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## Evidence of Necessary Existence

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What follows is an exposition and defense of a core element of Ayn Rand's form of philosophical foundationalism,<sup>1</sup> namely her "axiomatic" concepts of existence, identity, and consciousness (Rand 1990, chapter 6). I shall proceed in five steps. In the first part of this paper, I shall set out Rand's axioms, focusing on her axiom of existence: *Existence exists*. In the second section, I shall discuss the nature and function of such linguistically curious expressions as "Existence exists." In section three, I shall explicate Rand's method of validating these axioms by focusing on Aristotle's defense of the Principle of NonContradiction (henceforth, the PNC). Aristotle's and Rand's approaches are similar, and Aristotle's ideas on this topic have been widely contested on a number of different grounds, so reviewing Aristotle's position will shed light on Rand's. In the fourth part of this paper, I wish to consider the kind of "evidence" we may have for the kind of propositions which both Rand and Aristotle regard as identifying basic facts, giving special consideration to the role that self-knowledge plays in providing such evidence. Finally in section five, I shall consider some contemporary objections to the Aristotelian/Randian approach.

Rand clearly thought of herself as a foundationalist. She illustrates the structure of knowledge and the relationship of philosophy to the sciences and culture with the metaphors of buildings (foundations/superstructure), armies (general/private), and trees (soil/roots/trunk/branches/leaves/fruit)

(Rand 1982, 82, 8, 13–14). Indeed, Rand seem to be simultaneously committed *both* to rationalist foundationalism, which seeks foundations in the broadest, most abstract principles, and to empiricist foundationalism, which seeks foundations in sensed or perceived particulars. This tendency toward dual foundationalism is amplified in the writings of her followers.<sup>2</sup> Passages such as the following are common throughout her work. In support of the rationalist interpretation, we find:

Philosophy studies the *fundamental* nature of existence, of man, and of man's relationship to existence. As against the special sciences, which deal only with particular aspects, philosophy deals with those aspects of the universe which pertain to everything that exists. In the realm of cognition, the special sciences are the trees, but philosophy is the soil which makes the forest possible. (Rand 1974 a, 2)

In support of the empiricist approach, we find quotes of this tenor:

Nothing is self-evident except the material of sensory perception. (Rand 1974 b, 13)

Man's senses are his only direct cognitive contact with reality and, therefore, his only source of information. Without concepts there can be no language; there can be no knowledge and no science. (Rand 1970, 90)

### I. Rand's Philosophical Axioms

According to Rand, "Existence exists'... is a way of translating into the form of a proposition, and thus into the form of an axiom, the primary fact which is existence" (Rand 1990, 3). "But," Rand goes on to add, "explicit propositions as such are not primaries; they are made of concepts. The base of man's knowledge—of all other concepts, all axioms, propositions and thought—consists of axiomatic *concepts*" (ibid., 55, emphasis added). It is axiomatic concepts, not propositions, that serve as the first principles of Rand's philosophy. She defines an axiomatic concept as:

the identification of a primary fact of reality, which cannot be analyzed, i.e. reduced to other facts or broken into component parts. It is implicit in all facts and all knowledge. It is the fundamentally given and directly perceived or experienced, which requires no proof or explanation, but on which all proofs and explanations rest. (ibid., 55)

At this point, it should be made clear in just what way Rand's axiomatic concepts are axiomatic. In the Aristotelian tradition, there are two kinds of first principles. The first kind consist of basic statements describing the contents of a particular realm of phenomena which is the subject of scientific investigation. An example from geometry would be any basic definition, such as that of a point or line. These first principles are particular to specific sciences.

The second kind of first principles apply to all sciences across the board. These principles do not provide the content of the science, rather, they rule its form. These are the principles of reasoning, such as the principle of noncontradiction and its corollaries, or the principle that equals added to equals yield equals. These principles are axioms. These axioms are not stated as the premises of scientific demonstrations. Rather, they identify the unspoken assumptions or presuppositions which rule and guide scientific demonstration itself. (See Aristotle, *Metaphysics*, Γ3, 1005a19–34.)

Rand's axiomatic concepts are axiomatic in this second sense. They do not appear as the premises of scientific demonstrations. Instead they (1) delimit the realm in which demonstration takes place and (2) provide the foundation for the rules of logical inference. Axiomatic concepts do not refer to the specific content of our knowledge, but to the form that our knowledge must take. The chief difference between Rand's and Aristotle's axioms is that Aristotle speaks of axioms solely in the context of scientific demonstration, which proceeds by deduction. Rand extends the context of axioms by pointing out that they are presupposed in and ground in-

ductive reasoning as well (Rand 1990, 299–300, 28, 70–71, 56–57, 102–3; Rand 1961, 124–26, 151–52).

Rand's three "first and primary" axiomatic concepts are *existence*, *identity* and *consciousness* (Rand 1990, 55). *Existence* identifies the fact that something *exists*. *Identity* identifies the fact that *something* exists. And *consciousness* identifies the fact and that we are *aware* of these other facts.

By *existence*, Rand means not only what goes by the name of the "external world," but also consciousness and its states. By *consciousness* she means "the faculty of perceiving that which exists" (Rand 1961, 124). Consciousness is by nature intentional: every act of consciousness is outwardly directed, related to and resting upon something that exists independently of that act. And by *identity* she means the particular, determinate natures of that which exists. To be is to be something, to have a specific, finite set of characteristics and potentialities. *Identity* is roughly equivalent to *nature*. To say that things have identities is to say that they have natures. But this talk of "having" natures is too loose. Things do not so much *have* natures; they *are* natures. There is no ghostly substratum which receives the identity of things like pin-cushions receive pins. "Existence and identity are *not attributes* of existents; they *are* the existents" (Rand 1990, 56). Or, more succinctly: "Existence is identity" (Rand 1961, 124).

What motivates the identification and conceptualization of the primary facts of existence, identity, and consciousness? The motivation is foundational: to ground human knowledge, to serve as a guardian against error and a corrective for it. As Rand puts it, "Axiomatic concepts are the products of an *epistemological* need—the need of a volitional, conceptual consciousness which is capable of error and doubt. . . . It is only man's consciousness, a consciousness capable of conceptual errors, that needs special identification of the directly given" (Rand 1990, 58–59). This identification of the directly given serves to "found" knowledge. But it does not do so in

any conventionally "foundationalist" way.

Rand's talk of "axioms" which serve as the "base of man's knowledge—of all other concepts, all axioms, propositions and thought" inevitably calls to mind the project of the rationalist foundationalists: the discovery of an indubitable master axiom; such as the Cartesian *cogito*, upon the basis of which we can validate all other knowledge through the use of strict logical deduction. Rand's characterization of axiomatic concepts as identifying "basic facts" of reality and "the directly given" calls to mind the empiricist foundationalist project of identifying "incorrigible" sensory or perceptual data upon which we can found all knowledge through induction.

But Rand's approach is neither rationalist nor empiricist. Unlike the empiricist, whose basic facts are sensed or perceived particulars, Rand's basic facts are extraordinarily abstract and general. Existence, identity, and consciousness are simply not on the same level of abstraction as this-here patch of red or this-here tomato. But the generality of Rand's axioms does not place her in the rationalist camp either, despite any similarity of Rand's concept of consciousness and the Cartesian *cogito*. Whereas Descartes claimed to discover the *cogito* as his starting point simply by examining his ideas until he found one that is rationally undeniable, Rand holds that we somehow learn her axioms from experience. It is only after we draw the axioms from experience that we show that they are rationally undeniable. Whereas the rationalists claim that we can supply or at least validate the content of our knowledge by deductively spinning out the implications of their fundamental principles, Rand does not deduce anything from her axioms—although she does talk about the "corollaries" of her axioms.

In explaining how her axioms serve as the "base" of knowledge, Rand actually drops the metaphor of building upon foundations, employing instead the metaphor of

guidelines for an activity or game and the metaphor of en-  
framing, embracing, enclosing, or delimiting a space or field:

It is only man's consciousness, a consciousness capable of conceptual errors, that needs special identification of the directly given, *to embrace and delimit the entire field of its awareness*—to delimit it from the void of unreality to which conceptual errors can lead. Axiomatic concepts are epistemological guidelines. They sum up the essence of all human cognition: something exists of which I am conscious: I must discover its identity. (Rand 1990, 58–59, emphasis added)

Rand makes it abundantly clear that she is only surveying and staking out the site upon which human knowledge is built. The edifice of knowledge rests upon experience, not upon philosophical axioms, not, at least, in the Cartesian, or pure-rationalist sense. To tinker with the metaphor, the axioms may serve as the cornerstones of the structure, but not its foundations. Her axioms provide only the most general form of knowledge, not its specific content—the widest frame, not the individual brushstrokes:

The concept "existence" does not indicate what existents it subsumes: it merely underscores the primary fact that they exist. The concept "identity" does not indicate the particular natures of the existents it subsumes: it merely underscores the primary fact that they are what they are. The concept "consciousness" does not indicate what existents one is conscious of: it merely underscores the primary fact that one is *conscious*. (ibid., 59)

Rand's axiomatic concepts delimit the form of knowledge in two general ways. First, they set down the boundaries of possible experience. Whatever in fact we happen to experience, it will *exist*, that is, it will be *other than* the conscious act which is our experience of it. Thus we can simply ignore the solipsists—for example, Max Stirner, in his *The Ego and His Own*—whose positions clearly imply that conscious acts create their objects *ex nihilo*. Furthermore, whatever we happen to experience, it will "have" an identity, that is, it will be de-

terminate. Thus we could simply ignore those who would claim that they have experienced something that is both red and green at the same time and in the same respect, or, as Gerard—one of Iris Murdoch's characters in *The Book and the Brotherhood*—who "knew and did not know." And finally, whatever we happen to experience, it will be an *experience*, that is, we shall be *conscious*. Thus we can simply smile at those psychologists and philosophers—such as B.F. Skinner and Willard van Orman Quine, respectively—who claim that they are aware of data which indicate that consciousness, intentionality, and the given are myths.

The second way in which Rand's axioms delimit the form of our knowledge is well-captured by her metaphor of *guidelines*. The axiomatic concept of *identity*, when stated in propositional form, is *A is A*, the law of identity, which, along with its corollaries, is the foundation of logic.

Although Rand treats experience rather than philosophical axioms as the foundation of knowledge, this does not imply that she is in any conventional sense an empirical foundationalist. There are two main reasons for this.

First, Rand rejected and tried to distance herself from what is conventionally called empiricism—and, by extension, from empiricist forms of foundationalism. Consider the following:

For the past several decades, the dominant fashion among academic philosophers was empiricism—a militant kind of empiricism. Its exponents dismissed philosophical problems by declaring that fundamental concepts—such as existence, entity, identity, reality—are meaningless; they declared that concepts are arbitrary social conventions and that only sense data, "unprocessed" by conceptualization, represent a valid of "scientific" form of knowledge; and they debated such issues as whether a man may claim with certainty that he perceives a tomato or only a patch of red. (Rand 1970, 83)

The essential point here is Rand's rejection of the empiricist idea of a conceptually "unprocessed" or uninterpreted sensory "given." Rand holds that this view is but the flip

side of the rationalist view that we can know simply by the manipulation of concepts without relation to sensory evidence: "Accepting empiricism's basic premise that concepts have no necessary relation to sense data, a new breed of rationalists . . . declar[es] that *scientific* knowledge does not require any sense data at all (which means: that man does not need his sense organs)" (ibid., 84). Rand, however, holds that all knowledge is based on the evidence of the senses *and* that all perceptual knowledge is processed or interpreted. "All knowledge is processed knowledge—whether on the sensory, perceptual or conceptual level. An 'unprocessed' knowledge would be a knowledge acquired without means of cognition" (Rand 1990, 81).<sup>3</sup>

Now to the second, and most fundamental, reason why Rand is not an empiricist foundationalist. Foundationalism of both the rationalist and empiricist varieties arises from what Richard Bernstein has called "Cartesian anxiety" (1983). Cartesian anxiety itself arises from entertaining the possibility that mind and reality can be totally separate—that the truth of the entirety of our knowledge can meaningfully be called into doubt—that all of our commonsense knowledge can be suspended in "scare quotes" and treated as "mere beliefs" which then have to be justified by establishing their representational relationship with the external world. In other words, Cartesian anxiety arises from the idea that consciousness may in fact *not* be conscious of something *other than itself*, that all we know may in fact be floating ideas composed out of the stuff of consciousness and internal to it. Once this radically skeptical possibility is raised, it is simply optional whether we argue our way out to the external world on the basis of rationalist principles or empiricist sense data.

Rand is not this kind of foundationalist because she does not suffer from Cartesian anxiety. For Rand, consciousness is conscious. This does not mean that consciousness is infalli-

ble. But it does mean that we are—not always, but for the most part—in contact with reality. Rand is well aware that doubt, uncertainty, error, illusion, "mere appearances," "mere opinions," and other privations of consciousness occur. But these can be identified as such only within the context of actually achieved knowledge. Knowledge is the standard by which we judge something to be a mere appearance, a mere opinion, an error, etc. Knowledge is the background against which we can identify doubt, uncertainty, and illusion.

Given this, it is simply arbitrary for the skeptic to blow up opinion, error, and uncertainty to encompass all of our knowledge. Surely there is something illegitimate about taking a pair of mutually-defining correlatives—such as knowledge/opinion or appearance/reality—and then suppressing one term while totalizing the other. In what sense, then, would "appearance" still mean appearance when its correlative, reality, is suppressed? If the skeptic no longer has the background of knowledge against which to identify mere opinion, then what evidence can he offer for his knowledge (?), opinion (?), that there may be no knowledge and only mere opinion? If the skeptic no longer has the standard of knowledge against which he can judge something to be erroneous or dubious, then what evidence can he give us that we might always be in error and doubt? The answer is: *The skeptic cannot offer good reasons*. Hence the Cartesian hypothesis that an evil demon may be deceiving us; hence the contemporary discussions of mad scientists and hapless brains in vats. And the result of these rather paranoid fantasies is Cartesian anxiety.

Rand is not a conventional foundationalist because she simply does not let the whole modern foundationalist project get off the ground. But this does not mean that Rand should be identified with contemporary antifoundationalist philosophers such as Richard Rorty and Paul Feyerabend, not to

mention deconstructionist literary theorists, such as Stanley Fish. Most of these philosophers are simply *frustrated* foundationalists. They accept the legitimacy of the entire modern philosophical project—then they simply deny that there are any solutions. Rand does not simply deny the solutions. She denies the problems as well.

## II. Rand's Use of Language

The identification of existence, identity, and consciousness is not "informative," if informative speech is arbitrarily restricted to the production of "synthetic" propositions. Nor is it informative in the sense of communicating something surprising and novel. Everyone knows these facts, or can know them upon a moments reflection. As soon as they are stated, it seems less like they have imparted new information than reminded us of something that we have known all along. The purpose of identifying them explicitly is, again, not so much to inform as to *underscore*—to underscore the basic framework of human cognition. This underscoring rather than informative function is reflected in the formal axioms drawn from these concepts. Axiomatic concepts can be transformed only into repetitive or "tautologous" axioms, such as "Existence exists—Consciousness is conscious—A is A" (Rand 1990, 59).

To dismiss these axioms with the claim that they are repetitive, banal, or obvious is simple to miss the point. *Of course* they are obvious, in the sense that they are ordinarily unremarkable. If they were not, then they would not be identifying (conceptually) *basic* facts. *Of course* they are repetitive or tautologous. If they were not, then they would not be *underscoring* those basic facts. Rand takes philosophy with the utmost seriousness. Its purpose is not to titillate with novelty but to contemplate and appreciate eternal verity. Given this conception of philosophy, repetition is not an impoverished

mode of speech, but the highest and deepest. Repetition, moreover, is especially necessary in the current intellectual climate. Rand, like Orwell, thinks that our culture has sunk to such a level of skeptical decadence that it is necessary to identify, repeat, and defend the obvious.

To put this in admittedly somewhat metaphorical, but thereby more vivid, terms: A normal subject-predicate proposition has a certain inner structural tendency, a tug or flow toward the manifold and particular. When the subject term is set down, reference to some phenomenon is established: *cat*. Then, through predication, the phenomenon can be articulated internally (The cat is a noble beast) or related "outward" to other things in the world (The cat is on the mat). Aristotle tells us that a proposition is a  $\tau\iota$   $\kappa\alpha\tau\alpha$   $\tau\iota\nu\omicron\varsigma$   $\lambda\epsilon\gamma\epsilon\iota\nu$ —something said of something. The Greek preposition  $\kappa\alpha\tau\alpha$  has the sense of emanating out from something and down upon something else. The flow of a proposition is all "downstream," toward greater articulation, manifoldness, and plurality. Viewed from the perspective and anticipations set up by propositional thinking, the use of tautology and repetition, by throwing thought backward toward its subject, thus seems like a abortion of thinking. But, in fact, it is a call to a new kind of thinking, a thinking which reverses thought's natural downstream momentum, carries it back upstream to its source, and then tries to grasp that source: subject, substance,  $\omicron\nu\sigma\iota\alpha$ . The same essential movement can take place on the prepredictive level of thinking, that is, in the taking of something *as* something. Instead of predicating *p* of *S*, we can take *S as p*—and we can take ourselves backward to appreciate *S as S*. For instance, we can investigate being as moving, being as living, being as countable, being as thinking—or simply *being as being*.

Besides Aristotle, there are, to my knowledge, two other thinkers whose ideas of metaphysical language are similar to Rand's: Hegel and Heidegger.

In Hegel's system, the rough equivalent of a proposition like "Existence exists" is what is called the *speculative proposition*. The speculative proposition is best understood in contradistinction to what Hegel calls the *understanding*. For our purposes, the understanding is the kind of mentality that reads propositions in a distanced and highly discursive manner, following and therefore anticipating the propositional tug from subject to predicate, and the argumentative tug from proposition to proposition, searching always for specifics, for facts, and for conclusions. By contrast, the speculative sentence demands a different kind of thinking. It demands that the thinker abandon a distanced and discursive attitude, allowing himself instead to enter into the peculiar inner movement of the speculative proposition and to be carried from subject to predicate—and back to the subject again. Hegel would hold that such a motion is not merely an empty tautology that simply leaves one back where one began. Rather, in returning to the origin through the movement of the speculative proposition, we understand the origin differently, in light of the journey that thought has taken. Consider the following:

In the proposition "God is being," the predicate is "being;" it has the significance of something substantial in which the subject is dissolved. "Being" is here not meant to be a predicate, but rather the essence; it seems, consequently, that God ceases to be what he is from his position in the proposition, namely, a fixed subject. Here thinking, instead of making progress in the transition from subject to predicate, in reality feels itself checked by the loss of the subject, and, missing it, is thrown back on the thought of the subject. Or, since the predicate itself has been expressed as a subject, as *the being* or *essence* which exhausts the nature of the subject, thinking finds the subject immediately in the predicate; and, now, having returned into itself in the predicate, instead of being in a position where it has freedom for argument, it is still absorbed in the content, or at least faced with the demand that it should be.... This abnormal inhibition of thought is in large measure the source of the complaints regarding the

unintelligibility of philosophical writings from individuals who otherwise possess the educational requirements for understanding them. Here we see the reason behind one particular complaint so often made against them: that so much has to be read over and over before it can be understood—a complaint whose burden is presumed to be quite outrageous. . . . It is clear from the above what this amounts to. The philosophical proposition, since it is a proposition, leads one to believe that the usual subject-predicate relation obtains, as well as the usual attitude toward knowing. But the philosophical content destroys this attitude and this opinion. We learn by experience that we meant something other than what we meant to mean; and this correction of our meaning compels our knowing to go back to the proposition, and to understand it in some other way. (Hegel 1977, 38–39)

As for Heidegger: like Rand, he is interested in tracing out, articulating, or distinguishing the most fundamental concepts and recognizes that this task can be accomplished only in unusual—namely, repetitive and tautological—language. Heidegger, furthermore, recognizes the underscoring rather than informative nature of such utterances. Consider, for example, this passage from *What is Called Thinking?*

Language is not a tool. Language is not this and that, is not something else besides itself. Language is language. Statements of this kind have the property that they say nothing and yet bind thinking to its subject matter with supreme conclusiveness. (Heidegger 1968, 153)

Consider also Rand's "existence exists" alongside such (much-ridiculed) Heideggerisms as "appropriation appropriates," "the nothing nihilates," "the thing things," and "the world worlds" (Heidegger 1972, 16–24; Heidegger 1977, 105; Heidegger 1971, 174–80).

### III. Rand and Aristotle

Now we turn to the method by which Rand grasps these primary facts, conceptualizes them, and defends them. Rand offers the following test for the axiomatic nature of a concept.

There is a way to ascertain whether a given concept is axiomatic or not: one ascertains it by observing the fact that an axiomatic concept cannot be escaped, that it is implicit in all knowledge, that it has to be accepted and used even in the process of any attempt to deny it. (Rand 1990, 79)

Rand sets this out as a method by which we can ascertain whether a concept is axiomatic or not, but it is not and cannot be a means of directly and logically *proving* that a concept is axiomatic, for axiomatic concepts identify basic metaphysical conditions that must hold before any proof can take place, thus rendering any direct proof circular. For instance, the attempt to prove that something exists presupposes the existence of a prover. The attempt to prove the existence of consciousness is itself an act of consciousness. The attempt to prove the existence of identity or determinateness is itself governed by the law of identity.

But although this method does not *directly* prove Rand's metaphysical axioms, it does allow an indirect proof resembling both the reductio ad absurdum and the argument from the elimination of all other possibilities. This is the method of demonstration by refutation. By venturing the denial of any basic metaphysical fact, it can be shown that all alternatives to accepting such facts are incoherent. One simply points out that axiomatic concepts identify facts which ground the possibility of all thought, including any attempt to demonstrate them—or to deny them. For instance, the denial of existence presupposes that existence of a denier. The denial of identity involves acts of cognitive distinction, which would be impossible in a world without particular, determinate identities. The denial of the existence of consciousness purports to be consciousness of a fact and requires the actions of a conscious subject.

The type of error made in attempting to deny these facts is not the logical contradiction found between two inconsistent statements. It is a more fundamental, metaphysical "contradic-

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tion" between an action and the ground of the possibility of that action. And to point it out is a peculiar sort of ad hominum argument that does not, however, appear to be fallacious.

Now such reasoning almost always strikes philosophers as somehow fishy, but it does have a long history and a venerable origin. To my knowledge, its earliest occurrence is in Socrates' response to Protagoras in Plato's *Theatetus* (170a-171d). It is most prominent, however, in Aristotle's *Metaphysics*, book Γ, chapters 3-8, where Aristotle sets out and defends the principle of noncontradiction.

In chapter 3, Aristotle states that it is the task of the philosopher to investigate all beings insofar as they have being, and "to examine also the principles of the syllogism" (1005b8), which are not only logical, but also ontological principles: "the most certain principles of all *things*" (1005b12, emphasis added). Such a principle (or principles) must be "that about which it is impossible to think falsely," "most known," and "nonhypothetical" (1005b14-15). The reason for this is that it is "a principle which one must have if he is to *understand* anything." It is something "which one must know if he is to *know* anything," and thus it "must be in his possession for every occasion" (1005b15-18, emphasis added). Aristotle then goes on to state his principle:

Clearly, then, such a principle is the most certain of all; and what this principle is we proceed to state. It is: "The same thing cannot at the same time both belong and not belong to the same object and in the same respect." (1005b19-21)

Aristotle's explication and defense of this principle has three aspects. In chronological order—and, I presume, in order of importance—they are: (1) the careful statement of the PNC, (2) the assertion that no proof of the PNC is possible, and (3) the demonstration of the PNC by refutation. I shall treat each in turn.

Immediately after stating the PNC, Aristotle adds "and all other specifications that might be made, let them be added to

meet logical objections" (1005b21–22). A bit later, he adds "contraries cannot at the same time belong to the same subject (and let the usual specifications be added also to this premise)" (1005b28–29). What is going on here? As I interpret it, Aristotle understands the task of setting out the PNC to be first (and I think, foremost) a matter of *stating* the principle in as clear and as distinct a manner as necessary to fend off possible objections and misunderstandings. There is a hidden critical dialectic at work here, a process by which tentative formulations of the PNC are progressively honed to precision. For example, the PNC may be stated as X. If, however, X has a fuzzy penumbra, shading imperceptibly off into Y, then the PNC must be restated again with the qualifications necessary to crisply delineate it from its background. For Aristotle, the primary task is to make strategic distinctions as crisply as possible.

Aristotle's next task is to respond to those who demand a proof of the PNC:

Some thinkers demand a demonstration even of this principle, but they do so because they lack education; for it is a lack of education not to know of what things one should seek a demonstration and of what he should not. For, as a whole, a demonstration of everything is impossible; for the process would go on to infinity, so that even in this manner there would be no demonstration. (1006a5–10)

Aristotle does not state precisely why the PNC is one of those things that is not subject to demonstration, but the reason is plain enough: one must employ the PNC in all reasoning; therefore, any attempt to prove the PNC is by necessity circular.

Aristotle's next step is to discuss those who deny the PNC. Aristotle distinguishes between two forms of the denial of the PNC. The first form might be termed the *honest* form. Some thinkers, in earnestly working through philosophical problems, happen to come to conclusions which implicitly or ex-

plicitly deny the PNC. "Those who come to such belief [i.e., the denial of the PNC] from the difficulties they have raised can easily be cured of their ignorance; for our replies will be directed not to their vocal statements but to their thought" (1009a17–20). These thinkers can be corrected simply by examining their reasoning and introducing helpful distinctions, such as actuality and potentiality. (See 1009a31–35.)

The other form of denying the PNC can be termed *dishonest*, or *contentious*. In responding to such denials, one does not seek to address the thoughts of the denier, but instead focuses on his words: "those who state such a doctrine for its own sake can be cured by a refutation of that doctrine as expressed in speech and in words" (1009a20–22). Aristotle describes the logic of demonstration by refutation thusly:

That the position of these thinkers [e.g., those who deny the PNC] is impossible can also be demonstrated by refutation, if only our opponent says something. . . . Demonstration by refutation . . . differs from demonstration in this: that he who demonstrates might seem to be begging the question, but if the other party is the cause of something posited, we would have a refutation but not a demonstration. The principle for all such arguments is not to demand that our opponent say something is or is not (for one might believe this to be a begging of the question), but that what he says should at least mean something to him as well as to another. (1006a12–22)

Thus far, the tactic is clear. Any attempt to directly prove the PNC is circular. But any attempt to deny it renders the denier guilty of a self-referential inconsistency. Once this inconsistency is committed, then the defender of the PNC need only point out the hopelessness of the opponent's position.

But how, precisely, does this work? An obvious story would be: First the skeptic offers an argument concluding with the denial of the PNC. Then one simply points out that all arguments are ruled by the PNC; therefore, such an argument presupposes what it denies, i.e., it is self-referentially inconsistent. But this is not Aristotle's strategy. Aristotle does

not hold that it is necessary to deny the PNC per se in order to open oneself to demonstration by refutation. Nor does he hold that one's denial has to take the form of an argument. Instead, Aristotle claims that what is denied is *difference*. He holds, furthermore, that the denial of difference can be shown to be self-refuting on three levels: (1) speech, (2) indication without speaking (e.g., pointing or shrugging), and (3) action. Note that argument per se does not appear on this list. Aristotle holds, furthermore, that there is a state of being in which the denial of the PNC does not open one to demonstration by refutation: a purely passive, vegetative existence. I shall treat each of these matters in turn.

Aristotle's extended arguments throughout chapters 4-8 are haunted by two specters: Eleatic monism and the Heraclitean flux. Eleatic monism is the affirmation of identity to the exclusion of difference and the affirmation of stasis to the exclusion of change. The Heraclitean flux is the affirmation of difference to the exclusion of identity and the affirmation of change to the exclusion of stasis. Aristotle holds that both positions are identical insofar as they exclude the possibility of meaningful speech: For the Eleatic monist, only one thing can truly be said of being: that it is. Anything more than this tautologous registration of sameness would introduce distinction, which requires the existence of nonbeing, which is impossible. For the Heraclitean Cratylus, all beings are in such a state of flux that he "criticized even Heraclitus for saying that one cannot step into the same river twice, for he himself thought that one could not do so even once" (1010a13-15). If everything is totally different, then each thing is different from itself, that is, there is not identity; nothing is anything; everything is nothing. This to say that total difference (nonidentity) leads us to total indifference: everything is the same (i.e., completely different, even from itself), an ineffable and unspeakable situation which reduces Cratylus the Heraclitean to Eleatic

reticence: "Cratylus finally thought that nothing should be spoken but only moved his finger" (1010a12-13).

By contrast, Aristotle, like Plato in the *Sophist* (254d-259d) and elsewhere, holds that identity and difference are equally primordial and irreducible to one another. This, perhaps is mirrored by the fact that the three highest principles of logic, Identity, NonContradiction, and Excluded Middle, are corollaries, neither derivable from nor reducible to one another. Aristotle thus holds that the denial of the PNC can be refuted if the skeptic simply affirms *difference*. But this cannot be the affirmation of *difference simpliciter*. In order to be distinguished from the indifferent difference of Cratylus, the affirmation of difference must be against the backdrop of the affirmation of *identity*.

The affirmation of identity and indifference takes place in speech. Thus when the skeptic denies the PNC, one can refute him by pointing to the fact that he does indeed deny the PNC (identity) and not something else (difference). If the skeptic is truly contentious and, infuriated by the attempt to refute him on the grounds of speech, retreats into silent gesturing, one can again point to the fact that he gestures here (identity) and not there (difference). Indeed, this determinateness is what allows us to distinguish a meaningful gesture from a mere involuntary reflex. If the skeptic persists in his denial and turns to stomp off in a huff, one can point out, as Aristotle does, that

it is most evident that no one of those who posit this doctrine, or anyone else, is disposed in his actions in the same way. For why does a man walk to Megara and not stay where he is with the thought that he is walking to Megara? And why does he not walk straight into a well or over a precipice, if such happens to be in his way, but appear to guard himself against it, with the thought that it is not equally good and not good to fall in? Clearly he believes one course of action to be better [identity] and the opposite not better [difference]. (1008b12-19)

If the skeptic chooses to pursue his denial further, there is only one resort: to sit down, shut up, and cease to function cognitively. But even this does not yield victory in argument. Or if it does, it is a Pyrrhic victory. "That the position of these thinkers is impossible can . . . be demonstrated by refutation, if only our opponent says something; and if he says nothing, it is ridiculous to seek an argument against one who has no argument insofar as he has no argument, for such a man qua such is indeed like a vegetable" (1006a12-16).

This, then, is Aristotle's treatment of the PNC. We are now in the position to evaluate it. The first and most salient conclusion is the undeniable persuasive power of Aristotle's approach. But in virtue of what is it persuasive? Precisely what kind of argument is it? It is to this question that I now turn.

#### IV. Self-Knowledge

Arguments are divided into inductive and deductive forms. Aristotle's demonstration of the PNC by refutation is not a deductive argument, direct or indirect, for it is precisely the foundation of deduction that is in question. It must, therefore, be a form of induction. But we must be careful here. The PNC is somehow drawn from experience and then validated by showing the self-referential inconsistency of its denial. But this is not, however, a standard enumerative form of induction, for the PNC does not purport to apply only to observed particulars. Nor is it open to falsification by new observed particulars. Rather, the PNC makes its claim about all beings—actual or possible, universal or particular, observed or unobserved: *Whatever* ultimately is, it is what it is, and it is not what it is not at the same time and in the same respect. The PNC, then, seems to occupy a realm between deduction and enumerative induction. This realm, I contend, is best seen as the realm of *reflection*. Specifically, I wish to follow an approach suggested by Kurt Riezler (1940). Riezler held that

self-knowledge, or reflection, at a basic, uncomplicated level can show that the axioms of logic are ontologically grounded and indispensable not just for rational discourse, but for all of existence (or, as we might put it in contemporary terms, for all possible worlds and forms of life).

It would seem very promising to contend that the principle of noncontradiction is the sort of knowledge we arrive at by way of this reflection, an understanding that arises when we focus upon the most native data in our lives. (Riezler's discussion is very promising in this area.)

How does this work? By the time that we are old enough to philosophize, we have gained an enormous body of knowledge, both conceptual and practical, or "tacit." If we reflect upon what is implicit in a single, narrow, utterly ordinary bit of this knowledge—say, the fact that we can read the English language—we can draw a number of conclusions. Firstly, the fact in question *exists*; it is there independent of, but knowable by, the act of reflection directed upon it. Secondly, that *it is what it is* and it is not what it is not at the same time and in the same respect. Thirdly, we are aware of all of this; we are *conscious*. Now, through a special act of the intellect, we can transcend the bland particularity of these conclusions, reaching conclusions of astonishing breadth. For any *experience*, no matter what the content, we can assert the same unvarying formal truth: that something *is*, that *something* is, and that we are aware of it. As Rand puts it, "Axiomatic concepts identify what is merely implicit in the consciousness of an infant. . . . (Implicit knowledge is passively held material which, to be grasped, requires a special focus and process of consciousness.)" (Rand 1990, 57).

But what is this special "act of the intellect," this "special focus and process of consciousness"? What it is *not* is clear. It is not a process of inductive generalization. We do not go around enumerating things, saying "This exists, and this ex-

ists, and this exists; therefore, existence exists." Nor is it a process of abstracting differences. Existence is not the ineffable residue that is left over once one boils off all determinations. Rather, one moves from "My linguistic capacity exists; it is what it is, and I know it" to "There is something; whatever it is, it is what it is, and I know it" in two steps. First, there is a reflective turn, a step back from a directly knowing *things*, to reflectively knowing the *knowing* itself. Second, there is a shift in focus from the content of our knowledge to its form. This is not achieved step by step, by a process of progressive abstraction. Rather, it happens in a single stroke, by a process that can be called *formalization*. One simply zaps out the content or determinations of the experience, leaving a formal scheme, *existence-identity-consciousness*, into which any particular content can be plugged. Rand's metaphysical axioms are, therefore, wholly formal in both origin and intent. They originate through reflection upon and formalization of the nature of experience. And, once they are derived, they serve as a permanent, neutral formal framework for knowledge, the material content of which is to be provided by empirical enquiry. Rand puts it thusly: "Axiomatic concepts are epistemological guidelines. They sum up the essence of all human cognition: something *exists* of which I am *conscious*; I must discover its *identity*" (ibid., 59).

There are, to my mind, two salient virtues of this formal foundationalism. First, it is extremely austere, compact, and minimalistic. It places only three basic constraints on empirical enquiry, leaving all questions of content, and more specific questions of form or method, open to be debated by scientists and other empirical enquirers who have expertise with the phenomena in question. This leads to the second virtue. Through its formal austerity and minimalism, Rand's axiomatic foundationalism escapes from both the problems of modern foundationalism and the problems of modern antifoundationalism.

Antifoundationalists, for example, are quite right to criticize what can be called "armchair" philosophy: the pretense on the part of many philosophers to investigate the particulars of the world, or to determine the specifics of scientific method, by a priori means, without dirtying themselves with any actual hands-on experience. This includes those contemporary philosophers of science, for example, who know little or nothing of the actual practice of scientists and still produce extensive explanations of scientific method, or epistemologists who fail to heed the findings of perceptual psychology. In our time, with a wealth of information available to us, such an approach is rightly criticized by antifoundationalists.

Rand's approach, by contrast, is so minimalistic and open-ended that she seemed uninterested in even such traditionally philosophical questions as the ontological status of fictions. (Whatever they are, they simply are what they are.) Rand's approach is also consistent with a healthy respect for the primacy of scientific practice, an open-minded ontological pluralism, and an (almost) anything goes, (almost) Feyerabendian, *laissez faire* attitude toward the methods of empirical investigation. The questions of the method and content of enquiry are left to the experts, to those who have something interesting to say about them: the investigators themselves.

Foundationalists, however, are correct to point out that antifoundationalists involve themselves in self-referential inconsistencies. For instance, Paul Feyerabend's methodological anarchism—as in his *Against Method* (1975) and *Farewell to Reason* (1987)—if carried out consistently, is self-negating. After all, if no methodological option can be ruled out in advance by philosophical means, then methodological dogmatism is just as much an option as methodological pluralism. It may just be the case that tomorrow a rigid form of dogmatism might "work."

Rand's formal minimalism, however, can serve both as the foundation of pluralism and prevent pluralism from negating

itself. It founds pluralism by delimiting the form, rather than by determining the content and method of enquiry. It preserves pluralism by formally eliminating the possibility of contents or methods which foreclose the open-ended form of knowledge. In short, whereas Feyerabend's unlimited anarchism is subject to an internal dialectic which makes it ultimately self-negating, Rand secures pluralism from self-negation precisely by limiting it under the minimal government of her axiomatic concepts.

### V. Replies to Some Critics

I now want to take up a number of contemporary objections to the Aristotelian approach. Before doing so, however, I must step back and take stock of what is going on here. I am examining a number of objections to the PNC or to Aristotle's method of demonstrating it by refutation. The PNC is a signal example of a philosophical principle, thus all objections to it are themselves philosophical in nature, or at least philosophical in import. But what is it to have a philosophical position? And what does the nature of a philosophical position allow us to conclude about these objections to the PNC?

My first clue is that all philosophers at least criticize other philosophers or philosophical views. What does such criticism presuppose? Firstly, it presupposes that the critics and the criticized *exist* and share enough of a common world for communication to take place. Secondly, it presupposes that the parties to the dialogue are *conscious* of one another and of their positions. Thirdly, it presupposes that the critics and the criticized are *different*. If they are not different individuals—as, for example, in a thought-experiment—then they are at least different aspects of the same individual.

A second clue is that even those who deny the PNC must employ arguments and whatever arguments presuppose

(e.g., logic). The frequent critical discussions engaged in by those who make such denials presuppose some (at least implicit) commitment to logic, however eagerly this commitment may ultimately be denied or explained away as a mere move in a game that need not be played. Despite these ploys, however, the very act of denying the PNC would not mean anything without the prior acceptance of the binding character of what is being denied. Even the most vehement proponents of ontological relativity assume certain standards. What, after all, could be the (rational) force of criticism based upon standards that do not have a status over and above convention, temporary interest, subjective preference, or sheer whim?<sup>4</sup> The criticisms leveled by relativist philosophers frequently purport to deliver a knockout punch. In virtue of what? And indeed, it does appear that something firm—at least as firm as a political agenda—is being hinted at, implicitly promised, in advancing even the most relativist or irrationalist views.

But do not these preliminary observations alone secure for us what Aristotle has in mind, namely the *ontological* status of the PNC? Do they not secure for us what Rand had in mind, namely, the truth of her philosophical axioms? To confirm this, let us briefly consider some concrete examples.

Let us begin by considering a point raised by R.M. Dancy:

One might deny the law of non-contradiction for all sorts of reasons. None that I have seen strike me as good reasons. But neither do I see any reason for saying that there never could be a good reason for denying it. (1975, 142)

Dancy's work explores the varied issues, pro and con, surrounding the Aristotelian stance. For the most part, his conclusions are sound. Still, he is wrong in this last, skeptical reflection. Dancy is denying the universal scope of the PNC. He is willing to grant that, on the basis of enumerative induction, he has not seen a good reason to deny the PNC. But he is willing to entertain the possibility that some good rea-

son might come along. But presumably such a good reason would refer to some matter of fact or some philosophical principle (which, ultimately, must derive its sense from some matter of fact). Presumably, this matter of fact must have some determinate content; it must be something. From Dancy's own words, we can know at least one thing about its determinate content: It is such that, if Dancy were to encounter it, it would be capable of persuading him to deny the PNC. Yet this involves a paradox. If it is determinate enough to persuade Dancy that it supports the denial of the PNC, then it is determinate enough to be further evidence of the PNC. Again, the PNC is not valid simply of the facts that we can enumerate. It is true of all possible facts, including those facts which Dancy considers to be possible counterexamples.

Yet even this Aristotelian response has been met with further skeptical objections to the effect that it simply carries no ontological import. All the self-refutation argument shows, these skeptics claim, is that those who engage in some form of verbal communication commit themselves to certain standards, whether they admit or deny this fact. But what if one decides to deny the PNC and then simply shuts up? As William O'Neill puts it in his book on Rand:

If . . . I am sincere, and my stated rejection of the law of contradiction is the last *sensible* statement which I choose to make (since all normal discourse is based on logical assumptions), I cannot be accused of being self-contradictory because I abstain from all subsequent attempts to rationalize or defend my illogicality. In such a case, of course, my assertion that I reject the formal law of contradiction will be a terminal assertion. I have now quit playing the logic-game of true-false dichotomies altogether. . . . My choice is to live without considering the idea at all, let us say, *intuitively* at a purely spontaneous (preverbal) level of response in something approximating Zen awareness. (O'Neill 1972, 95)

First of all, note that O'Neill construes the kind of contradiction involved in denying the PNC as a contradiction be-

between propositions, whereas in fact it is a contradiction between a proposition and the ontological conditions of asserting the proposition. Second, to the extent that O'Neill's "Zen awareness" allows life to go on in a "spontaneous" and intuitive—though "pre-verbal"—manner, he falls victim to Aristotle's rebuttal of Cratylus' gambit of shutting up and pointing. This objection can be extended to those who give up propositional speech not only for pointing, but for grunting, commands, and various other "intuitive," or "spontaneous," nonpropositional ways of signifying. Even if one simply indicates something with a grunt, one is indicating this *as opposed to that*. In other words, one is registering the phenomena of difference and determinateness, which are the foundation of the PNC. If O'Neill were simply to gesture mutely—for instance, in pointing out items on a menu—then, presumably, he is indicating *this* entree rather than *that* entree. And, no doubt he would gesture in mute anger should the waiter bring him the wrong order. Clearly, then, he is aware of the determinacy and difference of things, which awareness, if put into speech, would be the PNC. Therefore, O'Neill tacitly admits the truth of what he denies to be the case in his (last) words. To the extent that O'Neill's "Zen awareness" approaches what Aristotle called a vegetative state of existence, it is a testament to the depths of self-stultifying absurdity to which contentiousness can bring us. It also testifies to a misunderstanding on O'Neill's part of the purpose of philosophical argument, which is not primarily to change the mind of any stubborn opponent, but to establish whether something is or is not the case. The fact that O'Neill's only escape from granting the ontological status of the PNC is to choose "to live without considering the idea at all" should be sufficient to establish the real point at issue: the *rational* unavoidability of the PNC.

Martha Craven Nussbaum, in her provocative essay "Saving Aristotle's Appearances," maintains that Aristotle

Second point

But from he couldn't deny anything anymore.

(Handwritten scribble)

(Handwritten scribble)

does not demonstrate that the PNC has an ontological status, but merely that it is unavoidable given the structure of our common, socially-inculcated language and conceptual framework. Thus Aristotle's demonstration of the PNC by refutation merely testifies to his rootedness in the Greek form of life, to how the Greeks thought and spoke (Schofield and Nussbaum 1982).

The essential problem with Nussbaum's argument for the relativity of the PNC is that it is premised upon a fantastic idea of absolute truth. For Nussbaum an absolute truth is external to our language and conceptual framework, and cannot be captured by them, for any such truths would become ipso facto "internal" and, therefore, relative. Since Nussbaum seems to identify consciousness with the linguistically relative, or mediated, she is in effect arguing that absolute truths are precisely those truths of which we are *not* conscious. Now, whatever different views of absolute have existed in the tradition, I submit that this is not one of them, even if some characterizations of truth have allowed this interpretation.<sup>5</sup>

Nussbaum is led to this position by her equivocal use of the concepts of what lies *inside* or *outside* of consciousness. Nussbaum accepts the traditional claim that absolute truths are in some sense outside of consciousness. But *outside of consciousness* is ambiguous. It can mean that the absolute object of consciousness exists independently of, but knowable by, consciousness. Or it can mean that the absolute object is outside of all relationship to consciousness, i.e., unknown. I submit that the defenders of absolute truth hold that their truths are *outside* of consciousness in the first sense, not the second sense. That is to say: an absolute truth is a truth that is *known as absolute*, a fact that has both entered into the grasp of consciousness and is grasped precisely as existing independently of the grasp of consciousness. Nussbaum, however, holds that absolutists mean the latter sense of *outside*. Then, by identifying knowledge with being *inside* consciousness—that is, being

relative to our language or conceptual schemes—she saddles the absolutist with the absurd position of seeking absolute truth (truths lying outside of the grasp of consciousness) which, as soon as they are captured (brought into the grasp of consciousness), evaporate into relative truths *by the mere fact of being known*.

Another way of approaching this issue is through an ambiguity in the use of *inside*. The absolutist may well be willing to grant that an absolute truth is somehow "internal" to our language and conceptual frameworks, for it is precisely *through* our language and conceptual frameworks that we grasp absolute truths. The trouble with this kind of language is that we are also constantly tempted to "locate" our language and conceptual schemes "inside" our minds, or even in our brains. And this creates a problem, for it seems to imply that, if our world is *inside* our language and our language is *inside* our heads, then the world is located inside our heads, nested in Chinese boxes, as it were.

Yet this is an absurd position, reached by an equivocal use of the word *inside*. In the first sense, *inside* means *mediated by*. In the second, it means *located within*. Thus, in order to avoid the problems posed by this ambiguity, the absolutist stresses that, however mediated or "inside" our knowledge is, it is still knowledge of something that exists outside; something that is not located in the head. Returning now to Aristotle, we may grant that for Aristotle the PNC is *inside*—that is, mediated by—our conceptual schemes. But once it comes *inside* our conceptual schemes it is appreciated precisely as outside of them—that is, as an objective, ontological truth.

To conclude, I believe that I have established that Rand's axiomatic foundationalism has a number of philosophical virtues. It is a highly economical and original recovery and development of central threads of the Aristotelian tradition, standing outside of both the rationalist and empiricist tendencies of modern epistemology. Indeed, to the extent that

modern epistemology is premised upon treating solipsism as a conceivable possibility and therefore the problem of the external world as a live issue, Rand's foundationalism can be characterized as postepistemological, even postmodern—yet not postphilosophical and postrational.

Yet another virtue of Rand's project is its systematic ambitiousness. The sketchy outline above is, in fact, an outline of a defense of human reason and its prospect for guiding one to success in leading a truly human life. Both of these prospects are under severe attack, with serious consequences for both the profession of philosophy and for human life. Rand's Objectivism, of all the schools of contemporary philosophy, is, in my view, the one best suited for validating and carrying out the Enlightenment project of creating a society that is both rational and intellectually responsible on the one hand and free and pluralistic on the other, a society in which the open-ended inquiries of the sciences, the arts, and the other participants in the conversation of mankind can take place, not in spite of a foundationalist philosophy which puts heavy-handed *a priori* constraints on the freedom of enquiry, but precisely because of a minimalistic foundationalism, which—by delimiting the basic framework of rational enquiry—uncovers those conditions and limits which make free and rational enquiry possible in the first place.<sup>6</sup>

#### Notes

1. It is worth noting here that Ayn Rand often writes as if her foundationalism held that all aspects of science, history, and culture in general, can be reduced to philosophical influences or should be reduced to them by being philosophically criticized and reconstructed on "firm foundations." (See Binswanger 1986, 358–62; Rand 1988, 104; Rand 1961, 28; Rand 1975, 82; Rand 1974a, 6; Rand 1966, 19. See also Sciabarra 1989.) In this paper, I am not treating Rand as this sort of foundationalist, but as a foundationalist vis-à-vis the current debate between Richard Rorty (i.e., in Rorty 1991) and his critics. (See further, Machan 1989, chapter 1, and *Reason Papers*, no. 16, "Rethinking Foundationalism.")

2. See, for example, Peikoff 1986. Throughout this essay, Leonard Peikoff repeats that the foundation of knowledge lies in perceived particulars. He then ends his essay by saying that, "if your reduction [of concepts to their basis in 'sense data'] is accurate, you will find that that base is the axiom with which we began: existence exists" (1986, 11).
3. David Kelley, in an exchange with Peter Munz, a reviewer of Kelley's *The Evidence of the Senses*, aligns himself with the empiricist tradition, though not in the sense of disagreeing with Rand but only in so far as his work, following Rand's, is closer to a scientific realist epistemology. Consider the following:  
Professor Munz is correct in placing my work in the tradition of empiricists who hold that perception is the basis of our knowledge of the world, the foundation of any certainty we may achieve. My approach differs from that of other empiricists in many respects, including the one that he mentions: I regard perception as a distinct mode of cognition, intermediate between sensations on the one hand and conceptual knowledge on the other. Unlike sensation, perception is the awareness of entities: stable objects in three-dimensional space. Unlike conceptual knowledge, this awareness is direct, it involves no interpretation, and can therefore serve as a non-circular cognitive ground for conceptual knowledge of those objects (*Critical Review* 2(4):183, emphasis added).  
See Also Kelley 1986 and 1984.
4. It is not accidental that *criticism* is related etymologically to *criterion*.
5. I discuss this, along lines prompted by Rand's understanding of the nature of knowledge, in Machan 1989 and 1982.
6. I received a great deal of help from Greg Johnson and from the editor of *Objectivity* in the development and composition of this paper. Of course, all errors are my responsibility.

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## Identity of Indiscernibles and Quantum Physics

Joseph Mixie

### I. Ontological Framework

I shall discuss Leibniz's principle of the identity of indiscernibles, as it applies to physical objects. I define this principle as follows: For every X and for every Y, if X has every property that Y has and Y has every property that X has, then X and Y are identical.

This principle should not be confused with the indiscernibility of identicals, which says: For every X and every Y, if X and Y are identical, then every property that X has, Y will also have, and every property that Y has, X will also have.

These two principles, the identity of indiscernibles and the indiscernibility of identicals, have a converse relationship. They do not imply the same thing. The proposition "If it rains tomorrow, then I shall bring my umbrella" does not imply the same thing as "If I bring my umbrella, then it will rain tomorrow." In general form, "If A, then B" does not imply "If B, then A."

The indiscernibility of identicals states a condition sufficient to ensure that two objects be indiscernible, namely that they are identical. This principle is rarely discussed and rarely denied.<sup>1</sup> The identity of indiscernibles, on the other hand, says that if two objects have all the same properties, then they are identical. This implies that an object's identity is all the properties that the object has, and an object's identity is not anything more besides those properties. In its