Ayn Rand's Theory of Concepts

Rethinking Abstraction and Essence

ne notable change in the philosophical literature of the last thirty years has been the extent of attention to the nature of *concepts*. Although philosophers have been concerned with "conceptual analysis" and related issues since the early twentieth century (and in fact since Kant), sustained attention to what concepts are, to their "possession conditions," to their acquisition and—especially—to their epistemic role is quite recent. The problem of the nature of concepts is, of course, much more ancient, since the traditional problem of universals, today thought of as primarily a metaphysical issue, originally had as an important component the explanation of the universality of our knowledge. In this connection, I should say at the outset that I am using the term "concept" as Rand does, to refer not to an object of thought but to a retained grasp of objects of thought, where the grasp is of the appropriate unitary sort.¹

^{1.} Compare, for example, Geach (1957, 18–19), who cites for the former "Russell's use of [the term 'concept'] in *The Principles of Mathematics* and again . . . the use of it to translate Frege's 'Begriff'; Russell's 'concepts' and Frege's Begriffe were supposed to be objective entities, not belonging to a particular mind." As Geach and others have pointed out, viewing concepts as "mental particulars," and thus your concept of electricity as a distinct existent from mine, does not preclude speaking of you and me as having the same concept of electricity. "Mental

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A number of philosophers, including, for example, John McDowell in Mind and World (1994) (building especially on the writings of Wilfrid Sellars), have come to speak of the role of concepts in the justification of propositional knowledge.² Now, if one thought of perceptual awareness as preconceptual, and justification of perceptual judgments as noninferential, one would need, it seems to me, a normative theory of concepts as the bridge. On this view, the proper application of the subject and predicate concepts in a judgment would be crucial to the justification of perceptual judgments employing those concepts. McDowell, of course, does not think such a picture is plausible, and views the relationship of concepts to perceptual experience quite differently. He speaks of the picture of concept-formation I have just pointed to as "a natural counterpart to the idea of the Given," and argues that such a view would require the abstraction of "the right element in the presented multiplicity." But, he writes, "this abstractionist picture of the role of the Given in the formation of concepts has been trenchantly criticized, in a Wittgensteinian spirit, by P. T. Geach" (McDowell 1994, 7; referring to Geach 1957, §§ 6–11).

The view that Geach criticizes under the name of "abstractionism" involves, however, a crude, Lockean notion of abstraction.³ Those of us disinclined to think that the "Given" is a myth should consider the possibility that a more sophisticated view of abstraction could provide just

particulars" is Jerry Fodor's term (see, for example, Fodor 1998, 23); Rand speaks (with some reservation) of "mental entities" (*ITOE* 10, 157–58). Throughout this essay, I follow Rand in putting terms for particular concepts in quotation marks.

^{2.} In McDowell 1994, see, for example, Lecture I, sec. 2, where he refers to Sellars's "Empiricism and the Philosophy of Mind" in Sellars 1963; see also the index in McDowell 1994, s.v. "Sellars, Wilfrid." Both McDowell and Sellars acknowledge the Kantian source of their views on this topic (McDowell 1994, 1). Sellars is not explicit in "Empiricism and the Philosophy of Mind" about its Kantian roots, but, as McDowell observes at the opening of his 1997 Woodbridge Lectures, "In his seminal set of lectures, 'Empiricism and the Philosophy of Mind,' Wilfrid Sellars offers (among much else) the outlines of a deeply Kantian way of thinking about intentionality—about how thought and language are directed toward the world. Sellars describes *Science and Metaphysics: Variations on Kantian Themes* (1967), his major work of the next decade, as a sequel to 'Empiricism and the Philosophy of Mind.' (vii). The later work makes explicit the Kantian orientation of the earlier; Sellars now shows a conviction that his own thinking about intentionality (and, indeed, about everything) can be well expounded through a reading of Kant" (McDowell 2009b, 3).

^{3. &}quot;I shall use 'abstractionism' as a name for the doctrine that a concept is acquired by a process of singling out in attention some one feature given in direct experience—abstracting it—and ignoring the other features simultaneously given—abstracting from them" (Geach 1957, 18). Compare the accounts of abstraction and the coming to have a general idea in John Locke's An Essay Concerning Human Understanding (Nidditch 1979), e.g., II.iii.7, II.xi.9.

the bridge between preconceptual perceptual awareness and conceptually structured perceptual judgments (and in general between perceptual awareness and conceptual knowledge) that is needed to put knowledge on a perceptual foundation.⁴

It is my view that this is, in fact, the case, and that Rand has produced just such an account of abstraction, concept-formation, and knowledge. In this chapter I will not be focused on the issue of propositional justification per se, though I will say something about norms for the formation of concepts and definitions. My aim here is rather to sketch out Rand's theory of concepts and their formation, including its more sophisticated, non-Lockean view of abstraction, sufficiently to show its appeal and to provide a basis for further work. I will take us through the theory of concepts and definitions, and the new view of essences that goes with the theory of definitions. The chapter will conclude with a brief account of the key normative concept in Rand's epistemology—objectivity—the concept that provides the bridge between Rand's theory of concepts and her views on issues of justification.

Rand (1905–82) presented her theory of concepts in a monograph titled *Introduction to Objectivist Epistemology (ITOE*). It was first published in installments in 1966–67, then as a single volume later in 1967. An expanded edition, including edited transcripts of portions of several workshops on *ITOE* she held in 1969–71, was published posthumously in 1990. The heart of the theory itself she had developed in the late 1940s (*ITOE* 307).

- 4. Recent work in the philosophy of science has suggested that a proper theory of concepts is important as well to the understanding of the process of discovering and justifying scientific theories. See, for example, the work on "exploratory experimentation" by Friedrich Steinle and Richard Burian, among others. A good place to start is Steinle 2006. (Thanks to Dick Burian for bringing work on this topic to my attention.) An understanding of the role of concept-formation in the reaching and justification of both propositional judgments and scientific theories helps one to see the unified epistemological character of issues (and work) that tend today to be divided among philosophy of mind, epistemology, and philosophy of science.
- 5. The implications of this theory of concepts for questions of justification will be discussed in detail in the next essay, by Gregory Salmieri, and to some extent in the chapter that follows his, by Onkar Ghate. See also Bayer 2011 and forthcoming.
- 6. "Introduction to Objectivist Epistemology," *The Objectivist*, July 1966–January 1967, reissued as a single volume by *The Objectivist* later in 1967. The monograph was reissued by Mentor Books in 1979 with a companion essay, "The Analytic-Synthetic Dichotomy," by Leonard Peikoff (first published in *The Objectivist*, May–September 1967). The 1990 expanded second edition was edited by Harry Binswanger and Leonard Peikoff, and was published by Meridian Books. All citations herein are from the 1990 edition (cited as *ITOE*; all italics in

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The issue of concepts is for Rand primarily an *epistemic* issue. Concepts for her are cognitive vehicles, and more, are themselves cognitive grasps: they are *forms of awareness* of an indefinite number of individuals, and an account of them will be a crucial part of a general theory of the nature and means of knowledge. They are best understood by contrast with perceptual awareness, on which, she holds, they are built.

Her theory of concepts thus depends on a theory of perception, and both theories depend on a key proposition of her metaphysics, pertaining to the general relation between consciousness and existence, between mind and world. This is the thesis which has often been called "metaphysical realism," and which she calls "the primacy of existence." It is the thesis that existence has metaphysical priority over consciousness: that things exist and are what they are independent of consciousness, and that consciousness is a faculty of *discovery*—it neither creates its objects nor contributes in any way to their constitution. Consciousness, as Rand has put it, is *metaphysically passive*. It is, however, she says, *epistemologically active*.

"Consciousness, as a state of awareness," Rand writes, "is not a passive state, but an active process that consists of two essentials: differentiation and integration" (*ITOE* 5). This is true, she holds, at all levels of awareness: sensation, perception, conceptual knowledge. But at each of these levels, consciousness is directed outward, at objects (or aspects thereof) that have an existence and a nature independent of that act of consciousness.

Perception is for Rand a distinct form of awareness, different from both sensation and conceptual awareness. It is a direct awareness of persisting things, of entities, discriminated from each other and from their backgrounds. The integration of sensory data into *perceptual* awareness, Rand holds, is done automatically by the brain and nervous system. Con-

quoted passages from this work are in the original. Peikoff's "The Analytic-Synthetic Dichotomy" will be cited as such, from *ITOE*, using the 1990 pagination. Peikoff's *Objectivism: The Philosophy of Ayn Rand*, especially chapters 3 and 4, is also an important resource for Rand's theory of concepts; it will be cited as Peikoff 1991.

^{7.} Rand characterizes a sensation as "produced by the automatic reaction of a sense organ to a stimulus from the outside world; it lasts for the duration of the immediate moment, as long as the stimulus lasts and no longer" (VOS 19). She views it as a scientific, not philosophical, question whether human beings pass through a distinct sensory level of awareness prior to perception (as here explained). Even in the case of pre-perceptual sensory awareness, the sensory mechanism still isolates incoming stimuli from a background of stimuli and unites it into a single (if only momentary and sensory) awareness.

cepts are not required for perceptual awareness as such (though once acquired on the basis of prior perception, they may, of course, facilitate perceptual recognition).

There are various features of Rand's account of perception that should be underscored here. First, perceptual awareness is a form of awareness. Perception is the product of a causal interaction between perceiver and independent entity (with its attributes), but this product is irreducibly a state of awareness of the independent entity (not to be analyzed, for example, functionally or information-theoretically) and as such is a form of knowledge, a form of cognitive contact with the world. But—secondly it is a nonpropositional form of awareness. Rand held that philosophers often confuse the character of the content of perceptual awareness with the character of our (inevitably conceptual) description of the content of perceptual awareness. Perception is not an awareness that (say) this ball is red, nor of a ball as red (which is to classify the perceived attribute), but is, rather (to the extent that one can describe a nonconceptual awareness conceptually), an awareness of the red ball, as discriminated from other objects in one's field of view and noticed perceptually as different from, say, the blue ball next to it.

Thirdly, such awarenesses, Rand says, are unerring: they are neither true nor false, they just are. But, as cases of awareness, they are forms of knowledge that provide evidence, once one has reached the conceptual level, for or against perceptual *judgments* (for example, *that* this ball is red), which do have truth values. On Rand's view, for instance, perceptually grasped similarities and differences between perceived entities (and their attributes), though nonpropositional, support the claims regarding those similarities and differences that are implicit in the formation of concepts such as "ball," "red," "blue," and of subsequent propositions such as "This ball is red." This understanding of perception will get further elaboration and defense in subsequent chapters in this volume, but part of the elaboration is precisely the theory of concepts that I go on to present in this essay.⁸

8. See the essays in this volume by Salmieri and, especially, Ghate. Rand's view of perception is outlined in Peikoff 1991, 37–48. See also Kelley 1986, who builds on her theory of perception. Robert Efron's Rand-influenced "What Is Perception?" (Efron 1969) builds an account of perception similar to Rand's upon a fascinating analysis of a case of visual object agnosia. Efron also discusses how attributes of consciousness are to be scientifically measured, and in that connection introduces the notion of the "specificity" of perceptual awareness, by reference to thresholds of perceptual discrimination. On perceptual awareness as a form of knowledge, see the opening portion of Salmieri's essay, which follows this one. On perception

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All but the most primitive animals are not able to survive by isolated sensory data alone; they need the perceptual awareness that their brain's automatic integration of sensory data provides. Likewise, human beings are not able to survive by perceptual awareness alone. In order to live, we need to *integrate perceptual data into concepts*, and these concepts into a vast body of hierarchically structured, higher-order concepts, thereby permitting a correspondingly vast body both of propositional knowledge and of conceptually based skills.

It is worth seeing in simple terms some of the ways, according to Rand, in which concepts vastly expand our cognitive power and thereby our ability to deal with reality. With this in mind, we can ask what sort of mental entities, formed by what sort of process, makes these cognitive achievements possible. The answers will shed light on why Rand called a monograph on her theory of concepts an introduction to her *epistemology*.⁹

To start, concepts extend our cognitive reach well beyond perception to things not directly accessible to the senses. For instance, via concepts we can grasp things (and properties) that are too distant in space from us, too large or small in size, too many in number, to be perceived. Concepts also allow us to grasp differences that are too subtle, and similarities that are too remote, to be grasped perceptually. They give us cognitive access, in short, to an enormous range of things, attributes, actions, relationships, and so forth, not directly available to perception. In fact, a developed system of concepts allows a *classification* of the things, attributes, actions, relationships, and so forth, in the world, grouping these myriad particu-

as nonrepresentational and thus neither true nor false, see Ghate's essay and, among others, Brewer 2006; Brewer 2011a, chap. 5; Travis 2004; and, of course, Austin 1962, esp. 11. For discussion of the idea of nonpropositional justification, see, in addition to Ghate's essay, e.g., Pryor 2001 and 2005.

Central to Rand's view of perception is her insistence that what we perceive—both entities and their characteristics—is *particular*. Universality is not for her a feature of the objects of awareness, but of the form in which, on the conceptual level, we are aware of particular objects. This distinction between the object and the form of perceptual awareness, properly understood, provides the basis for a rejection of one of Sellars's main arguments against the "Given," as Ghate briefly discusses in the latter part of his essay in the present volume. On this distinction between the form and the object of perception see, in addition to discussion elsewhere in this volume, my *On Ayn Rand* (Gotthelf 2000), chaps. 6 and 7; Peikoff 1991, 44–55; and Kelley 1986, chap. 3.

^{9.} See *ITOE* 1–3 and Salmieri's essay, following this one. In the next paragraph I draw on my presentation in Gotthelf 2000, 57. See also Peikoff 1991, 73–74.

lars into manageable cognitive units. And this classification allows us to organize and condense the vast amount of knowledge we acquire, according to the relevant subject matters and predicates; it is analogous, Rand says, to a complex file-folder system with extensive cross-references. This makes possible, among other things, specialized study; by studying some members of a properly conceptualized group, Rand observes, we are able to learn about all members of the group, and thus to apply that knowledge to new individuals of that group that we encounter. That is, concepts make possible induction, and thus science and technology and, indeed, all rational action.

The integration distinctive of concept-formation begins with multiple perceptual grasps of a small number of individuals (for example, a child's noticing of some tables similar to one another and different from some nearby chairs), and moves to an open-end grasp of all relevantly similar individuals, past, present, and future (for example, a grasp of all tables, past, present, and future) (ITOE 17-18, 26-28).12 Later concepts will be formed from earlier ones. In some cases several earlier concepts will be integrated into a wider concept (for example, "furniture" from "table," "chair," "dresser"). In others, an initial concept will be subdivided into narrower ones (for example, when "beagle" and "greyhound" are formed from "dog"). In yet other cases a body of observation and theory, made possible by earlier concepts, establishes the existence of unobserved (or unobservable) particulars that need to be conceptualized (for example, "electron"). And so on. But the principle that the formation of a new concept is a move to a single grasp of all the relevantly similar particulars remains the same.

- 10. "The concept 'man,' for example, enables us to think and learn about all men (past, present and future) at once; and to call someone a man is to bring the whole of our knowledge about men (medical, psychological, philosophical, etc.) to bear on them" (Salmieri and Gotthelf 2005, 1996); see also *ITOE* 27–28. On the file-folder metaphor, see *ITOE* 66–67, 69.
- 11. This is a point that has also been stressed, to a greater or lesser degree, by "natural kind" theorists. See, for instance, Griffiths 1997, chap. 7, and the exchange between Ian Hacking and Richard Boyd at the Twenty-Ninth Oberlin Colloquium in Philosophy (Hacking 1991a, Boyd 1991, Hacking 1991b). See also note 4 above concerning recent work on "exploratory experimentation." Leonard Peikoff has developed an approach to induction based on Rand's theory of concepts. For references (and a brief discussion), see Salmieri's essay, which follows this one.
- 12. Rand typically uses "open-end" rather than "open-ended," perhaps because she has in mind a point that is more about the object (or content) of the grasp than about the grasp itself.

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To understand this process, and the concepts that result, and the cognitive powers they make possible, we have to ask what is the nature of that integration. Indeed, says Rand, because concepts are products of a certain kind of integration, we will not understand the product—the concept—unless we understand the process—concept-formation. But, given the primacy of existence discussed above, to understand the process we will have to understand the basis in reality for the groupings that concepts ought to supply us with. Because conceptual groupings start from a grasp of similarity, we need an understanding of the nature of similarity, and this is where we will start, contrasting Rand's distinctive account of similarity with those of traditional realism and nominalism. This will address the heart of her view of the metaphysical basis of concepts, from which we will be best able to see her distinctive theory both of the process by which concepts are formed, and the nature of a concept once formed. This will be the subject of my first section: "Nature, Basis, and Formation of Concepts."

The process of concept-formation is not complete, Rand maintains, without proper definitions, and such definitions must specify the essential distinguishing characteristic(s) within the conceiver's context of knowledge. Understanding Rand's view of definitions and essences (including their contextual character) is thus crucial to understanding her theory of concept-formation and its implications for understanding the development both of human knowledge in general and of science in particular. This will be the subject of my second section, "Definitions and Essences," which will provide an account of Rand's views on these matters.

Rand's theory of concepts has both descriptive and normative dimensions—the theory not only seeks to identify how concepts are formed, but also, where there is choice, how (and when) they ought to be formed. This normative dimension of Rand's theory will be the focus of my final section—"Norms of Conceptual Activity"—in which I show how the character and basis of conceptual norms point us toward Rand's general theory of objectivity, which is at the center of her epistemology.

Nature, Basis, and Formation of Concepts

Traditional realists have held that the basis of proper conceptual grouping is a mind-independent universal or abstract element—an identical Form or essence or property which the individuals of a group somehow share (or otherwise stand in the same relation to). Conceptual groups come, in