what can only be described as a rant against arbitrary assertions (pp. 278-85). To be sure, arbitrary assertions—understood as claims without any evidence—are invalid and a discussion of them is relevant in this chapter. A well-considered discussion, which takes account of modern scholarship, might have been a valuable contribution to epistemology, but this is not what he offers. Additionally, in his rant, he makes a number of claims about arbitrary assertions that cannot all be true. According to Binswanger, arbitrary claims are:

- claims made with no evidence (p. 278);
- “ignorance taken as epistemological license” (p. 279);
- such that “logic cannot be used to guide what one does with” them (p. 280);
- such that they can never “turn out to have been true” (p. 282);
- “actually fantasy” (p. 282); and
- “not propositions at all, but pseudo-propositions: words with the linguistic form of a proposition, but without cognitive meaning” (p. 284).

If a “claim” is not a proposition at all, then how can it be a claim that’s made with no evidence? Two examples he gives of arbitrary assertions

are: “My three of clubs is now a king of clubs” (p. 280) and “It is raining now” (p. 283). Both of these are arbitrary in the context in which Binswanger presents them, yet are they not propositions at all? Can logic not be used to guide what one does with them? Can it not be true that “It is raining now”? Binswanger seems not to have made up his mind about the properties of arbitrary assertions.

6. Treatment of other Philosophers

A few points are worth making here about Binswanger’s treatment of other philosophers and philosophical systems. A few major historical figures are brought up—primarily Aristotle, but also John Locke, Ludwig Wittgenstein, Plato, and John Stuart Mill. Binswanger draws distinctions between his view and theirs, yet their views aren’t treated in any depth. No modern adherents of any of these philosophers makes a presence, nor are any current philosophical approaches and their similarities to or differences from Objectivism discussed. This is an enormous missed opportunity to connect with other thinkers or to illustrate the advantages of Binswanger’s or Objectivism’s approach over those of others.

There are a few places in the book where an entire philosophical school or problem is dismissed in just a few sentences. For example, Binswanger says, without any prior introduction to Pragmatism and its main claims, “Principles are, of course, exactly what Pragmatism rejects. Pragmatism opposes principles on principle” (p. 41). This claim, while it may be true, is left without support. At a later point, he brings up Russell’s paradox and Godel’s theorem, offering an invalidation of the former and a critique of the latter in just a few sentences (pp. 250-51). Neither of these complex issues is explained and given a fair hearing before it is dismissed. This is another enormous missed opportunity, for if Objectivism truly could offer insights on these problems, that would be of great interest and value to philosophy in general.

7. Conclusion

Overall, *How We Know* has strong and poor chapters. The presentation of material that was already developed by Rand is clear and Binswanger’s use of examples helps illustrate those claims. His occasional elaboration of claims based on scientific findings, especially regarding perception, is also valuable. Other strong chapters, such as those on principles and free will, that space did not permit me to address, are well worth reading.

For all of these strong points, Binswanger's novel claims as well as his attempts to advance Objectivist epistemology into new areas are relatively weak. His main innovation is the observation that propositions are formed, in part, through measurement-inclusion. The remainder of his discussions about propositions, defective propositions, and proof and certainty, do not advance the state of knowledge, and his novel claim about the cognitive content of concepts is unconvincing. Furthermore, both the strong and weak chapters suffer from a lack of engagement with other thinkers and philosophers. Binswanger says in his introduction to the book that it is aimed at the "intelligent layman" (p. 17). An intelligent layman, with no prior introduction to Objectivism and little prior knowledge of epistemology, would need more comparisons and contrasts with other philosophies in order to grasp and appreciate Rand's Objectivist epistemology.

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