

INTRODUCTION

People who first read an Ayn Rand novel are likely to be struck by two characteristics of her writing. The first is its evocative power: Rand describes a scene so vividly that, later, you remember it as if you had lived it. This artistry can be seen in her ability to express a mood or personality in a single detail and her method of capturing a complex idea in a stark, dramatic symbol.

But an Ayn Rand novel is also striking for the logical power of her ideas. Rand's narratives are her means of presenting a philosophy, and that philosophy comes across with the persuasive power of a locomotive barreling down a track. Her ideas draw one in with their irresistible logic: the way one idea leads to the next; the way the answer to one question leads to another question that is answered in turn; the way issues that at first seem unrelated are revealed as instances of a single concept; the way each element in the philosophy dovetails with every other.

There are many novelists with the ability to write evocative, dramatic narratives; it is the strength of the ideas within the narrative that makes Rand's novels stand out. Their enduring popularity and the impact they have had on so many lives result from both her literary ability and the logical power of her philosophy.

The goal of this book is to place that logical power within your grasp. To do this, we will lay out the structure of Objectivism, the basic anatomy of the system. We will examine the relationships among its central ideas, from the axioms of metaphysics and epistemology to the principles of political philosophy, and the evidence that each idea requires for its validation. This amounts to an unprecedented examination of the positive content of Objectivism — as distinct from criticisms of cultural trends or other philosophies — at a high level of thoroughness and precision.

Objectivism is a topic one can study at many different levels, from the most introductory to the most advanced. Some critics describe Objectivism as simple-minded, but the subtlety of Rand's ideas belies this assessment. In fact, these ideas are remarkable for the fresh approach they bring to the traditional problems of philosophy. They offer solutions with the technical sophistication to cut through tangles that have defied the great thinkers of history and continue to bedevil scholars today. Solving the problem of universals, and bridging the "is-ought" gap, are not signs of a simple-minded school of thought. On the other hand, it is true that Objectivism is intelligible to non-intellectuals. Because its principles are based in the facts of reality, they often have the appeal of common sense.

In this book, we obviously cannot lay out the full extent of Objectivist

thought in all its complexity, addressing every technical issue, pursuing every derivative application, exploring every new topic that further research suggests. That would be far beyond the scope of any one volume. But such an exhaustive survey of the philosophy is not our aim. Rather, we seek to give you the philosophy in overview; if not in one glance, then in one flow of reasoning. The fold-out diagram in the flyleaf, which begins with knowledge and ends with government, represents that flow.

On the other hand, as the complexity of the fold-out diagram indicates, this is not an introduction to Objectivism. To be able to grasp the material this book has to offer, you will need to be familiar with Ayn Rand's essential writings. These include not only Rand's fiction—especially *The Fountainhead* and *Atlas Shrugged*—but also the nonfiction essays in *The Virtue of Selfishness*, and other essays such as “What is Capitalism,”¹ “Philosophy, Who Needs It?” “Causality versus Duty,”² and “The Psycho-Epistemology of Art”³ in other volumes. These works by Rand will provide the reader with the necessary prerequisite: a familiarity with the core ideas in each area of the philosophy, and with the basic way in which the areas relate, with politics depending on ethics, which in turn depends on epistemology and metaphysics. We will analyze philosophical arguments using the simple diagramming technique presented in David Kelley's *The Art of Reasoning*. Chapter 5 of that book offers instruction in basic argument analysis for those who are unfamiliar with it.⁴

In addition to these prerequisites, we will frequently have occasion to refer to other major works in the Objectivist literature, including Leonard Peikoff's survey *Objectivism, the Philosophy of Ayn Rand*,⁵ Nathaniel Branden's work on the theory of self-esteem⁶ and David Kelley's monographs *Truth and Toleration*⁷ and *Unrugged Individualism*.⁸ We will also touch on certain issues that have arisen in the developing scholarship on Objectivism and related ideas. The reader who is curious to pursue these issues, or other technical aspects of philosophy, will find citations of useful literature in the notes.

The Systematic Level of Understanding

The purpose of this book is to deepen your understanding of the structure of Objectivism: how its principles fit together, and what evidence each of them requires. When you grasp the philosophy at this level, you will have a systematic understanding of it.

The systematic level is one of three essential levels at which one can understand a subject. This applies to the grasp of physics as much as to philosophy. The first level, in order of complexity, is an *intuitive* resonance, based on one's subconscious integration of accumulated information and experience. This is the level of understanding typical of a first-time reader of Rand's novels who responds with a “gut” reaction that the ideas are true and important. In

Levels of Understanding

Intuitive	Systematic	Scholarly
Unreflective acceptance of a principle, based on the subconscious integration of a mass of accumulated information and experience.	Ability to formulate principles explicitly and relate them logically to other principles and data.	Issues pertaining to the formulation and validation of the principles.
Physics: Common-sense experience of gravity.	Ability to state the law of gravity and its relation to other laws.	Physicist's knowledge of gravitational theory.
Philosophy: "Gut" reaction to Rand's novels.	Knowledge of central principles of Objectivism and their logical relationships.	Philosopher's understanding of Objectivism.

physics, the intuitive level is represented by our common-sense familiarity with gravity and momentum

The second level is *systematic* understanding, in which one can formulate the principles explicitly and relate them logically to other principles and data. In physics, this is the kind of understanding one gains from an introductory course in physics, which enables one to state Newton's laws of motion, Einstein's insights on the relationship between gravity and space-time, and their relation to everyday experience. In regard to Objectivism, the systematic level gives one the ability to grasp its principles explicitly, distinguishing the essential from the peripheral ones and understanding their logical relationships.

The third and most complex level is *scholarly* understanding, in which one develops an appreciation of the technical issues pertaining to the formulation and validation of the material. A trained, professional physicist, for example, is knowledgeable about the form of mathematics that Einstein employed to model Relativity, and is able to relate it to the standard manner of formulating Newton's Laws. Similarly, a philosopher's understanding of Objectivism includes a wealth of scholarly knowledge that goes beyond the systematic level.

Each of these levels represents a distinct way of understanding a set of ideas. What is the cognitive value of each of these levels? How thoroughly must one grasp a body of principles in order to be sure of them?

The intuitive level is quite useful. With only an intuitive understanding

of gravity, for instance, pre-modern people were able to build bridges, shoot arrows, and undertake other tasks requiring knowledge of gravity. In fact, we all have to rely to some extent on intuitive understanding, because we can't stop to reason out every issue and every event's implications for all our beliefs, at every instant. When we meet a stranger, for example, we have to rely on our experience of similar-seeming people to know how to act. In the short run, this knowledge is only available subconsciously: we don't have time to consciously inventory our past experience before we decide whether to smile at someone or not.

Most people hold their fundamental ethical and metaphysical beliefs at the intuitive level, and it is to this level of understanding that most popular philosophies and religions appeal. An idea seems intuitive because it resonates with our experience and our sense of life, and we can thereby develop a profound, "gut" sense of its truth or falsity, of right and wrong. An intuitive grasp of an idea feels strong, and it relates to the facts through our subconscious integration of our own experiences. Its subconscious, felt character is the source of its emotional strength, but is also the source of its limitations.

A felt or intuitive certainty is not the same as real, epistemological certainty, the certainty one acquires through consciously considering the facts. For example, there are many people to whom it seems intuitively obvious that the government should take some money from the rich and give it to the poor. And there are also quite a few to whom it seems intuitively obvious that it is sinfully self-indulgent to have sex for the sake of enjoyment, and not for the sake of conceiving children. In fact, there are many more people with intuitive beliefs of this sort than there are those who sympathize with Objectivism.

The intuitive level enables us to react to ideas, but rarely to initiate new ones. Many people say that when they first read Ayn Rand, they recognized her ideas as something they had always believed but were unable to articulate on their own. But it cannot literally be true that they had grasped the ideas before they read Rand: if one cannot formulate an idea for oneself, then it cannot be a genuine conviction. At the intuitive level one can *respond* to ideas: recognizing some as acceptable, rejecting others. But the limitations of this level become obvious as soon as one tries to explain something to someone else—or even to oneself.

The systematic level represents a form of knowledge that overcomes these limitations. It allows one not merely to feel the truth of one's ideas, but to demonstrate it. It allows one to see weaknesses in one's own beliefs, and formulate new ideas to fill those gaps. The systematic level consists in knowing how to formulate principles and how to relate them logically to each other and the facts. This gives one the knowledge of *why* one believes what one does, and thus provides certainty — not the felt certainty of intuition, but the cognitive certainty that comes from *proof*.

Systematic understanding is also important for applying one's ideas to

different contexts, and for resolving apparent conflicts among principles. When it is not obvious how to apply a principle, or which principle to apply, one has to think the matter through. That is when one needs a better understanding than intuition provides. For instance, honesty is a virtue with a great deal of intuitive support, as evidenced by the fact that many different ethical systems have advocated it. But how does the principle of honesty apply to a case in which one may harm oneself by telling the truth? To know what to do in such a case one needs to know precisely what this virtue requires and how it serves one's values. But this in turn requires an understanding of one's values, and how they relate to one's virtues. It is only at the systematic level that one can formulate such an inquiry clearly.

A systematic understanding is especially important to someone who wants to communicate ideas. To explain a body of principles like Objectivism, one needs to be able to convey the principles and the reasoning behind them with clarity and precision. To develop those skills, one needs a kind of mental map of the principles and arguments. By way of analogy, consider the process of learning to draw. All of us can recognize a human form when we see one, but drawing it is much harder. For that, one needs to learn the underlying anatomy.

One means of spreading ideas is through polemics. Polemical arguments *seem* simple and direct, but good ones rest on a deeper foundation of thought. To be a successful polemicist, one needs to identify the essential issues at stake in a debate, and the only means of doing so is by understanding the logical relationships between them. In political arguments, for example, many advocates of laissez-faire capitalism get hung up over details such as how to finance a government in a free society, despite the fact that this issue is pretty far down the logical chain. Imagine you are debating the merits of capitalism with someone and this issue comes up. If this is your opponent's only objection to complete, laissez-faire capitalism, then the argument is won. Is your opponent going to argue for the welfare state because he *opposes* taxation? Not likely. Usually, you will find that your opponent has much more fundamental objections to laissez-faire: *these* are the issues you should address. A systematic understanding of the principles involved will allow you to foresee what those issues are and direct your polemics to addressing them in a convincing manner.

In short, to develop a solid, cognitive certainty about one's principles, to be able to apply them confidently to varying circumstances, and to be able to communicate them effectively, one needs understand them systematically. That is what is what this book is designed to help you achieve.

The Scholarly level of understanding is similar to the systematic in its conceptual and logical character. In a sense, it is the extension of systematic understanding: at some point, as one learns more and more about a system of ideas, the level of detail and focus of one's thinking and knowledge become scholarly. The difference between the two levels is quantitative, not qualitative,

yet it is significant.

For example, much scholarly work in Objectivism is focused on relationships between Objectivism and other positions in philosophy, both historical and contemporary. While some appreciation of these details is important for ordinary purposes, they are usually of concern to people with a more specialized interest in them. For example, the development of the theory of abstraction, from Plato and Aristotle through the Medievals to the Moderns, is an interesting story, but is of the same practical import as the history of scientific theories: it is not necessary to a solid understanding of what abstraction actually is.

Scholarly work also tends to deal with more subtle issues about exact formulations of principles, and the logical details of the relationships among them. These are important issues, and a philosophy that cannot treat them satisfactorily will always remain subject to refutation. We will be discussing some of the developments in the scholarly literature on Objectivism, especially those that raise an issue of formulation or justification that has significant implications for the rest of the system. However, most issues of formulation and interpretation at the scholarly level are not vital to one's understanding of, or legitimate certainty about, the main points of the philosophy. The scholar's knowledge is simply more detailed, thorough and, at times, esoteric.

The focus of this book is the positive content of Objectivism: the claims it makes about reality, human nature, values, and society. The other systematic surveys of Objectivism—notably Nathaniel Branden's and Leonard Peikoff's taped lecture courses, Peikoff's text *Objectivism*, and of course, Ayn Rand's own summary in John Galt's speech in *Atlas Shrugged*—all place a substantial amount of emphasis on criticizing contemporary culture and non-Objectivist philosophical viewpoints. For example, only the first third of Galt's speech is devoted to laying out Rand's philosophy. The other two-thirds amounts to an extended critique of the altruist-collectivist axis in Western thought. In the other surveys, this critique is admixed liberally into the body of the exposition.

The present work differs from these in being devoted to the positive content of Objectivism. The Objectivist critique of mysticism and altruism, and of their deleterious impact on Western culture, or the enumeration of the failings of the mixed economy, are worthy polemical topics, but outside the scope of this book. We will touch on such critiques only to the extent that they are required either to grasp or validate the positive content of the philosophy. With an understanding of that content, of course, you will be better placed to grasp and appreciate the Objectivist critique of other viewpoints.

Another difference from previous systematic surveys is our methodical examination of the essential ideas of Objectivism. By analyzing the argument for each principle, and calling attention to each place where fresh inductive evidence is required, we give the student of Objectivism unprecedented access to the logic of the philosophy. This examination of the philosophy is as

much concerned to teach *why* it has the structure it does as to convey *what* that structure is.

At times this has required some changes in formulation from those used in the surveys mentioned above, or from Ayn Rand's own writings. Besides stylistic differences, there are cases in which a careful examination of the nature of an argument or position has pointed up the need for clarification or a more substantial change. We have made such alterations only when the logical structure of the philosophy has demanded it and we have noted and explained the change in any case where our formulation differs significantly from the previous Objectivist literature.

Because our subject is the core theses of Objectivism, the content of this book is derived from the existing literature on the philosophy. Although our integration of the material is new, we have avoided offering untried research in this work. Any formulation we present is derived from literature that been subjected to criticism and analysis by knowledgeable scholars. We have, however, endeavored to express the philosophy in our own words. We include quotations from Ayn Rand's own writings to allow the reader to compare the substance of our presentation with the substance of hers, despite the differences in focus and tone.

The Structure of Knowledge

Before we consider the structure of this philosophy, we would do well to first understand why any philosophy has a structure. To see why, we need to consider some basic facts about human knowledge.

Epistemology is the branch of philosophy concerned with the nature of knowledge and the methods of validating it, that is, of identifying its factual basis. Epistemology has a double importance for us in understanding the logical structure of Objectivism. On the one hand, reason is part of the content of human nature, and therefore has significant moral and political implications. All of the ethical and political conclusions of Objectivism are based on this fact. Because epistemology tells us what reason is, how it operates, and what the different features of knowledge are, it forms part of the body of the philosophy. It will thus be one of the topics we turn to in Chapter 1, and the diagrams there will show the logical structure of the Objectivist epistemology.

But this body of knowledge is also relevant to our *method* of understanding the structure of Objectivism, including the principles of epistemology itself that we will analyze in Chapter 1. Epistemology explains why knowledge has a structure, and what the basic standards of logic are. So to understand the diagramming method we will be using in this book, we need to discuss certain aspects of epistemology here at the outset.

The principles presented in the diagrams identify facts, such as "rea-

son is volitional,” or, “to live, human beings must deliberately exert the effort to pursue consciously chosen values.” A principle is a proposition that identifies an essential or significant fact. A proposition is a complete thought, usually expressed as a sentence. Just as sentences are made of words, the proposition that a sentence expresses is composed of the concepts to which its words correspond. Our concepts are our ideas of categories or types of things and their attributes, actions, and relationships. Concepts allow us to grasp general facts about the world, covering the whole range from the physical objects that a child first learns about—milk, ball, dog, etc.—to abstract ideas such as cosine or justice that we derive by complex chains of reasoning. Because concepts are the building-blocks of this level of awareness, we call the knowledge that employs them “conceptual knowledge.”

By identifying facts in the form of propositions, we have an open-ended means of understanding reality. We can express any fact as a proposition; we can even express propositions for imaginary situations, “facts” that do not exist, such as “I own a winged pig.” The conceptual level of awareness thus covers the whole range of knowledge, from a child’s first words to the most complex theoretical structures of the arts and sciences.

But the conceptual level is not our direct means of being aware of the world. Our concepts are formed on the basis of the awareness we attain through perception. Perception is the integrated, automatic awareness of things that we receive through our senses. We do not have any direct means of grasping categories such as “man” or abstract attributes such “beauty,” except by deriving them from the data of perception. And what we are aware of by perception are particular things: *this* man, *that* beautiful statue. This means that all our knowledge must be derived by various processes of integration from perceptual data. These processes include:

- Forming concepts based on relevant dimensions of relative similarity among particulars: e.g. “tree,” “square,” etc.
- Generalizing from observation: e.g. “Dogs bark.”
- Drawing inferences from what we already know: e.g. “Because the cars have their wipers on, I can tell that it is raining outside.”
- Weighing evidence to draw conclusions about facts we cannot directly observe: e.g. the process of determining guilt in a criminal trial.
- Coming up with theories and hypotheses and testing them by experiment: e.g. the process of scientific research.

The diagrams in this book can abstractly summarize the essential results of these processes; they can’t substitute for the performance of them. This means that as you proceed through the book, you should actively engage the diagrams, and not accept them passively.

Because the conceptual level is derived from perceptual awareness, it is *hierarchical*. The vast amount of information we possess may feel as if it is

on the same level, but it is not. For instance, consider the way you think of two different facts: 1) You are looking at a book. 2) You are living in a democratic country. Both facts are obvious to you, but they are established quite differently. You can *see* that the book is a book; you cannot see whether your country is democratic. You can see what a book is, you cannot see what a democracy is. The concept of a book is more concrete than the concept of democracy.

All knowledge traces back to perception, but some knowledge is closer to the perceptual base and some is farther away. For instance, if we meet a woman, we can tell simply from her physical appearance that she is a woman, and not, say, a stone. But how would we tell if she is a *good* woman, or an evil one? We would need a prior criterion of good and evil, a criterion of value. Goodness and evil are not evident in a person's appearance, the way, say, hair color is. A person's moral character is a psychological fact about him; we must infer psychological facts from observable characteristics like how a person acts or what he says. As this example shows, the judgment that a thing is a human being is much more direct and basic than a judgment about a person's moral character. In fact, the one precedes the other: one has to identify a subject as a person before moral judgment becomes relevant.

The hierarchical character of knowledge means that it has a structure. In this sense, knowledge is like a tall building, with some items in the foundation, and others built up from the foundation. And just as a skyscraper has a steel frame, a body of knowledge has an essential structure.

Induction and Deduction

The logical processes by which we build up the structure of our knowledge are of two broad types, which logicians call *induction* and *deduction*. Although a technical discussion of these two processes could fill a book in itself, understanding their role in the structure of Objectivism requires only that we differentiate them on the basis of essentials.

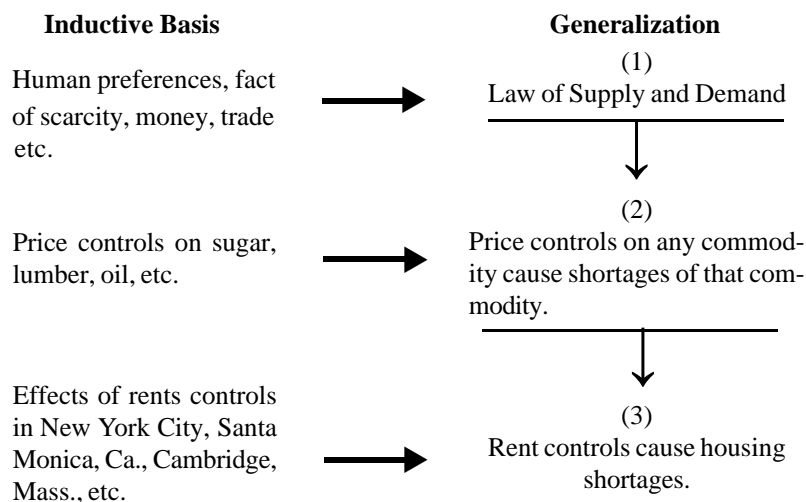
Induction is the process of drawing general conclusions from the observation of particular cases. For instance, we notice that all people age and die, that their bodies are fragile and can be fatally damaged. We generalize this observation as: All people are mortal. Deduction is the process of drawing out the implications of the general knowledge we already possess, usually by applying generalizations to specific instances of a type. Continuing our example, each of us knows that we will die some day by deducing it from the fact that all human beings are mortal.

Since our knowledge is hierarchical, resting on the base of perceptual observation of concrete things in our environment, it would obviously be impossible for us to build up our knowledge by deductive inference alone. Where would we get the generalizations on which deduction depends? For those gen-

eralizations we need inductive inference. Above the level of perception, all of our knowledge depends in one way or another on induction. In a sense, induction is like earning money: it is the process of acquiring new information. Deduction is like spending money, because it allows one to get the most out of one's store of inductive information. In most cases, our conclusions depend on both inductive and deductive procedures used in combination, just as we normally obtain economic goods by a combination of earning and spending money. A point of particular importance is that there can be inductive support at any level in the structure of our knowledge.

To understand this point, let's look at the example of the effects of rent controls. Economists know that rent controls lead to shortages of housing. The reasoning that leads to this conclusion is sketched out in the chart "Induction and Deduction" below:

Induction and Deduction



An economist *deduces* that rent controls lead to shortages from the more general point that **price controls on any commodity lead to shortages of that commodity**. This principle is in turn a deduction from the abstract **law of supply and demand**, which summarizes interaction in any marketplace.

The downward links between the generalizations are deductive, but *inductive* evidence can enter at every point. On the first level, the law of supply and demand has its basis in very abstract generalizations: that people have preferences, that they trade in goods, that goods are scarce (i.e., that not all wants

can be fulfilled), that people trade through the medium of money, and that markets establish common prices for goods. Notice that if neither this inductive basis nor that at the other levels existed, then the general principle would not be based on facts; it would be an *arbitrary* assertion. This is an instance of the principle that any item of knowledge must be based on inductive evidence at *some* level.

The general principle regarding the effect of price controls, at the second level of the chart, has its own inductive basis in the observation of commodity markets. When the principle has been derived by deduction, this inductive basis provides a source of independent confirmation. Any meaningful proposition, even one that we have established deductively, asserts some fact about reality. If it is true, then the fact that it asserts exists and we can confirm the fact inductively. This means that any true principle that we have established deductively should also have independent inductive support.

Inductive evidence plays a similar confirming role at the third level of the chart. The inductive support for the principle that rent controls lead to housing shortages is found in the experience of various cities with rent control policies. In the U.S. in recent decades, these cities have included New York City; Santa Monica, California; and Cambridge, Massachusetts.

Thus deduction and induction could not function apart from each other. Understanding the world in terms of generalizations allows us integrate large amounts of information in a compact form. Induction is the process of forming generalizations from the data we are aware of, but our generalizations would be useless if we failed to employ deduction to apply them to particular cases. Furthermore, deduction and induction must be employed together if we want our thinking to be robust against error. Inductive confirmation is not always necessary to establish the truth of a proposition: a conclusion that one has correctly deduced from true premises is itself true. However, when we deduce from a broad abstraction, such as the first level in the chart, to a more concrete principle, such as the third level, there is a danger that something essential to the more concrete case may have been left out.

Something is *essential* if it is a fundamental cause of what we seek to explain, a cause that explains many other effects. When we abstract from a wide range of data, as when we form principles that apply to *all* markets, we must ignore many details, such as whether the products in the market are durable, whether there are many comparable substitutes for a given product, whether information about prices and offers is well-distributed, whether there are many buyers and sellers, and so on. There is a danger that one of those details may be significant in a manner that is not obvious. By looking for direct inductive evidence of the conclusions we deduce from our generalizations, we can check to make sure nothing has been overlooked or incorrectly integrated.

On the other hand, accurate abstractions, connected by deductive in-

ferences, can put an enormous amount of information at our disposal in a concrete form. In the case of rent controls, the deductive relation to economic theory allows us to bring the whole gamut of economic experience to bear on the question at hand. For instance, there may be only three or four cities at any one time that have rent control regulations, and these may differ in detail so much that it is difficult to inductively determine the correct generalization that one should draw from the limited evidence. More abstract principles, such as those at levels (1) and (2) in the chart, which are linked deductively to the topic at hand, serve as a tremendous data-gathering system, a kind of cognitive lens, that focuses distant light on the subject.

We will have many opportunities to see the same pattern in our analysis of the logical structure of Objectivism. To take one of many examples that we will explore in detail later on, the political principle that man needs freedom in order to live successfully follows, through a chain of deductive inferences and new inductive generalizations, from the fact that reason is man's basic tool of survival. This conclusion about freedom is confirmed inductively by historical evidence about human well-being in free societies as opposed to unfree ones. This inductive support confirms the deductive derivation, assuring us that our reasoning has conformed to the facts. The deductive support assures us that we have interpreted the historical evidence correctly, that we have extracted the essential generalization to be drawn from the enormous mass of concrete facts.

Context

A common source of error in generalization is a failure to base one's conclusions in the full context of evidence. Our knowledge is *contextual* in virtue of its hierarchical nature. It does not consist in isolated bits of data, each with its own, self-contained meaning, each with its own separate relationship to reality. The meaning of any conclusion, and its relationship to reality—i.e. its truth or falsity—depends on its relationship to the network of other knowledge by which we derived it. Hierarchical knowledge is contextual because each item of knowledge is grounded in some particular evidence, in the awareness of certain types of things, a certain range of experience. In this sense, the context of knowledge is like the different places that the pylons of a building's foundation come to earth: the structure depends on many sources of support coming together. As the support changes, the superstructure of knowledge may change as well.

The meaning of a principle, in the Objectivist view, is determined by tracing the process by which it connects to reality. This means, among other things, establishing the context that a person integrates by means of concepts. A failure to attend to this is one reason why people discussing abstract ideas often "talk past" each other: they are using the same words, but they don't *mean* the

same things. Imagine having an argument of about capitalism with a Marxist: to a Marxist, capitalism is any system characterized by some private control over capital. To an Objectivist, capitalism is a *laissez-faire* system. To a Marxist, Sweden is a capitalist country; to the Objectivist, it is a mixed economy, with characteristics of both capitalism and socialism. Of course, the truth is *not* whatever one wants it to be, but the truth of one's principles depends on the meaning of one's terms, because it is that meaning to which the facts of reality either do or do not correspond.

This example also illustrates the importance of attending to the full context that lies behind an abstract idea. In the case of the concept of capitalism, classical liberals and economic theorists emphasize the basis of market interaction in property rights and freedom of contract. It is common, however, for people to ignore the effects of regulation and state intervention in characterizing a business as "private" and a system as "Capitalist." This leads to an odd disjunction between economic theory, which focuses on firms with full control over their choices, and the reality of most "Capitalist" systems, in which a firm's range of choice is quite delimited by regulations on wages and benefits, product categories, production methods, prices, and so on. The disjunction exists because many fail to attend to the difference between the context of economic theory and the context of the popular notion of "Capitalism."

The contextual nature of knowledge is also significant because one's context of knowledge changes over time. As individuals we become aware of new evidence and facts. Even the cognitive context of society as whole expands with exploration and new scientific discoveries. As one's context changes, the meaning of one's principles can change as well. For instance, in the 18th century, generalizations about "fish" integrated information about all creatures that swam, including whales and porpoises. This categorization was not a mistake: there are valid reasons for regarding swimming creatures with fins as similar. However, by the 20th century, marine biology was better understood, and the term "fish" came to be applied to a more narrow class of animals. The old knowledge about "fish" was not false; it is still true in terms of aquatic creatures. But now we have knowledge about fish, e.g. that fish are cold-blooded, that would not have applied to the old manner of classification.

Because one's knowledge is contextual, it can be expanded to apply to a wider range of circumstances as one actively expands it by investigating new evidence and information. One model of the development of knowledge from one context to the next is the transition from Newtonian to Einsteinian physics. Newton's mechanics accurately described the motions of bodies moving at low velocities relative to the speed of light, which was the context of evidence to which Newton had access. Centuries after Newton, Einstein was aware of a broader context of evidence, including improved astronomical observations, and the discovery that the relative velocity of light was constant

from all perspectives. Einstein's theory addresses that broader context, but in addressing Newton's original context, it replicates Newton's findings. Newton was not falsified by Einstein in the context in which his laws were solidly confirmed, indeed, he could not have been. On the other hand, the common assumption of the 18th Century, that Newton's mechanics would describe the motions of all objects at all times in all places, turned out to be in error.

Every expansion of one's context allows one to better understand reality. For this reason, we have a need to assimilate new knowledge and expand our context of knowledge over time.

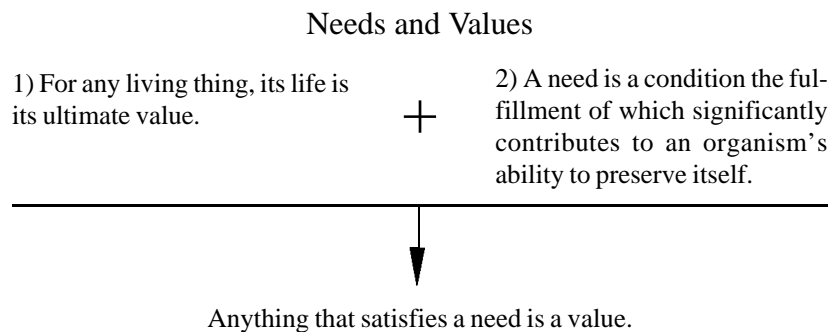
Diagramming the Logical Structure

The big diagram in the flyleaf represents the structure of the whole building that is Objectivism. It also represents the essential interconnections among the ideas. Using the diagram, we can trace back the basis of a highly abstract idea like moral judgment and we can see which ideas are basic to all of philosophy. By breaking the big diagram down into smaller, distinct diagrams of arguments, we make it easier for you to understand the individual connections and grasp the structure of each step in the reasoning. Notice that the flow of the big diagram is basically one-way, reflecting the fact that knowledge is hierarchical. Nevertheless, later conclusions do sometimes provide support for ones established earlier; we will include these backward flows in the big diagram, and discuss them in the text.

To see how a diagram works, consider the following argument, which plays an important role in the foundations of ethics (as we will see when we meet this diagram again in Chapter 2). The argument has two premises that give a conclusion:

- For any living thing, its life is its ultimate value.
- A need is a condition the fulfillment of which significantly contributes to an organism's ability to preserve itself.
- Therefore, anything that satisfies a need, is a value.

Represented as a diagram, this argument appears like this:



Notice the meaning of the symbols in the diagram. Each numbered proposition (a.k.a. “premise”) expresses a significant fact. The symbols show how these facts are related. In this diagram, premise (1) and (2) are united by a plus symbol “+” and an underline that joins them together. The downward arrow shows a connection between the propositions that are underlined and the conclusion that follows from them. In this diagram, there is only one such inference from premises to a conclusion, but in most diagrams there will be several, and most of the conclusions will in turn serve as premises for the next stage of the diagram. The inference from premises (1) and (2) to the conclusion is essentially deductive in character, though we have not cast it in any of the standard forms used by technical formal logic. In other cases, arrows will represent inductive inferences from observations of various kinds. We will have to appeal to facts about human consciousness, which one knows introspectively, or to facts about social interaction, which have been studied by historians and economists, among others. All of these appeals to evidence are cases of induction.

These diagrams are important tools for highlighting the structure of an argument. In an argument presented in prose, it is easy to let a key premise slip past, or to be lulled by compelling rhetoric into accepting an erroneous inference. When an argument is presented as a diagram, it is easier to consider each principle or inference on its true merits, and to trace the effects that a change in the premises would have on the conclusions of the argument—and ultimately on the rest of the philosophy.

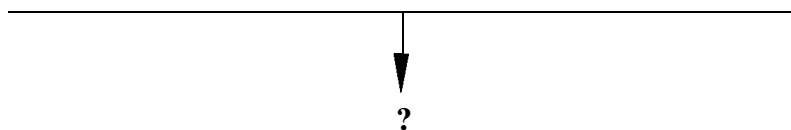
For example, Premise (1) above states that life is the ultimate value. In Chapter 2, this proposition is the conclusion of a preceding diagram. So, in the “Life and Needs” diagram, it is taken as proven. In the Objectivist ethics, life provides the foundation and context of the claims of ethics. The diagram allows us to trace the effect of this premise on the rest of the philosophy. Here, because life is the ultimate value, we see that every value serves a biological need. But suppose that life were *not* the ultimate value. Suppose instead, as the Muslims claim, that the ultimate value were submission to the will of God. Then our diagram would have a very different conclusion:

With this change to Premise (1), we certainly cannot conclude from the two premises that biological needs are the basis of values. Our original conclusion simply does not follow, nor would any conclusion based solely on the biocentric conception of value. Changing Premise (1) has changed the conclusion of the diagram, and that will affect every subsequent argument that depends on it.

In this way we can use the diagrams to assess how much a change in one principle in the philosophy would affect the rest of the philosophy. In the case of the argument we’ve been discussing, which defines what a value is, any change in the substance of the argument would have radical effects on the rest of ethics, because the idea of value stands at the root of ethics. Of course, the

Needs and Allah

1) For any living thing, submission to the will of God is its ultimate value.	+	2) A need is a condition the fulfillment of which significantly contributes to an organism's ability to preserve itself.
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effect of a big change in the idea of “value” is one that most people can grasp without the use of diagrams. However, subtle changes as well as obvious ones can be highlighted in the diagrams.

The diagrams also force us to look in the other direction, to the underlying bases for our premises. Each premise must be supported either by some previous inference or by observation of particular facts in reality. In our example about life and needs, we noted that Premise (1) of the diagram is a conclusion of a previous diagram. As we will see, (1) is derived deductively from premises that are even more fundamental. Premise (2), by contrast, is supported inductively. The premise states the definition of the term “need” as biologists use it. Our knowledge that needs exist is a generalization from our observation of living things and the circumstances in which they live and die.

Now we have our tools in place to begin our examination of the logical structure of Objectivism. You are about to encounter the power of a system of ideas that proceeds with remorseless logic step-by-step, validating each claim it makes from the self-evident to the most derivative.

Ayn Rand named her philosophy “Objectivism” because its central theme is objectivity: the objectivity of knowledge in corresponding to facts, the objectivity of moral values as a species of facts, the objectivity of a political code derived from human nature. It is to the logical basis of her concept of objectivity that we now turn, that is, to the structure of the theory of knowledge.

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- 1 Ayn Rand, "What is Capitalism," in *Capitalism, The Unknown Ideal* (New York: New American Library, 1966) New York: Signet, 1967 11-34.
 - 2 Ayn Rand, "Philosophy, Who Needs It?" in *Philosophy, Who Needs It?* (New York: Bobbs-Merrill, 1982) New York: Signet, 1984 1-11, and "Causality versus Duty" in *ibid.* 95-101.
 - 3 Ayn Rand, "The Psycho-Epistemology of Art" in *The Romantic Manifesto* (Cleveland: World Publishing, 1969) New York: Signet, 2nd rev. ed., 1975, 15-24.
 - 4 David Kelley, *The Art of Reasoning, Third Edition* (New York: W.W. Norton, 1998).
 - 5 Leonard Peikoff, *Objectivism: The Philosophy of Ayn Rand* (New York: Dutton, 1991).
 - 6 e.g. Nathaniel Branden, *The Psychology of Self-Esteem* (New York: Bantam, 1983) and *The Six Pillars of Self-Esteem* (New York: Bantam, 1994) New York: Bantam, 1995.
 - 7 David Kelley, *Truth and Toleration* (Poughkeepsie: Institute for Objectivist Studies, 1990)
 - 8 David Kelley, *Unrugged Individualism: The Selfish Basis of Benevolence* (Poughkeepsie: Institute for Objectivist Studies, 1996).