

Mind and Will as Objective Phenomena The Ontological Status of Introspective Data

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It is not the mind, nor will, which chooses man's actions.
These are merely man's capacity to act mentally and to
choose those actions. The cause of man's actions...is *man*,
as a minded, willing organism. (Bissell 1974, 37)

This essay seeks to clarify the nature of introspection and its data by applying the method used in Robert Efron's analysis of perception and Leonard Peikoff's analysis of the ontological status of sense data. Sense data are neither intrinsic nor subjective but objective, and the same will be shown to be true of our awareness of mind, will, and the various processes associated with them. In support of this analysis, an attempt will be made to formulate with greater clarity Rand's trichotomy of intrinsic-objective-subjective, and in so doing to show that it has valid application to non-volitional phenomena.

Part A. The Tragic Transformation of Rand's Trichotomy and the Perilous Pitfall of "Mind Independence"

An underlying concern of this essay's thesis is the current status of the concept of "objectivity" in Rand's philosophical system. As such, it continues the exploration undertaken by Jason Raibley (2002) and David Ross (2001). Objectivity is a central idea in Rand's philosophy and is the source of the name she chose for her philosophy. Indeed, Peikoff (1987) says that objectivity is "the central guiding norm of epistemology" (lecture 3). However, in emphasizing this fact, I think that Rand and Peikoff have lost much of the point of Rand's distinction (known familiarly as the "trichotomy") between the intrinsic, objective, and subjective.

1. Another Look at the Intrinsic-Objective-Subjective Distinction

It's clear that Rand initially envisioned a broad role in her philosophy for the trichotomy. As she stated ([1967-67] 1990), "[T]he dichotomy of 'intrinsic or subjective' has played havoc with this issue [the nature of concepts], *as it has with every issue involving the relationship of consciousness to existence*" (53, emphasis added). "Every issue" would certainly seem to include the relationship of *perception* to reality and, in particular, the issue Peikoff refers to as "the metaphysical status of sense data."

However, Peikoff has been of two minds on the matter. In his lecture series on modern philosophy, Peikoff (1970) introduces the trichotomy by illustrating it in terms of the metaphysical status of sensory qualities (lecture 11). In his ancient philosophy series, Peikoff (1972) was still referring to various erroneous views of the nature of sense data as

being "subjective" or "intrinsic," and did refer tersely to sensations as being "cognitive elements, *objective* indicators in a certain form of what is out there" (lecture 12, emphasis added). Yet, by his lectures on Objectivism, Peikoff (1976) had dropped all reference to the trichotomy in discussing the metaphysics of sense data (lecture 4). Then, in his book (1991), he argued that the distinction between intrinsic, objective, and subjective does not apply to sense perception, which "cannot depart from reality," but only to conceptual level processes, which are governed by our volitional faculty (112, 117).

The triggering cause of Peikoff's decision to no longer apply the trichotomy to perception was an apparently casual remark by Rand to Peikoff after one of his lectures, most likely in 1972 (though perhaps in 1970). As Peikoff (1987) relates it:

[Questioner asks: What are things that you did in the past that you're right about now?...]I'll tell you one really gross error that's on one of the tapes. I applied the objective-subjective-intrinsic trichotomy to sense perception. I took the view that sense experience was objective—this was many years ago—as opposed to being intrinsic or subjective, and tried to develop a whole thing around that, which is completely wrong, because the concept of "objectivity" only *arises* on the conceptual level. There's no choice, and there's no method with regard to sense percepts. They're just *given*. And that was thoroughly confusing. That must have caused me three years of mental development, just that one error. As I remember, Ayn Rand casually said to me, "You know, that wasn't too clear, because you made it sound as though sense perceptions are objective." And I said, "Well, what do you mean?" [Laughter] [Question-answer session #1]

On the seemingly smallest of equivocations or confusions, the fate of a philosophical movement sometimes hinges. This seems to be such a case. Peikoff's original discussion was in terms not of the epistemological objectivity of "sense experience" or "sense perceptions," but the metaphysical objectivity of *sense data*. Peikoff wanted to argue that sense perceptions (i.e., sense data) had objective *metaphysical* status (the "out there, in here"), while Rand wanted to argue that sense perceptions (i.e., processes of perceiving) were *not epistemologically* objective (volitionally adherent to reality). Peikoff could have attempted to sort this all out; he could have pointed out that his usage of the term "objective" was to the *content* of perception, while Rand's denial of the usage of the term was to the *action* of perception. Instead, however, he merely continued to use the "out there" and "in here" metaphysical status language to refer to *every* form of *incorrect* idea about the products of the relationship between existence and consciousness. As for the terms "subjective," "intrinsic," "objective" and "out there, in here," they were still used, *except* in referring to theories of the metaphysical status of sense data.

(Kelley, by contrast, at least recognizes a certain derivative usage of "objective" for perceptual level phenomena. He wrote (2001): "Ayn Rand reserved the term "objective" for phenomena at the conceptual level, for reasons that I consider valid but irrelevant here; so my extension of the term to cover the perceptual entity-in-a-form

should be considered an analogy" (16). The irrelevance of Rand's reasons seems to be based on the fact that Rand was focusing on the nature of conscious *actions*, while Kelley is focusing on the nature of perceptual *contents*.)

Whether or not Peikoff actually realized that he and Rand were at cross-purposes, however, he still could have avoided making such drastic changes in his presentation by challenging her on the issue of whether "objectivity" should be limited in application to the *volitionally* reality adherent. As Peikoff (1991) says in his definition of the trichotomy, the "view" or "approach" of existence apart from consciousness and consciousness apart from existence are what are referred to, respectively, as "intrinsicism" or "subjectivism"—and they are so "*in any variant*" [144, emphasis added]. Instead, however, he argues (1991) that normative terms such as "objectivity" cannot be applied to perception, because perception, being an automatic process, "cannot depart from reality" (112, 117). Surely this begs the question. It seems reasonable to ask why *non-volitional* adherence to reality does not also merit the label "objective" or "objectivity." That is, why not allow for a *non-normative* use of "objective," alongside the normative usage? Peikoff has offered no good reason not to apply these terms, along with "objectivism," to the variants that pertain to the metaphysical status of sense data. Granted, some conscious processes are *automatically* reality-adherent, but what is important (in regard to the trichotomy) is that they are automatically *reality-adherent*. They adhere to reality automatically.

In general, intrinsicism, subjectivism, and objectivism are all real views of the metaphysical status of the products of the relationship between existence and consciousness, and those views are held not just in regard to the content of volitional processes, but also in regard to the content of perception. It pertains, as Peikoff (1991) himself defines it, to the metaphysical status of "phenomena of existence apart from consciousness" (intrinsic) vs. "phenomena of consciousness apart from existence" (subjective) vs. phenomena of consciousness interacting with existence (objective) (144).

Also, intrinsicism, subjectivism, and objectivism are all real views of the epistemological nature of the relationship between existence and consciousness, and those views apply just as much to perception as to conceptual processes. Either perception is awareness of internal contents, with no adherence to reality (subjectivism), adherence to external objects, by means of a passive gaze (intrinsicism), or adherence to external objects, by means of an active processing of sense data (objectivism). These are all real views. Granted, two of them are in error, but this is the case for *every* application of the trichotomy, whether the phenomenon concerned involves volition or not.

Once the distinction between content and action of awareness is clearly drawn, and objectivity is defined in terms of reality-adherence, it can be seen that there was no need to abandon one of the most illuminating applications of the trichotomy that Objectivism had to offer! True, Rand and Peikoff didn't abandon the trichotomy *entirely*, just in regard to the issue of perception—and even then only in regard to terminology. But that abandonment is bad enough, in terms of the confusion and inconsistency with past writings.

In summary: there is a vital distinction to be made between the metaphysical issue of the *nature* of products of psychological processes (forms of existence-consciousness interaction) in general and the epistemological issue of the nature of *valid* normative psychological processes in particular. In other words, the *reality of the content* of consciousness vs. the *validity of the action* of consciousness. Terminology clearly applying to the former has been misidentified in some cases as applying only to the latter, thus constricting the range of application of the trichotomy and rendering the Objectivist philosophy more muddled and less systematically unified than it should be.

One of the consequences of this constriction of the trichotomy is that this essay's view of mind has been more difficult to integrate and longer in the development than it should have been. For these reasons, suggestions are given here toward a clearer, simpler, and more tightly integrated view of the threefold distinction of the intrinsic, objective, and subjective (hereafter referred to as IOS).

2. Revamping the Trichotomy

A helpful way to understand the fundamental basis of the IOS is the insight that there are two ways in which existence exists in relation to consciousness, and two ways that consciousness exists in relation to existence:

- a. An aspect of existence can exist *apart from its being held as the object of an act of consciousness*.
- b. An act of consciousness can exist *apart from its holding as its object an aspect of existence*.
- c. An aspect of existence can exist *as that which is held as the object of an act of consciousness*.
- d. An act of consciousness can exist *as that which holds as its object an aspect of existence*.

The third and fourth ways of relating occur when existence and consciousness (i.e., an aspect of existence and an act of consciousness) *interact with* one another, and the first and second ways of relating occur when existence and consciousness *do not interact with* one another.

Rand's approach is to begin with the first and second ways of relating, labeling them "intrinsic" and "subjective," respectively. (Her choice of the term "intrinsic" is deliberate: she apparently wants to return to the original meaning of the term "objective," which more recently in history has been misapplied to mind-independent phenomena. See the next section.) Her own probable definitions are derivable from her remarks (1967) about the nature of the good. On this assumption, Rand would define the intrinsic theory as the view that holds that a given phenomenon "resides in some sort of reality,

independent of man's consciousness." Similarly, the subjective theory is the view that holds that a given phenomenon "resides in man's consciousness, independent of reality." The objective theory, however, holds that a given phenomenon is "neither an attribute of 'things in themselves' nor of man's emotional states, but [a grasp] of the facts of reality by man's consciousness...[i.e.], an aspect of reality in relation to man" (22)

Now, one might think that, since we must grasp the *relation* between reality and a human being in order to understand the good, the good is neither a feature of reality nor a feature of a human being, but some kind of thing *between* them. Actually, however, it is *because* of the kind of thing between them (the rational evaluative relation) that the good is *both* a feature of reality (in relation to a human being) *and* a feature of a human being (in relation to reality)!

Look at Rand's wording: "...an aspect of reality in relation to man." (Not: "the relation between an aspect of reality and man.") And: "...an evaluation [by man's consciousness] of the facts of reality..." (Not: "the evaluative relation between man's consciousness and the facts of reality.") In other words, there is a large grain of truth in both the intrinsicist and the subjectivist theories that must be acknowledged and incorporated into our (Rand's) transcendence of the traditional false dichotomy.

Correcting the intrinsicist view that "the good resides in some sort of reality, independent of man's consciousness," we hold instead that: the good resides in *an aspect of reality* in relation to man's consciousness. And correcting the subjectivist view that "the good resides in man's consciousness, independent of reality," we hold instead that: the good resides in *man's consciousness* in relation to reality. The good resides in *both* places!

The application to the ontological status of truth, for instance, is obvious and straightforward: the truth resides in an aspect of reality in relation to man's consciousness (the truth resides in an aspect of reality as known by man's consciousness)—AND—the truth resides in man's consciousness in relation to reality. (Paraphrasing Rand's first "definition" of the good: the truth is an identification of a fact of reality by man's consciousness according to a rational standard of cognition.)

To generalize from this on the basis of the four fundamental alternatives described previously, IOS can more helpfully be defined as follows:

- e. Intrinsic—an aspect of existence apart from its being held as the object of an act of consciousness.
- f. Subjective—an act of consciousness apart from its holding as its object an aspect of existence.

Pausing for a moment, let us note how dialectical Rand's approach is, a point made by Sciabarra (1995, 159-60). She begins by noting that the intrinsic and the subjective have historically been the typical explanations offered for such phenomena as

value, sense data, concepts, truth, etc., and they each offer a one-sided, incomplete and false explanation of these phenomena. The root of their mutual failure at explanation is that neither has a complete picture of the relationship between existence and consciousness to guide them.

Yes, there are aspects of existence that are not being held as the object of an act of awareness—and there are acts of awareness that are not holding as their object an aspect of existence. But some acts of awareness *do* hold aspects of existence as their object—and some aspects of existence *are* held as the object of an act of awareness. In this respect, such aspects of existence and acts of consciousness can *each* be regarded as "object-ive."

So, the definition of "objective" as Rand uses the term must be carefully phrased so as to reflect this *dual-aspect* nature of the objective. Rand's own clearest statement, given above, is that the objective is both "[a grasp] of the facts of reality by man's consciousness" and "an aspect of reality in relation to man." Again, there is a clearer, more helpful way to define the "objective." First, we acknowledge that there are two aspects to the objective:

g. ObjectiveE—an aspect of existence *insofar as it is held as the object of an act of consciousness*. (Or, more briefly: that which is held as the object of an act of consciousness.)

h. ObjectiveC—an act of consciousness *insofar as it holds as its object an aspect of existence*. (Or: that which holds as its object an aspect of existence.)

We can, if we like, compress them into one definition:

i. Objective—an aspect of existence *insofar as it is held as the object of an act of consciousness and/or an act of consciousness insofar as it holds as its object an aspect of existence*. (Or: that which is held as the object of an act of consciousness and/or that which holds as its object an aspect of existence.)

However, the important thing to bear in mind is that "objectiveE" is the definition that applies to what is called "the ontological status of sense data," "the ontological status of truth," and most importantly for this discussion, "the ontological status of mind." The definition that applies, then, to issues of one's adherence to reality, whether automatically or volitionally, is "objectiveC."

3. Fellow Travelers in Trichotomy Land—an Assessment

To be sure, in terms of common usage, this is an unorthodox, even idiosyncratic usage of the term "objective." As with other terms such as "selfishness" or "capitalism," there is a distinct semantic and conceptual clash between common usage and

Objectivism's preferred definitions of terms. Rand really stirred the pot when she abandoned the traditional package-deal dichotomy of "objective" vs. "subjective" in favor of IOS. Once the concepts are carefully sorted out, a clearer view of things does eventually result, but there is still an enormous problem in convincing others to make a major change in how they use these concepts.

There appear to be several principal strategies for dealing with the ambiguities about what "objective" means, in a way that goes beyond the traditional confusing metaphysical dichotomy between "objective" and "subjective." While some of them involve positing a trichotomy, they all recognize that one of the possible views to be considered is that phenomena of consciousness are *relational*.

a. Throwing out the Bathwater, Keeping the Baby

One approach attempts to work with the concepts and terminology established by the traditional two views. It does not challenge the appropriateness of their use of the terms "objective" and "subjective." It merely *adds* the factor of the relational or interactive character of conscious phenomena and then gives "thumbs up" or "thumbs down" on the relational/interactional view, leaving the traditional "objective" vs. "subjective" extremes intact.

A negative example is the reference by C. E. M. Joad (1957) to a subjectivist doctrine that recognizes the relational aspect of the phenomenon of value as a "modified subjectivist" theory. Joad thus assimilates the *relational* view of value (and presumably the relational view of conscious phenomena in general) to the subjectivist view. Joad, who personally advocates a Platonistic form of the intrinsic theory (but which he calls "objective"), sees problems with such a "modified subjectivist" position (338-9). (Allegedly, the claim that value (as well as other phenomena, such as qualities of sense data) exists only when there is someone there to generate it, entails a Hegelian epistemology.)

A positive example is the theory of George Lakoff and Mark Johnson (1999) that phenomena of consciousness are not "objective" (mind-independent) nor "subjective" (world-independent) but instead "interactional" (24). This is a very crafty way to approach the problem. It involves the least changes in inherited semantic infrastructure and the most changes in conceptual superstructure. For this reason, it may be the model most likely to be accepted by our culture. Considering its close similarity (except in terminology) to the Randian view, I think we should be extremely encouraged by this development and attempt to monitor and influence it in the most positive and vigorous way we can. We could wish that the culture would conform to the Randian set of *labels*, but it is far more important that the *concepts* are adopted. And what Lakoff and Johnson are arguing for seems *awfully* close to our Objectivism. (It's accurate and fair to call it "objectivism—interactionism (our Objectivism)—subjectivism" or "objectivism—relationalism (our Objectivism)—subjectivism.")

On the other hand, there is...

b. Throwing out the Baby *and* the Bathwater

People such as Rand, as well as certain Aristotelians, including John Deely and Edward Pols, exemplify this approach. Their solution is to reject the traditional conceptual framework and to deny the claim that the mind-independent is properly called "objective." They differ, however, in what they choose to call the mind-independent, and they each offer good grounds for the relabeling they propose. But each is also may be doomed to relative obscurity, since each requires too great a lexical change for the culture to comfortably adapt to it. In two of the cases, the change is in the direction of an apt *new* labeling; in the other, it is in the direction of an apt *very old* labeling (that was abandoned in the early years of modern philosophy).

The tack of Randian Objectivism is to refer to the mind-independent as "intrinsic." The term "intrinsic" is completely apt as a way to describe aspects of reality apart from one's conscious interaction with them.

Similarly, Deely (1990) refers to the mind-independent as "the physical":

The engrained dichotomy between the subjective on the one hand, which is all that is essentially private or illusory, and the objective on the other hand, which is what is public, real, and independent of the observer, simply fails to hold up when duly weighed and considered in the light of the only instrument we have for discriminating the true (or more sound) from the false (or less sound). A trichotomy [!] is necessary, and a trichotomy of a most peculiar kind. The essential category for the experienced as such is the category of the objective: whatever exists in any way as known. Opposed to the objective in this sense is both the physical in the sense of the things of the environment prejaent to and able as such to survive the demise of experience, and the subjective in the sense of the psychological or psychic depths of the individual insofar as they are not available objectively here and now. In other words, we have a trichotomy where the subject stands at the center of a web of relationships comprising precisely an objective world. Through the web, each subject is also entangled in other webs with other centers, the whole comprising an objective network (59).

Pols (1998), on the other hand, hearkens back to the ancient and early modern practice of referring to the mind-independent *and* the mind, apart from any interactions between them, as "subjects." In its own way, this labeling makes a good deal of sense, in the context within which it was developed (though it, too, may be doomed to obscurity as little more than a historical footnote):

[T]he Latin-based term 'subject' is properly used to translate Aristotle's *hypokeimenon*, which he applied to any concrete being (*ousia*) regarded as

possessing properties that were less fundamental than the being itself: the being *lies under* its properties, as the Greek word says, and it persists even though its properties change...The term 'subject' thus became part of systematized grammar and logic: the concrete being/entity/thing was well suited to be the *subject* of a sentence; its properties well suited to be *predicated* of the subject. (Aristotle, *Categories* 2a11-4b19)...[Thus] the original meaning of 'subject' does not imply consciousness (later called subjectivity) or even sentience...[W]hat Descartes calls a thinking substance can just as well be called, on the basis of the medieval terminology Descartes worked with, a thinking *subject*. Descartes grudgingly says as much in replying to an objection made by Hobbes...The important point is that for Descartes a mind has no exclusive right to be called a subject: there are also physical subjects and they too are more fundamental than the modes—heat, for instance—that inhere in them...[What the demonstration in Descartes' Meditation VI] purports to demonstrate is that bodies really do exist as (concrete and actual) *subjects*....Because of the terminology Descartes inherited, the expression 'representative reality' is interchangeable with 'objective reality'; the thought is that what is represented to the mind by one of its ideas is in effect an object *for the mind* (107, 108).

Thus, in a way, Pols is recognizing the relationality of consciousness and that this is the proper meaning of the "objective." But observe this interesting twist: in an instance of consciousness, we have a *knowing* subject and a *known* subject that, in being known, becomes the *object* of knowing. Prior to an act of knowing, we just have a bunch of *subjects*, i.e., things, which can, when known, become *objects*. So here the trichotomy (if we can call it that) is subject that is known, subject that knows, and subject that is known *as object* of knowing by subject that knows. Clearly, the first is what Rand calls the "intrinsic" and what Deely calls the "physical" (though knowing can be of more than just the physical).

It's not likely that the views of either Pols or Deely will catch fire and transform our culture in regard to how we label the mind-independent aspects of reality. Perhaps the most viable strategy is to make peace with thinkers like Lakoff and Johnson, to make sure our *ideas* survive, even if the verbal containers must ultimately be discarded.

c. A Further Lexical Note

The *Oxford English Dictionary* distinguishes between the Aristotelian/Scholastic definition of "objective" and the Kantian/modern sense of the term.

2. Philos. Used of the existence or nature of a thing as an object of consciousness (as distinguished from an existence or nature termed subjective). The Scholastic Philosophy made the distinction between what belongs to things subjectively (subject), or as they are 'in themselves', and what belongs to them objectively (object), as they are presented to

consciousness. In later times the custom of considering the perceiving or thinking consciousness as pre-eminently 'the subject' brought about a different use of these words, which now prevails in philosophical language. According to this, what is considered as belonging to the perceiving or thinking self is called subjective, and what is considered as independent of the perceiving or thinking self is called in contrast objective. As to this transition of use (which primarily concerns the word subjective, and affects objective as its antithesis) resulting in what is almost an exchange of sense between the two adjectives, see HAMILTON Reid's Wks. 806 note, R. L. NETTLESHIP Philos. Lect. Remains I. 193.

a. **[Opposed to subjective in the older sense = 'in itself']** Existing as an object of consciousness as distinct from having any real existence; considered only as presented to the mind (not as it is, or may be, in itself or its own nature). **(Obs)** 1727-41 CHAMBERS Cycl., Objective..is used in the schools in speaking of a thing which exists no otherwise than as an object known. The esse, or existence of such thing is said to be objective.

b. **[Opposed to subjective in the modern sense]** That is or belongs to what is presented to consciousness, as opposed to the consciousness itself; that is the object of perception or thought, as distinct from the perceiving or thinking subject; hence, that is, or has the character of being, a 'thing' external to the mind; real. **This sense is occasional in writers of the later 17th and early 18th c. (the early examples being more or less transitional); but its current use appears to be derived from Kant, and to appear in Eng. subsequently to 1790, and chiefly after 1817.**
[emphasis added]

The pivotal concept and change in meaning that drove this shift in senses of "objective" is the concept "subjective." Once the meaning of "subject" changed from that of an existent, whether conscious or not, to that of a conscious being, it was inevitable that "objective" would lose the meaning of an existent before the mind and instead take on the meaning of an existent *apart from* the mind.

Seen from this perspective, Rand's IOS appears to involve a return to the original use of the term "objective," pertaining to an existent before the mind, but to retain the modern use of the term "subjective," pertaining to a mind. While the original meaning of "subject" included both things in the world and conscious beings in particular, it fundamentally considered them all *as existents*, apart from the issue of consciousness per se. To convey this meaning, Rand instead prefers the term "intrinsic," which results in her trichotomy of "subjective" = consciousness apart from existence, "intrinsic" = existence apart from consciousness, and "objective" = existence and consciousness in relation to one another. This is a distinct improvement upon the modern false alternative of "subjective" = mind-dependent and "objective" = mind-independent.

4. "Objective Reality" and "the Mind-Dependent"

As noted in a previous section of this essay, "objectiveE" pertains to an aspect of reality held as an object by an act of consciousness, the "out-there, in here," to use one of Peikoff's colloquialisms. It is important to clarify how this sense of "objective" relates to Rand's metaphysical principle of the Primacy of Existence, which she used to express in terms of "Objective Reality." The Primacy of Existence holds that existence is independent of consciousness or, as is sometimes said, "mind-independent." (See Raibley, 2002.)

Peikoff (1991) says that this latter usage of "objective" is "harmless" (117), but is it? There appears to be a problem. Consciousness exists, too. Does this mean that consciousness is independent of consciousness? The possible implications are horrendous. Is concept-formation independent of perception? Is imagination independent of perception? Is memory independent of cognition? Clearly, we need a more detailed analysis, which requires an additional distinction, that between a *generating* and a *viewing* (or, in the general sense, "perceiving") consciousness.

According to the Primacy of Existence, everything that exists is independent of a *viewing* consciousness; a *viewing* consciousness cannot create (or destroy or change) what it is viewing. A *viewing* consciousness is metaphysically passive in relation to its object. However, both objective and subjective phenomena are dependent upon a *generating* consciousness. Thus, only intrinsic phenomena are independent of both a *viewing* and a *generating* consciousness.

Before the Trichotomy was "Objective Reality." Rand's (1965) original formulation of "objectivity" was twofold. It referred to two aspects of "the relationship of consciousness to existence" (7). Metaphysically, the world exists and is what it is "independent of any perceiver's consciousness." Consciousness holds existence as its object; it does not create the world. Epistemologically, to know the world, man must adhere to reality by using a specific means (reason) in accordance with a certain method (logic). Consciousness can know the world as it is; it is not blocked from reality and need not distort reality, but knowledge is not automatic or causeless.

The metaphysical aspect of objectivity, most commonly referred to by Objectivists as the Primacy of Existence, is sometimes also referred to as "metaphysical objectivity" or "metaphysical objectivism" or "metaphysical realism." Rand's phrase "objective reality" thus was taken to mean that reality is the object, not the subject or creation of consciousness.

Is this true? In one sense, no. Consciousness is real, too, and some real aspects of consciousness are generated by, created by, a person's conscious acts. Both subjective aspects such as dreams or imagination and objective aspects such as sense data are generated by consciousness (i.e., a person's being conscious). But in another sense, yes. Even things generated by consciousness are not generated by an act of consciousness that *views* them.

Thus, while consciousness (i.e., a person being conscious) helps *create* objective and subjective (but not intrinsic) phenomena, consciousness (a person being conscious) does not create them in the process of *viewing* them (i.e., holding them as its *object*). Everything that is held as the *object* of an act of viewing consciousness is independent of that act of consciousness. In other words, everything that is held as the *object* of an act of viewing consciousness has *metaphysical primacy* over that act of consciousness. Even subjective phenomena (e.g., fantasies, etc.) have metaphysical primacy over an act of consciousness that holds them as its object!

So, "objective reality" is a misleading term. In full, it means: that which, in existing (or being able to exist) as the *object* of an act of consciousness is not thereby the *creation* of that act of consciousness.

Everything that exists is "objective" in this sense, even subjective (consciousness generated) phenomena and intrinsic (non-consciousness-generated) phenomena. This use of the term is vacuous, which may be why Rand quietly phased it out in favor of Primacy of Existence. Furthermore, "mind-independent" is vacuous in this sense, as well. Everything that is being held as the object of a mind is uncreated by and thus independent of that act of a mind—even subjective phenomena that are generated by some other act of a mind than the act that views them.

The only sense of "mind-independent" that is *not* vacuous is that which pertains to things that are uncreated by any act of mind (i.e., intrinsic phenomena)—as against things that are generated by an act of mind (i.e., objective and subjective phenomena). And the only sense of "objective" that is not vacuous is that which pertains to things *insofar as* they are held as the object of an act of consciousness—as against the "intrinsic" (i.e., things *apart from* an act of consciousness that holds them as its object)—and as against the "subjective" (i.e., acts of awareness *apart from* a thing that they hold as their object).

Thus, "mind-independent" in the non-vacuous sense and "intrinsic" are equivalent terms. However, the former has seriously misleading implications. The "mind-independent/mind-dependent" distinction is a non-fundamental distinction, a package deal, lumping together the polar opposite of mind-independence (the subjective) with a third view that is fundamentally opposed to both of them (the objective).

The non-vacuous sense of "objective," however, has no misleading implications. It fundamentally opposes itself to both false, incomplete alternatives, showing them to be "opposite sides of the same coin." For this reason, the "mind-independent/mind-dependent" distinction, and its other traditional form, "objective/subjective," should be avoided as vacuous. Instead, IOS should be adopted as a fundamental distinction of mutually exclusive and jointly exhaustive possibilities.

One final point, which will lead in to the next section: The current trend (e.g., Peikoff [1991], Ross [2001] in Objectivism) is to regard intrinsicism, objectivism, and subjectivism as *epistemological*—i.e., as theories of knowledge and methods or styles of thinking. This perspective follows from a consideration of the aspect of objectivity

labeled "objectiveC." Does a person gain knowledge by a focus on reality and does that focus have an identity? Does consciousness adhere to, or hold as its object, some aspect of reality and, if so, how does it do so?

However, this is only one aspect of the story, and it overlooks the perspective that follows from a consideration of the aspect of objectivity labeled "objectiveE." In this respect, intrinsicism, objectivism, and subjectivism are *metaphysical* (or ontological) doctrines, theories of the ontological status of a number of phenomena of considerable interest and importance in philosophy, phenomena that come to our attention when we focus on a relation between consciousness and existence.

For instance, is the good an attribute of a thing one values, apart from one's conscious rational awareness of it? (Intrinsicism) Or is the good an attribute of a thing one values, apart from the nature of the thing valued? (Subjectivism) Or is the good an attribute of a thing one values that is the product of one's rational awareness of some aspect of the thing's identity? (Objectivism) In other words, as Rand (1967) asks: is the good an aspect of reality apart from man's awareness of it, or an aspect of man's consciousness apart from the nature of reality, or "an aspect of reality in relation to man" (21)?

Armed with these two perspectives and sets of concepts, we are prepared to address the issues of the objectivity of mind and the objectivity of introspection.

Part B. Introspective Realism and the Ontological Status of Mind

The view of the nature and functioning of the mind advocated by this essay is strongly analogous to the Objectivist position on the nature of sense data. It amounts to drawing a parallel between perception and introspection, between sense data and mental data, and between physical objects and the brain-mind.

1. Perceptual Realism: Peikoff's Analysis of Sense Data and Efron's Analysis of Perception

Peikoff (1991) discussed the senses in what he called the "anteroom" to epistemology (38ff). The way he shed light on the nature of sense data can appropriately also be used to clarify the nature of mental data, such as our experience of being conscious and being able to choose our actions. As he has explained in various lectures and writings, sense data (colors, shapes, sounds, etc.) are just as *real* as the entities that produce them in interaction with our senses and nervous systems.

This view, often referred to as "Perceptual Realism" (see Kelley 1986, 3), is the acceptance of the reality of the effects of causal primaries, whose own reality is not questioned (see section 4). It is proposed as the corrective to naive "Scientific Realism," which holds that what is real is not sense data, but the measurable entities, attributes, and actions that interact with us to *generate* the sense data. In other words, on the view of

naive Scientific Realism, all that is real is what Objectivists call "intrinsic" phenomena, whereas an enlightened Scientific Realism should allow that "objective" phenomena, i.e., phenomena of the form in which we are aware of entities, etc., are real, too.

Now, these interactive phenomena are just as *real* as the things that are interacting, but they have a different *status*, which can best be thought of as interaction-dependent, in the same sense that an effect or causal consequence is dependent upon the interaction of the two entities that interact to cause it. That is, sense data, which are objective, intentional, interaction-dependent phenomena, are just as real as the physical objects and conscious living organisms that interact to produce them. The sense data are *not* independent "third things" in the world, but instead the *form* in which we independent things (the party of the second part) are aware of other independent things (the party of the first part). (So to speak.) That is what objective, intentional phenomena *are*, the essence of their real nature. They are objectiveE, aspects of existence *insofar as they are held as the object of* an act of consciousness.

We perceive red objects and wonder about the reality of the quality of red. It looks so real, yet scientists tell us that the quality of red is just the result of interaction between our sensory mechanism and the waves of electromagnetic energy reflected by the object we see as red. Peikoff says that redness is a causal consequence, but it is *no less real* for that. On the other hand, although our knowledge of the redness is more immediate than our later-gained, scientific knowledge of the reflective attributes of the object, the redness is *not more real* than the reflective attributes either. The redness is not an intrinsic attribute of the red object, but instead an objective attribute, generated by our causal interaction with it, in the process of sense-perceiving it.

So, even though the redness is part of our primary data of the external world, and is in this sense "axiomatic" or foundational, it is not something that we hold onto *in spite of* or *in opposition to* our later scientific awareness of the nature of physical objects. Instead, we *integrate* all of this awareness. We realize that our *form* of perceptual awareness operates by means of causal consequences that generate *objective* phenomena (percepts), *through which* we are aware of the world.

Neurophysiologist Robert Efron (1969) gave a rigorous conceptual treatment of perception in his 1968 essay, "What Is Perception?" (See also Kelley 1986.) In it, he defines perception as "the direct, immediate awareness of discriminated existents which results from patterns of energy absorption by groups of receptors" (147). By "discriminated existent," Efron means "the segregated, isolated, cohering 'thing' which is perceived" (145). He gives examples and explains further: "The objects we see or touch; the notes, the tones, or voices we hear; the odors we smell, and the flavors we taste, are all 'discriminated existents'. The term...is used because it is sufficiently abstract to denote the object or content of *all* forms of perception. In short, the 'discriminated existent' is the 'it' that we perceive" (145) "Discriminated" means "isolated and treated as a 'unit' [a "separate, distinct existent"]" (145) An existent is "that which exists," whether it be a physical object, a sound, a shadow, or an odor or taste (144). (Efron avoids the terms

"object" and "entity," since these more narrowly apply to "spatially cohering collections of matter" (145).)

Efron carefully distinguishes perception from "interoception," which is "another category of direct, immediate awareness resulting from energy absorption by receptor organs." This type, he says, "gives us no direct information about external reality but informs us only of the physiological state or condition of our body," such as experiences of nausea, hunger, pain, and cramp (144). Psychologically, interoceptions are "directly and unambiguously experienced as 'inside' us while....perceptions give us direct awareness of what is 'out there'" (144). Epistemologically, interoceptions "tell us of our physiological condition," while "perceptions tell us about external entities" (144).

The necessary *physical* condition of perception is "the existence of gradients or patterns of energy in space and time." A "gradient" or "pattern" here means "any spatial and/or temporal variation in the quantity or quality of energy impinging on a specific group of receptors" (144-5). The same applies to the physical precondition of interoception. If there were any additional forms of direct, immediate awareness of reality resulting from energy absorption by receptor organs (or some kind of energy-sensitive tissues), these would depend upon some kind of patterned energy, also. (See section 3.)

The thing that perception and interoception (and any hypothetical additional forms of direct, immediate awareness of reality) have in common is that they are objectiveC, acts of consciousness *insofar as they hold as their objects* some aspect of existence. To the extent that they are sustained without conscious effort, they are automatically objectiveC, adhering to reality.

2. Extending Peikoff's analysis: Mind as objectiveE, the form in which we are directly, introspectively aware of brain

Similarly, by hypothesis, we are directly aware of the actions of our brains or our nervous systems doing various things, such as choosing, forming a concept, perceiving a physical object, forming a value-judgment, remembering a past event, etc. They seem so real and immediate to us that we do not (and should not) question their reality. However, some philosophers and brain scientists say that *all* that is real is the intrinsic, material properties and actions of the human brain or nervous system, and that our introspective awareness is thus unreal, because it does not at all "look" anything like chemical and neural processes.

Peikoff's analysis of the equal reality of physical objects and their causal consequences (sensory qualities) indicates the pattern to follow for a resolution to this controversy. Once and for all, we can uphold the reality of the mental *and* reject the Cartesian notion that the mind is some sort of entity distinct from the brain—and that mental processes are some sort of processes distinct from brain processes. They are objective. They are real. And they are causal consequences. And just like sensory qualities, once they are generated (see my other post) they become a physical part of the

brain and have causal efficacy just as any other physical part of the brain. No need for spooky mental-physical interactionism. No need for Descartes and the Ghost in the Machine. No need for a mind doing things separate from the brain of a conceptually conscious, self-directing, human being.

Here, then, is a paraphrase of the argument used by Peikoff (1972, lecture 12) in his discussion of the validity of the senses. Peikoff has provided there an ironclad argument that can be extended in a very straightforward way. It is paraphrased at length here in order to argue the case that (1) our introspective awareness of mental states and qualities is not an illusion, but objective, (2) our mental states and their qualities are not causal primaries, but are the effects of our brains, which, as they carry out processes of perceiving, remembering, conceptualizing, introspecting, etc., are *also* affecting certain sensitive brain tissues which function as "introspectory receptors", as it were.

Let us assume that the entire realm of mind, as we introspect it, is an effect—an effect produced by the operation on certain sensitive tissues in the brain of the ultimate causal primary that makes up the human brain in itself. Let us assume we have discovered the actual causal primaries in the brain, the ultimate elements of the brain in itself, the basic irreducible building blocks of the brain in itself, which underlie and give rise to everything that we introspect, to the entire mental realm as we know it. Now what these ultimate primaries are, I, of course, do not pretend to know. For purposes of this construct, let us call them "puffs of meta-energy."

In other words, let us assume that we have reached omniscience, penetrated to the core of the brain in itself and discovered that the brain in itself is puffs of meta-energy; and that what we introspect as the mental realm of thoughts and feelings and percepts and memories with varying intensities is all an effect on us of various combinations of energy puffs acting on our means of introspection; so mental contents in themselves are really combinations of various energy puffs.

Suppose, now, this whole construct were true. The crucial question is: what would it prove about the validity of introspection, or the status of mental qualities as we introspect? And the answer is: nothing of any epistemological significance whatever. The point here is this: if the brain is made of energy puffs in various combinations, so is the human introspective faculty: and it is still an iron, inescapable fact of reality that when the energy puffs which comprise the brain interact with the energy puffs which comprise the human introspective apparatus, when all of these puffs enter into all of the combinations that they enter into, the inexorable result is the mental realm as we introspect it, with all of the kinds of processes and qualities it possesses. This is a fact, a fact of reality, and not a creation of consciousness. It is a fact that, when such and such energy puffs unite in such and such a combination with other ones, the result is a

thought with all of its properties, or an emotion, or a memory, or a precept, etc. So, whenever we introspect one of these mental objects, we are introspecting reality—in other words, energy puffs in a certain combination; and every introspection gives us real information about that particular combination of energy puffs. Does it mean that thought, emotion, imagination, memory, etc. are unreal just because they are effects of the energy puffs in certain combinations? Certainly not; the exact opposite is true. If they are effects of the energy puffs, by that very fact they are real, real products of the real puffs that make up the brain. We did not invent the puffs. We did not invent their capacity to unite into forms that bring about a mental realm. It is a metaphysical fact of reality that certain puffs in certain combinations produce, when introspected by a human being, a mental realm; and that every introspection we have gives us information about the puff combinations that exist. It is an intrinsic fact of things in themselves that B-puffs (man's brain) combined with I-puffs (man's introspective apparatus) yield mental objects.

Now, on this account, if we pursue it, the whole mental realm would be an effect, an effect of the brain in itself acting on the puffs that make us up and constitute our introspective apparatus. But the point is: the mental realm would be an effect, a *real* effect, and, therefore, *a real fact*. You do not deny the reality of something by explaining it. You do not make something subjective by giving a causal explanation of it. You do not detach it from reality by showing that something in reality produced it. The exact opposite is true. If you have shown that the cause of something exists in reality, if you have shown that reality itself, reality *in itself*, produced certain facts, then you have given the most solid metaphysical foundation there is to those facts; you have shown that they are inherent in metaphysical reality itself. In a word: if the whole construct I have given you were true, it would change nothing about the validity of introspection or the reality status of the mental qualities we introspect. In this manner, *all* of the mental qualities we perceive are inherent in reality, in the brain in itself; they are real; they are not inventions or subjective products of consciousness....*All* the qualities we introspect are facts of independent reality as introspected by human consciousness....The actual facts are: there is a brain in independent reality which has various attributes in itself; human beings have the faculty of consciousness and introspect the brain by certain means, and thus in certain forms, forms inexorably dictated and determined by the nature of the brain in itself, part of which includes the nature of man's introspective apparatus.

There is no ground to assume that the causal primaries in reality possess in themselves the exact same form as our mental data, since we know that our mental data are effects and that we perceive by certain means. But by the same token, you cannot pronounce our mental data as invalid on this ground. It is only by starting from our mental data that we can ultimately

conceptually unravel the information they contain and finally end up with a conceptual account of the energy puffs or whatever it is we reach at the summit of the cognitive quest.

It has already been shown how Peikoff's discussion of the metaphysical status of sense data is an important contribution to the reconciliation of perceptual realism and scientific realism in regard to sense data. Part of what the above lengthy paraphrase attempts to accomplish is to indicate the parallel application of Peikoff's view of the metaphysical status of sense data to the metaphysical status of mind and consciousness. Thus, an implication of this essay is that Objectivism should include a doctrine of "mental" (or "introspectual") realism, which is fully compatible with an appropriately formulated version of scientific realism regarding the brain.

The mind is not an *intrinsic* phenomenon, like the brain and nervous system, but an *objective, intentional* phenomenon. It is the form in which we are aware of our brain's conscious functioning, and the form in which we are aware of our brain's capacity to engage in such activity. And "we" is not a reference to anything ethereal or mysterious, but simply to ourselves, the conscious living organisms that we are.

Mind is another name for the brain (or perhaps a *part* of the brain) viewed introspectively. If mind, as we are aware of it, is what is co-existent with some roving high-level patterns of neural activation, it is that traveling center of activation that we are introspectively aware of, and not the brain as a whole. In the same general sense that color is another name for a *part* of an object (namely, its surface) as viewed via color perception.

Just as we do not say that the atomic structure of an object that we perceive as red is *itself* red, neither do we say that the physical structure of our organism that we introspect as being agitated or happy or reminiscent or deliberative is *itself* those things. Those various things we experience external objects and ourselves as being are *objective*, they are the product of interactions between things that emit patterned energy and receptive tissues at various places in our organisms. (In the case of introspection, the thing emitting patterned energy and the thing with tissues receptive to that energy are one and the same entity—the human nervous system. See the next section.)

But being objective, they are also *interactional* phenomena, they are *causal consequences*. (Again, refer to Peikoff's analysis of the metaphysical status of sense data.) Values and knowledge *are* possible. They are what our organisms *produce* in interaction with reality, including internal interactions between different parts of our organisms.

Someday scientists may be able to localize the brain processes that are the causal primary behind a specific experienced item of knowledge, and they may be able to compare that item both to its source in experienced reality and to the other stored items of knowledge in the brain. They could thus assess it in terms of both its correspondence to reality and its coherence with one's other knowledge—and even discern whether, apart

from its factual correspondence to reality, one correctly assessed it as a fact at the time one did so (contextualism).

But if and when this speculative scenario comes true, that will not in any way contradict what we already know. We *already* have more immediate data about a *causal consequence* of our brain processes. We can identify and evaluate *that* data, just as we were able to identify and evaluate our perceptual and conceptual data about external objects long before we knew the details of their microstructure and how it contributed to their overall macro-level characteristics such as color, shape, etc.

The mind is not an intrinsic phenomenon (like a material entity), but (like a color patch) is an *objective* phenomenon: the form in which we are directly, introspectively aware of the brain and its functioning. It is a view of the mind that is completely consistent with Rand's trichotomy, and it completely obviates the necessity for debates over such conundrums as the "causal efficacy of mind." The entity involved is the *brain*. Consciousness is not some other entity cohabiting in Cartesian mystery with the brain. Instead, it *is* the brain as we are aware of it introspectively, just as a round, red color patch *is* an apple as we are aware of it perceptually.

3. Extending Efron's analysis: Introspection as objectiveC, the direct, internal awareness of brain activity

The preceding parallel between the objectiveE status of sensory data and the objectiveE status of mental data points to a further parallel. By analogy to Perceptual Realism being a doctrine of objectiveC, as Efron presumes in all his scientific work and journal articles, and as Leonard Peikoff argues in his lectures and book on Objectivism, this essay's proposed doctrine of mental or Introspective Realism is objectiveC, also.

Just as we have two pathways to knowledge about the nature of external physical objects (the sensory perceptual and the scientific), so also do we have two pathways to knowledge about the nature and workings of our nervous system/brain (the introspective and the scientific). Our awareness of thoughts and ideas is the form in which we are aware introspectively of what our brain is doing. Our awareness, through scientific examination and measurement, of neuronal, etc. processes is the form in which we are aware extrospectively of what our (or someone's) brain is doing.

The mind qua entity is the form in which the brain manifests itself to our direct, introspective awareness. But it is that aspect of the brain that we are aware of via introspection. "Manifestation" is the term referring to its *objective* status as a phenomenon of awareness. "Aspect" is the term referring to the *intrinsic* phenomenon (as in the formulation "an existent is an aspect of reality"), that which is an integral part of the brain, whether or not we are aware of it.

Mental action does not involve any physical action that is evident to our sensory awareness. But it does involve correlative physical action in the brain and nervous system. Further, our *introspective* awareness of this mental action (which has the

correlative physical action just mentioned) is enabled by the *same* kind of energy emission and reception that enables perception of the environment or of our internal physiological state. The sensitive, receptive tissues are probably not localized, but exist throughout the brain, wherever conscious brain processes occur that (at least, potentially) need monitoring. There is survival value in this kind of patterned-energy/data, just as there is in the patterned-energy/data coming from the environment or our internal physical processes. Otherwise, why would it have evolved? As Branden (1969) explains:

[A]n organism sustains itself physically by taking materials from the environment, reorganizing them and achieving a new integration which converts these materials into the organism's means of survival. We can observe an analogous phenomenon in the process by which a consciousness apprehends reality (29).

Rather than "materials," what an organism takes from the environment in apprehending reality is *patterned energy/data*. And the environment from the organism takes patterned energy/data in an act of introspection is *the brain (or nervous system) itself*.

It may be perplexing that we don't see neurons and synapses when we introspect—and it may seem that this argues against introspection being the form in which we are aware of our brain's power and actions. If so, consider this: when we perceive the heat of a radiator, that is the form in which we are aware of the motion of the radiator's molecules; and the fact that we do not see molecules does not invalidate this fact. Introspection is, in this respect, like perception. Although we don't *see* the causally underlying factors of a direct mode of awareness (molecules: perception, neurons: introspection), we are still directly aware of them in terms of their *causal consequences* (molecules: heat, neurons: thoughts). As with perception, the consequences are not less real than the causally underlying factors. Molecular motion is intrinsic; heat is objective. Neuronal action is intrinsic; thoughts are objective. The objective is the form in which we are aware of the intrinsic.

We experience colors, smells, etc. by using the senses to attend to physical reality, not to the senses themselves, whereas it seems that we experience mind by using mind to attend to itself. However, the general kind of awareness is the same in each case; both sense perception and introspection are forms of *direct* awareness. Moreover, tissues (whether peripheral or internal to the brain itself) function as the infrastructure of direct awareness (viz., as receptor organs for collecting patterned energy and relaying the collected data to some region of the brain for further processing).

There is a further parallel. The mind as we are reflexively aware of it is no less real than its physical infrastructure of which we are not (and need not be) directly aware but which supports and enables its functioning. So too are the colors, odors, etc. of physical entities as we are perceptually aware of them no less real than the physical infrastructure of those entities (viz., the atomic and molecular structures) that support and

enable the interaction of their colors and odors (via streams of patterned light and airborne chemicals) with our sensory organs.

Against this view that mental phenomena are the form in which we are directly aware of the brain carrying out certain processes, it may be objected that introspection does not reveal a mechanistic universe of billiard ball-like entities (ideas, values, etc.) that interact with one another in a manner analogous to the external world of physical objects. This is true, but neither does perception reveal physical objects to be composed of tiny sub-microscopic objects that somehow cause other tiny objects (photons) to hurtle through space toward our sense organs, interacting with still other tiny objects (receptor cells). Yet, that's what happens! As we later discover in pursuing physics and physiology and psychophysics. Similarly, as we are finding, various seemingly "mental entities" are physically located in the brain, even though we do not *directly*, introspectively detect them in that form.

A sticking point in accepting this view may be the insidious effects of what is known as the "diaphanous" model of awareness. (See Peikoff 1991 (47-8) and Addis 1989 (19-20).) As Kelley (1986) describes it:

We know of consciousness in the first place from the inside, as its subjects. From this perspective, the awareness of an object seems transparent, the simple presence of the object, a revelation of it. Unaware as we are, from this perspective, of the way our cognitive faculties operate to produce our awareness, it seems as if nothing but the object itself determines the way we grasp it...The diaphanous model can be expressed as the thesis that if the means by which we perceive affect the way things appear in perception, then we cannot perceive things as they are, but only their effects on us (37, 104).

On the diaphanous model, if you are perceiving a ball's red color, you are not perceiving the ball as it really is, i.e., you are not perceiving the manner in which its atomic structure is able to reflect light waves of a certain frequency; you are only perceiving the ball's *effects* on you. On the Perceptual Realist view, however, perceiving a ball's red color is the *form* in which you perceive the actions of its atomic structure. Similarly, on the diaphanous model, if you are introspecting your brain's mental powers and actions, you are not introspecting your brain as it really is. The diaphanous model, in other words, *precludes* our considering that human beings are able to be introspectively aware of brains as being mental powerful and active, and instead dictates that we can only be directly aware through introspection of the *effects* of our brains on us, namely, our consciousness.

Instead, however, introspection is thus *the process by which we are aware of our brains in high-level action*, and "mind-in-action" is the *form* in which we are aware (introspectively) of our brains in action. "Mind" is the form in which we are introspectively aware of our brain's high-level-capacities-in-action. So, there *is* interaction, but not between two *different* kinds of entities, just between higher-level and

lower-level *parts* of the brain and nervous system. We are introspectively aware of one of these two parts of the brain and nervous system in the form of "mind." We may also be aware of the other part in that form (and thus there is a "mind-mind" interaction), or maybe not (in which case, there is a "mind-body" interaction).

In other words, introspection is a kind of internal perception, which one can postulate as being supported by sensitive groups of cells all through the brain that receive energy from the "mental" brain processes analogously to the way the external sensory organs receive energy from the outer environment. This would be an evolutionary development that arose in tandem with our need to monitor our inner brain processes of integrating sense data into concepts above the lowest level. It is commonly held that sense organs evolved, because living organisms needed a way to monitor the outer environment and receive information so they could guide their *external* physical movements. Similarly, why couldn't human beings have evolved an organ of introspection (perhaps omnibus groups of sensitive brain cells), as a way to monitor our "inner" brain environment and receive information so that we could guide our *internal* physical actions (of our conscious brains)?

The fact that our perceptual awareness of a color patch does not give us direct insight into the physical structure of the object that creates our awareness of it does *not* argue against the *reality* of the color patch, viz., that it is a *real form* in which we are directly aware of that object. But neither does it argue that the color patch is a *separate entity* from the object that creates our awareness of that color patch.

Similarly, the fact that our introspective awareness of a mental phenomenon does not give us direct insight into the physical structure of the brain that generates our awareness of it does *not* argue against the *reality* of the mental phenomenon, viz., that it is a *real form* in which we are directly aware of the brain's activity. But neither does it argue that the mental phenomenon is a *separate entity* or activity from the brain that creates our awareness of that mental phenomenon!

When we are perceptually aware of an apple as being red, we know that the red sensory quality is not some different attribute from the apple's redness, but instead is the *form* in which we are directly aware of the apple's real attribute of redness. The sensory quality of red is not taken as evidence of some *other* ghostly, spiritual entity, a sensed apple, that is mysteriously yet intimately linked to the physical apple. Nor do we make the Kantian reversal and assume that the apple's redness as we are aware of it is something different from and less real than the apple's redness in itself.

We know that the sensed redness is the causal effect of the interaction between our sense organs and the stream of light particles reflected by the apple's surface. We know that our sensory awareness of the apple's redness is the form in which we are aware of the apple's power to absorb certain light frequencies and to reflect others. Based on this, we acknowledge that the apple's attribute of redness is, fundamentally, the power of the apple to reflect (rather than absorb) certain specific frequencies of light waves and, consequently, to cause certain changes in our sensory receptors and nervous systems. We

later learn about the molecular and atomic structure of the apple's surface, and about the nature of electromagnetic radiation, and about the molecular structure of our sensory apparatus. Yet, this does not warrant us to go off in either the Kantian or the dualist directions and postulate additional entities with mysterious relationships to physical reality.

We have no warrant for the Kantian view that the perceived redness of the apple is not real and that only the physical attribute which underlies that perception is real. And we have no warrant for the dualist view that there are two entities involved: the physical apple and the red sense datum. We are not entitled to say that just because the sensory quality of the apple's redness does not resemble the atomic or molecular structure of the apple, they are two different things. They are two different *forms* in which we are aware of the same attribute of the same entity.

All of this, we realize because we have risen above naive Perceptual Realism and have rejected a dualism of attributes and entities, one of which may or may not be more real than the other, and the interaction between aspects of an unfathomable mystery. Instead, we accept that there is only a duality of *perspective* on the *same* attribute and entity. (For an earlier statement of this view, see Bissell 1974, 21-2. See also Kelley 1981 (5) or 1986 (36) for a similar view.) Knowing and realizing all of this helps us to avoid all of these pitfalls in relation to the issue of *Perceptual* Realism. Yet, it seems insufficient to keep many of us from being lured into the parallel pitfall in regard to the issue of introspective or *Mental* Realism, when thinking about *mental* qualities that we are aware of through *inner* directed processes of direct awareness.

4. Scientific Realism and the Infatuation with "the Basic"

A Scientific Realist might try to asperse the value or veridicality of perception by saying that it does not show what entities are *really* like, that sense data does not look a bit like entities really are, as the scientist discovers them to be. We perceive entities as being solid and having continuity, while the scientist knows that they are "really just" congeries of tiny particles with vast spaces in between them. Sense data are not real and our belief that they give us valid cognitive contact with physical entities just an illusion. We perceive a tomato, for instance, as being red, while the scientist knows that the tomato is "really just" an entity having a physical structure such that the tomato reflects certain light frequencies and absorbs others.

A Perceptual Realist, however, says that the reflected light from the tomato interacts with our sense organs, causing sense data that are the form in which we are directly, perceptually aware of physical entities and their attributes and actions. Just because those data are the causal consequences of the actions of those entities and they don't look anything like the model physicists have of physical reality, that does not make them unreal or our experience illusory. Most importantly, the sense data *are* the tomato *as we are aware of it through perception*. They are *objective, real* phenomena.

In pattern, a Mental Realist says that some form of energy (probably electrical and/or chemical) emitted by the brain interacts with another, sensitive part of the brain, causing introspective data (e.g., our awareness of our mind) that are the form in which we are directly, introspectively aware of a physical entity, the human brain, and its attributes and actions. Just because those data are the causal consequences of the actions of the brain, and they don't look anything like the model neurophysiologists have of the physical brain, that does not make them unreal or our experience illusory. Most importantly, the introspective data *are* the brain *as we are aware of it through introspection*. They are *objective, real* phenomena.

There is a very helpful distinction made by certain Neo-Atomists, such as Laird Addis, in terms of "the given" vs. "the basic." Addis (1989) says that:

For the philosopher of the modern age, there are and can be only two possible answers to the question of how we should decide what fundamental properties are exemplified in the world. The first answer is this: just those properties that are *given* to us in experience including introspection *and* all those other properties that, according to the findings of science and everyday experience, are needed to explain those properties that are given to us. The other answer is this: just those properties that are mentioned in the laws of basic science. Choosing one rather than the other of these two possibilities is choosing *the starting place of philosophy*....[I]t is choosing between *the given* and *the basic* as the starting place for philosophy (12-13).

Peikoff (1991) makes the same distinction in terms of "the epistemologically primary" vs. "the metaphysically primary" (54), and he also discusses how "direct experience" or the perceptual level of consciousness is "the given" (52-4). Our experiential/perceptual grasp of entities is epistemologically primary, he says. All other knowledge presupposes awareness of entities as a starting point. He further acknowledges that this "does not necessarily mean that the entities we perceive are metaphysical primaries; as we have seen, that is a question for science" (54).

As science develops, the deeper causes of what we observe in perceptual awareness are revealed. But finding out that quarks or meta-puffs of energy or whatever is the basic, i.e., the underlying physical basis of the entities we perceptually experience, would not overthrow the epistemological primacy of entities. Nor would it invalidate the knowledge we have of entities and their attributes, etc. Quarks or meta-puffs may be the physical foundation of the entities we perceive, but they are *not* the epistemological foundation of what we know. That distinction goes to entities—whatever their ultimate metaphysical source or composition.

So, there's a very good reason why Rand's "conception of the universe still seems to be that of a complex of entities, however related to one another"—and that's because that's what it is! Regardless of the real nature of the basic, i.e., the ultimate underlying causes of those entities and their attributes, etc., these entities and their attributes are the

given. Unlike some philosophers, we need not suffer ontological vertigo at the realization that the solid objects we experience are "really mostly empty space"—nor engage in gleeful attacks on the validity of our knowledge of the world, being based as it is on our "deceptive" senses.

Interestingly, this infatuation with the basic, which is a central tenet of Scientific Realism, is also prominent in many spiritual movements. As Branden (1997) notes: "One of the conclusions at which the great mystical traditions of the world tend to arrive is that the ultimate 'stuff' of reality is not matter but consciousness or mind" (200). Even if someone can demonstrate the truth of this claim, however, that would not warrant his telling you that your experience of thoughts, feelings, memories, imagination, perception, etc. is not "truly real," and that *he* knows the "true reality" of your consciousness.

Furthermore, even if there were somehow a spiritual equivalent to Peikoff's meta-puffs of energy underlying our basic modes of awareness, those spiritual quarks would not be "more real" than our basic modes of introspective experience. Instead, those modes would simply be a *real effect* of the underlying cause, whatever it is. Naive "Spiritual Realism" is no more a royal road to "the only true knowledge" than is naive Scientific Realism. In both extrospection and introspection, the given is no less real than the basic.

Part C. Causal Inefficacy of Mind and the Bogus Specter of Epiphenomenalism

If, as argued above, mind is the form in which we are introspectively aware of the brain (or a part of the brain), then mind is an entity, viz., the brain as we are aware of it introspectively. And as such, the mind is capable of initiating actions and has causal efficacy.

However, the standard view of mind is not that it is an entity, but rather than it is the *capacity* of human beings to engage in conceptual functioning. A generally unrecognized consequence of this viewpoint is the causal *inefficacy* of mind, which is in stark contrast with claims by most Objectivist thinkers, including Branden, Efron, Peikoff, and others. This section will explore the problems of viewing mind as anything *other* than the brain (or one of its parts).

1. Standard Objectivist premises in regard to causality and mind, and their implications

a. Causality is the relation between entities and their actions. This implies that only entities act (or at least, only entities act causally), and that attributes, for instance, do not act. Further, only entities interact. Attributes do not interact with entities. To repeat: actions are actions *of entities* and interactions are interactions *between entities*. Attributes (such as consciousness) do not act, and attributes (such as consciousness) do not *interact* with entities (such as human beings or their body parts). The best presentation of this premise is in Joseph (1906, 400-425). Also see Rand (1957), who writes:

The law of causality is the law of identity applied to action. All actions are caused by entities. The nature of an action is caused and determined by the nature of the entities that act; a thing cannot act in contradiction to its nature (1037).

b. A power is the capacity of an entity to act, the potentiality of an entity for action. Capacities and potentialities of entities for action are what attributes of entities are. Branden (1969) says that "[W]hat a thing can *do*, depends on what it *is* (54), and Rand [(1966-7] 1990) agrees with "Professor E's" comment that "The so-called 'dispositional property' [power] is simply a package-deal term to cover a certain structure and its consequent potentialities for action" (284). This implies that powers are attributes of entities, and that entities have powers, attributes do not have powers. It is not the redness of the apple that reflects the light waves, but the apple. Its redness (i.e., the reflective property due to the atomic structure of its surface) is the attribute or power *by virtue of which* it *must do* so, but it is the apple that *does* it. The attribute does not *make* it do it, in the sense of efficient causation, and interaction between entities whereby one entity makes another entity do such and such. Instead, it is another kind of "causation," sometimes referred to as "formal causation." And the specific molecules and atoms that make it reflect a certain range and amount of light particles is yet another kind of "causation," sometimes referred to as "material causation."

Can an apple's attribute of redness make it reflect light waves? No, not literally. The apple reflects those light waves, by virtue of the power it has to do so. Can my mind cause me to cause my actions? No, not literally. I cause my actions, by virtue of the power I have to do so. Efficacy is power. Causal efficacy is the power to make something happen (i.e., to act). Entities have the power to act. Entities have causal efficacy—and *only* entities have causal efficacy. Causality is the relationship between an entity that has the power to engage in some action or other, and the action that it engages in. It is a category error to refer to something other than an entity as having causal efficacy.

c. Mind is either an attribute (capacity, power) or an active state—not an entity. (Analogy: The color red does not *have* the attribute of redness; it *is* the attribute of redness possessed by certain entities. The mind does not *have* the attribute of consciousness; it *is* the attribute of consciousness possessed by human beings.) Quoting Branden (1969):

"Consciousness," in the primary meaning of the term, designates a state: the state of being conscious or aware of some aspect of reality. In a derivative usage, "consciousness" designates a faculty: that faculty in man by virtue of which he is able to be conscious or aware of reality..."Mind" designates specifically *man's* consciousness (or form of consciousness—in contradistinction to the forms of consciousness exhibited by lower animals (26)..

From these premises and their implications, it further follows that:

d. Mind does not act. An entity is the *cause* of its actions. Its actions are the *effects* of an entity. The mind, being a *capacity* of a human entity to act in a certain way, is no more the *cause* of an action than is digestion, which is another such capacity (viz., whereby the human entity converts food to usable energy). The *ability* or capacity of one to do something is NOT the *cause* of one's doing it, for we have many unactualized capacities at any given point in time. It is the entity that actualizes its capacity to do something that is *what* is doing something, and that is the *cause* of its doing something. Once that fact is recognized, it is then no problem to acknowledge that *what* action is taken by an entity depends on what *capacity* is being actualized—and the *nature* of the action depends on the nature of the *capacity* being actualized.

Mind is a way the *body* can act or an active state the body is in. Consciousness is *not* a *thing* or an *entity*. It is an *attribute* of entities. Thus, consciousness *cannot* do things, such as causing changes in entities. It is *entities* and in particular human beings and their component entities (organs, tissue groups, cells, etc.) that do things, such as causing changes in each other. Such changes are, of course, changes in each other's attributes and their measurements—and among those changed attributes and measurements are consciousness and its scope and intensity.

Also, remember that existence gives rise to consciousness. Consciousness does not give rise to existence. The task and function of consciousness is to *be aware* of existence, not to do things to it and *cause changes* in it. That is, to follow the entity-terminology that is essential to causality—consciousness is the attribute by virtue of which *we* are aware of existence and by virtue of which *we* direct our actions so as to cause changes in existence. It is *we* and our physical body parts that do things such as those that begin the chains of cause-effect relationships that result in our learning things, remembering things, perceiving things, and affecting things through the physical actions of our bodies.

If you want to identify consciousness with our bodies or our organismic selves, then yes: consciousness can do things, can cause changes in physical reality, in a sense. But that is *not* because consciousness is an entity *in its own right*, but *only* because it is an *attribute* of the entity (and its parts) that does things and causes the physical changes inside and outside of itself.

e. Mind does not have causal efficacy. Mind *is* a causal efficacy of the body. *Entities* (viz., the human body and its physical parts) are causally efficacious. Mind is not an entity. It is a *capacity* of human beings. It is *human beings* that *have* causal efficacy and thus *are* causally efficacious. To *have* causal efficacy is to *be* causally efficacious. If mind cannot *have* causal efficacy, it cannot *be* causally efficacious. However, human beings *have* causal efficacy (including their having the capacity of mind), and they *are* causally efficacious (in being able to make things happen by the actualization of their capacity of mind).

A further clarification: although mind is not itself causally *efficacious* (human beings and their physical parts being the causally efficacious entities involved), mind *is*

the causal *efficacy* (capacity to make things happen) of human beings. Human beings *have* the causal efficacy we call "mind." And mind *is* the causal efficacy of human beings. But mind does not *have* causal efficacy. A causal efficacy such as mind cannot *have* causal efficacy, any more than an attribute such as redness can have the attribute of redness. Redness just *is* the attribute of redness of some entity, and mind just *is* the causal efficacy of human beings.

f. *Mind does not interact with the body.* Interaction *is* essential in the integration of our entities as healthy, efficacious organisms. But it is the integration of the various functions of our bodies by the proper interactions between our various body parts that is the key. It is our body parts that interact—not our attributes. Our attributes are the *powers* by virtue of which our body parts interact, and our overall entity (organism, self) carries out actions. Powers do not *interact*, they *enable* entities (including body parts) to interact. (And when "enable" simply means that they are the power by virtue of which entities and body parts interact.) The *error* is in thinking that consciousness interacts with the body.

Given the impossibility of causality apart from an entity and its actions, interaction cannot exist apart from two (or more) entities and *their* actions. It is (by Aristotelian/Randian standards) nonsense to speak of an entity interacting with its attributes (including its capacities or faculties) or its actions (including its active states or processes). It is *not* nonsense, however, to speak of an entity interacting as whole-to-part with one of its *organs*, or an organ similarly interacting with one of its parts or modules, or one part of an organ with another. In all of the latter, we are taking a part of an entity to be functioning *as* an entity, as when the liver secretes bile to help break up a morsel of food, or when a neuron sends neurotransmitting chemicals to another neuron to cause it to "fire."

So, the question of how or whether the mind interacts with the body *must* arise because people *experience* our minds as being a kind of thing that is affecting and being affected by our bodies. Also, we are only *directly* aware of our minds in a way that presents it as being radically different from our physical bodies. So different, in fact, that it is not at all clear *how* they can interact—but *that* they do seems introspectively undeniable. This, I take it, is the position of a number of Objectivists, and we may label it "common sense interactionism." However, it's only possible, *in a sense*, to say that the mental causally interacts with the physical, because the mental is a necessary co-existent to the physical, which is where the true causal inter-relations exist.

Since mind is not an entity, and since only entities interact, mind and body cannot literally be a "mutually interactive system." Mind is a *capacity* of the human nervous system, which consists of interacting cells, tissue groups, etc., and which itself interacts with other systems in the body. Like the capacity of digestion, and the processes that various parts of the body carries out when we actualize that capacity, the capacity of mentality (i.e., mind) is *integrated* with the body. *All* capacities, and all attributes in general, are integrated with the entities that possess them. But that does not mean that those capacities *interact* with the entity that has them—and, in particular, it does not

mean that mind interacts with the body. This is a totally illogical notion that should have been dead and buried with Descartes. It is part of "yesterday's philosophy."

I am not saying anything that is not a straightforward consequence of the Aristotelian-Randian concept of "causality" as the relationship between an entity and its actions—and the Randian identification that consciousness is not a thing, but an attribute of certain things (namely, animals, including human beings). To those who will take them seriously and integrate them fully, Aristotle and Rand stand as a towering refutation of the nonsense spread by the religious and Cartesian traditions, who claimed that there is some kind of "interaction" between mind and body.

Just as there is no clash between reason and emotion, but only between the thinking you have done at one time or another, so there is no clash or interaction between mind and body, but only between one part or another of your body, one or both of which may be engaging in an action that possesses the attribute of consciousness.

This has application to our physical and mental health, as well. We human beings have aspects of our physical health which also manifests as well functioning or malfunctioning in our conscious actions. But the *interaction* or "effects" as you refer to them are *all* between physical parts or systems of the human entity, and/or them and the human entity as a whole. There is *no* interaction between a part of the human entity that is *only* mental in nature and a part of the human entity that is *only* physical in nature. This is because there is no part of the human entity that is *only mental* in nature. If you think that there is, you are misinterpreting your data of introspection.

Psychologically, epistemologically, morally irrational *human beings* can activate their mental capacities (and thus certain parts of their physical nervous systems) in such a way as to make the body sick and dangerous to themselves and others. Throughout such negative chains of processes, however, it is not the *mind* that is doing things, but human entities and their various physical parts as they activate their mental capacities.

2. Can these implications be reconciled with the testimony of experience and the role of ideas in history?

a. The testimony of experience. We introspectively experience ourselves as having minds that are powerful and cause us to do things and are affected by things. Mind-body interaction *seems* to be real interplay between a spiritual thing and a physical thing that are somehow conjoined or intimately interwoven. It *seems* that the mind-body "Interactionism" view captures a real aspect of our experience, not an illusion.

First of all, as Rand held, there is no mind-body dichotomy. They are not two separate things, of one sort and another. They are a *unity*, and as Pols (1998) has said, the union of functions in human action with the "billionfold multiplicity" of the elements in the infrastructure is so intimate that the standard conception of a mind-body *relation* does not fully capture the embodiment of mind (100). The body and mind are *attributes* of the one, unified entity, the human organism. Body and mind are *so* unified that to even speak

of the *relationship* between them misses the point. To repeat: as Rand herself said, but did not fully elucidate—and thus left a trail of disciples who did not get it right—there is no mind-body dichotomy. The mind *is* the body, considered from the perspective of its power to be abstractly aware of, evaluate, and guide a human organism's physical actions toward its chosen goals. The body *is* the mind, considered from the perspective of its being the indispensable physical infrastructure of the human organism's mental functioning. Mind and body, to summarize, are not two Cartesian entities somehow coexisting in the same space and time, but complementary, inseparable aspects of one unified entity, a human being. So, at the very least, trying to assimilate into Objectivism the idea that mind is some sort of entity other than the body would entail jettisoning one of the major insights and tenets of Rand's philosophy.

Secondly, if dualism as the view that there is an interaction of mind and body is to be valid at all, it must be in terms of the interaction of two *entities*, for only entities can interact. I explore this possibility in section 3.

b. The role of ideas in history. The causal inefficacy of mental processes and of mind has led many people to protest in the following manner: If mind has no causal efficacy, then consciousness is irrelevant to human history, merely a superfluous accident. This is the challenge of Epiphenomenalism. What if consciousness (or mind) never existed? How can you claim human history would have been the same without consciousness or mind? How can you claim that consciousness has no role to play in the course of human events?

One error in such an objection is what I call the "what if" fallacy, or the fallacy of "logical possibility." Its proponents ask us to imagine what a phenomenon would be like without certain of its attributes. The reply is that there simply is no evidence that it is possible for conscious-level brain processes to exist without the attribute of consciousness.

Brain processes and their attribute of consciousness are metaphysically inseparable. Consciousness is a necessary aspect of brain processes at a sufficiently high level of complexity and/or intensity. It can no more exist apart from those processes than can the color, mass, or volume of the human body, or the incandescence of an iron rod of certain high temperature; nor can those brain processes exist apart from consciousness.

Thus, to speculate on how such brain processes might proceed without the attribute of consciousness is an exercise in futility. Consciousness is a natural, necessary attribute of those brain processes at or above that particular level. Those brain processes would not be those brain processes, were they not also possessed of their attribute of consciousness. Had consciousness never existed, it would be because brain processes of a sufficiently high level of complexity and intensity had never existed—otherwise, consciousness would have to have existed.

Without consciousness, human history could not have been the same, simply because humans would not have been able to carry out brain processes of a sufficiently high level to direct actions we would characterize as "human" (let alone, as "animal").

But the course of human events is not directed by consciousness per se. It is directed by conscious human beings, i.e., by human beings whose brains engage in processes possessing the attribute of consciousness.

Thus, Epiphenomenalism's erroneous view that consciousness is irrelevant to the history of the universe *cannot* be the consequence of its premise about the causal inefficacy of consciousness, but instead as I will show must be due to its premise about the historical irrelevance of anything that is causally inefficacious. (You don't get error from true premises, unless they are combined with false ones.) In its simplest form, the basic argument of Epiphenomenalism is: (1) consciousness does not have causal efficacy, which is correct, in my view, as I have already argued), and (2) anything that does not have causal efficacy is irrelevant to history, which, as I will show, is false. The conclusion, therefore, which is also false, is that consciousness is irrelevant to history.

As noted, I have explained how consciousness does not *have* causal efficacy, but that it *is* the (or a) causal efficacy of the living entities that possess it. It is *those living entities* that *have* the causal efficacy that consciousness *is*. And since the causal efficacy that consciousness *is*, and that those conscious entities *have*, is an *inseparable attribute* of those entities, and is the attribute in virtue of which those entities *have* that causal efficacy—and since those entities *are* causally relevant to history—then the attribute in virtue of which they are causally relevant cannot itself be causally *irrelevant*. Failing to realize this fact is the root of the Epiphenomenalist's false conclusion.

Another, more fundamental reply addresses the underlying fear that causal inefficacy of mind amounts to "materialism," the view that only matter is causally effective in the world, and that consciousness, by contrast, is nothing but a causally impotent epiphenomenon. This fear is misplaced, because matter is no more causally efficacious than is consciousness!

Matter is not a thing or entity, any more than consciousness is. Just like consciousness, matter is a set of attributes of entities. In particular, matter, like consciousness, is an attribute of human beings. "Body" simply refers to the human being as an entity, considered from the perspective of its *physical* attributes. Human beings, by virtue of the physical attributes of their bodies, are able to engage in physical actions. Human beings also have *mental* attributes. The mind is not an *entity*; it is the capacity of human beings to engage in actions that are not only physical but also mental. To repeat: "the mind" does not engage in "mental actions." We, as conscious human beings, engage in mental actions. There is thus *no* interaction between a part of the human entity that is *only* mental in nature and a part of the human entity that is *only* physical in nature. This is because there is no part of the human entity that is *only mental* in nature. If you think that there is, you are misinterpreting your data of introspection.

Body parts are all physical. The body as a whole is also characterized by consciousness. The fact that body parts cannot be separated from the body as a whole without jeopardizing the human entity's survival is one issue. The body parts are not *powers*, but *component entities* which *themselves* have powers (material and sometimes

also conscious) to do things. However, there is a quite difference sense in which it is true that consciousness cannot be removed from the human entity, and this is equally true in parallel of the fact that *matter* cannot be removed from the human entity. Consciousness and matter are not body parts. They are attributes, without either of which human entities cannot survive, for they *are* the *powers* of human entities to *do* things. But the crucial thing to realize is that *neither consciousness nor matter is a thing that HAS the power to do things*.

Thus, the concern about how history could possibly have unfolded the way it did without consciousness is completely misplaced. One may as well wonder about how history could have happened the way it did without *matter*! But, in pattern with my previous argument, although matter does not *have* causal efficacy, it *is* the (or a) causal efficacy of the living entities that possess it. It is *those living entities* that *have* the causal efficacy that matter *is*. And since the causal efficacy that matter *is*, and that those living entities *have*, is an *inseparable attribute* of those entities, and is the attribute in virtue of which those entities *have* that causal efficacy—and since those entities *are* causally relevant to history—then the attribute in virtue of which they are causally relevant cannot itself be causally *irrelevant*.

What this points to, therefore, is a non-epiphenomenalist, non-Cartesian, *non-materialist* view of mind as a causal efficacy/power of human beings. It is inaccurate and a philosophical error to speak of mind or consciousness as doing things, insofar as they are not actually entities, but rather attributes by virtue of which *we*, as conscious entities, do things.

It may be thought that those who speak of mental activity as causally effective are not committing some basic philosophical error, but are just using different terminology to describe the same fact. Without being able to talk in terms of mental causation, they say, we couldn't make any predictions about how entities will act and would thus be unable to understand their nature. I disagree. It's simpler and clearer to consider consciousness as the *means* by which some living entities regulate and direct their actions, rather than to claim that it is consciousness *itself* that is regulating and directing those actions. The former view avoids the Cartesian error of reifying consciousness into a kind of immaterial entity that "somehow" interacts with the human body and makes it do certain things.

Aristotle didn't have *all* the bugs worked out of his ontology, but one of his finest contributions was the basic principle that nothing *acts* except entities—and that nothing *causes* except entities. Thanks to the neo-Heracliteanism of David Hume, we have been struggling for several hundred years to dig out from under the fundamentally flawed and misleading event-event model of causality—and are just now (thanks to Rand and other neo-Aristotelians) perhaps turning the corner back to the entity-action model. Owing perhaps most to the enormous resistance of the religious community to de-entitizing the soul, we are not yet out of the woods. But at the very least, we should take care to strip such vestiges of the Cartesian, religious worldview from our *own* thinking.

3. Perhaps Mind is, after all, an Entity?

Premises 1b seems unquestionable. But suppose we challenge premise 1c, holding instead that mind *is* some kind of entity, and that consciousness *is* a kind of "stuff" or material.

First, if mind is a *physical* entity, then it must be the brain, or some part of the brain. In this case, mind as we are aware of it introspectively is an *objective* phenomenon, the form in which we are aware first person (using our brain, or one part of our brain, introspectively) of what some other part of our brain is doing. So, in answer to the question: What things interact in order to *produce* our awareness of having a mind?, the obvious answer is that it must be two parts of the conceptually conscious organism—most likely, two parts of the brain.

In other words, one part of the brain engages in a physical process which is also mental, thereby causing another part of the brain to engage in a physical process (which may or may not also be mental) But it is all too easy and misleading to abbreviate this as follows: a physical brain process which is also mental causes another physical brain process (which may or may not also be mental—giving the impression that the latter physical processes is caused by a previous process that is mental (but also physical). It's misleading, because it sounds as it is the mental-ness per se of the former process that is causing the latter process, when it's really the unified physical/mental nature of the former that is involved in the cause. And further, we have to remember that it is the brain, or a part of it, that is enacting the process that has a unified physical/mental nature.

It becomes a little confusing when we slip into talking of processes as causing things, but it seems to be a natural tendency. We should remember, though, that *actions* don't cause other actions any more that attributes do. *Only entities* cause actions. A decision is not an entity! Thus, decisions do not cause actions. A decision is *my* (the entity now writing this sentence) action, a conscious action *I* (entity) am taking, *not* an action *of my consciousness* (attribute). It is *I* who decide and *I* who then take the action that follows that decision. It is not my *decision* but *my having decided* (i.e. *I*, who have decided) that causes my subsequent action.

This is the *only* way to make sense out of human decision and action that *also* squares with the Aristotelian-Randian concept of entity—>action (not Humean action—>action or Moorean attribute—>action) and the Randian insight that consciousness is not an entity, but an attribute of entities. To discard the entity—>action model, or to discard the premise that consciousness is not an entity, is an unacceptable departure from Aristotelianism and Objectivism and a move toward either Hume's action—>action model of causality, or Descartes' interactionist, dual-substance (consciousness as an entity) model, or *both*.

As for "*parts* of the brain," this does not necessarily refer to an easily localizable chunk of the brain. Instead, it is more likely that a network of sensitive brain cells work together in interaction with whatever *other* brain cells are involved in a particular

thought, emotion, etc. And it may not be the *same* network of cells involved from one occasion of brain part/brain part to the next.

A commonplace of the computer age may be a helpful analogy here. A RAM-disk is a *functional entity* or opportunistically forming-unforming-reforming integration of various parts of a larger system in a computer, which arises "emergently" to perform certain higher level functions when the system needs it to. Thus, it's sort of an itinerant organ that coalesces and functions wherever in the computer it's needed, and subsides into quiescence when not needed, according to standing orders in the computer's hard drive.

That is what our mind is most like, if we are to think of it as being some kind of actual physical entity. We are cobbling together, from within our brains and nervous systems, whatever component cells and cell groups and modules are needed for a certain function or series of functions. Our *capacity* to do this is our "mind," and our capacity as activated at any point in time is experienced as our "mind" *in action*. All through the brain there are cells that neighbor the ones used in such mental activities, and these neighboring cells are sensitive to the goings-on and allow us to be aware of those goings-on. Voila, "self-awareness," i.e., awareness of the mind-in-action.

However, apart from viewing the mind as a RAM-disk-like part of the brain—more like a traveling wave than a stationary entity—there seems to be no rational way to think of the mind as some kind of physical entity. This proposal, furthermore, is merely a way of specifically restating the idea that mind is an *objective* phenomenon, the way in which we are introspectively aware of (some part of) the brain. (Recall the parallel to Peikoff's kind of analysis, which views a red sense datum as an objective phenomenon, being the way in which we are perceptually aware of (a physical attribute of) an apple.)

It might further be objected that mind *seems* to be a different kind of thing from brain cells and tissues, and that claiming that it is just a physical entity, despite appearances to the contrary, is a claim that our introspective experience is illusory. The reply to this is in pattern with replies to claims that our *sensory* experience is "illusory." Color, for instance, *seems* to be a different kind of thing from atoms and electromagnetic radiation, and to claim that it is just part of the physical world, despite appearances to the contrary, is a claim that our perceptual experience is illusory.

However, perceptual realism does *not* claim that color is "just" part of the physical world. Instead, perceptual realism recognizes that color is *a form in which we are aware of* a part of the physical world. Similarly, introspective realism does not claim that mind is "just" a physical entity (the brain). Instead, introspective realism recognizes that mind is *a form in which we are aware of* the brain.

Suppose, on the other hand, that mind is a *spiritual* entity. If so, then it must be composed of some other, non-material kind of stuff that interacts *somehow* with and integrates *somehow* with the brain. It should be noted that several years ago, one of the members of the Inner Circle shared his opinion (in private conversation) that Rand

definitely regarded consciousness as "a nonmaterial entity." If he was correct, that would go a long way toward explaining the persistence of the idea among Objectivists that consciousness has "causal efficacy," that it exemplifies (rather than contradicts) the Objectivist concept that all actions are caused by entities.)

However, consciousness is not an entity, any more than a color patch or a symphony is an entity. In Robert Efron's terminology, these are all "discriminated existents." They are *forms* in which we are directly aware of some entity (including its actions). Also, there is no *evidence* for this view that mind is a non-material entity!

4. Perhaps Efficient Causation is too narrow a concept to capture the causal efficacy of Mind?

Suppose, on the other hand, we challenge premise 1a, holding instead that causal efficacy is broader than just "efficient cause," entity-action causation. This would suggest an application of Aristotle's four-cause analysis to the nature of mind. It may be that attributes could legitimately be viewed as "playing a role" in an entity's actions, even though they are not the "efficient cause," the *agent* of action (the entity itself).

In other words, suppose that "mind" and "consciousness" are concepts of attributes which, while existing and "playing a role" in causal processes, do so only *as* attributes of entities. The role consciousness and mind "play" in causal processes would be precisely *as attributes* of entities rather than as (reified) entities themselves. That is, the capacities of mind and consciousness are the factor in a human being's state of awareness that Aristotle would have called the "formal cause" of awareness, rather than the "efficient cause," which is the conscious human entity itself.

The problem with this approach is that it sneaks in entity-action language. When we say that attributes "play a role" in an entity's actions, we really are pointing to the fact that entities are finite and, by virtue of their attributes, have a specific nature and thus specific limits on their actions. This does not open up a way in which attributes *act*, let alone *interact* with entities—and specifically it does not open up a way in which mind acts, let alone interacts with the brain or body.

Thus considered as the formal cause of awareness, consciousness is efficacious in a certain sense—not, however, in *itself HAVING efficacy* to do certain things, but in *its BEING efficacy* for US to do certain things. In terms of Aristotle's four-cause (factor) analysis, consciousness is not the "efficient cause" of awareness, not *that which is* conscious of reality, but the "formal cause" of awareness, *that aspect of OUR nature by virtue of which WE are* conscious of reality. Consciousness and all attributes in general are aspects of our nature by virtue of which we have the potential to do certain things.

It is not the *attributes* that *have* that potential or power or efficacy, however, but WE, the *entities*. The attributes *are* the potential or power or efficacy that WE *have*. Attributes, including mind, do not *have* causal power; they *are* OUR causal powers, which WE *have*. (A simple analogy: an apple's redness does not *have* color; red *is* the

color of the apple; it is the *apple* that *has* color.) This is precisely what is meant by this essay's earlier assertion that mind and consciousness are "causally *inefficacious*." The correct way to express their role in human action is that they are the means by which, or the attributes by virtue of which, WE as conscious, minded organisms are causally efficacious.

A brief consideration of an Aristotelian four-cause analysis may be the best guide to fully understanding the nature of mind in relation to human choice and action. A four-cause analysis is very dialectical and comprehensive, for it focuses on both the structural and temporal aspects of a totality. In dialectics, those aspects, Sciabarra notes (2000), "are understood *systemically* -- that is, according to their spatial, or synchronic, interconnections -- and *dynamically* -- that is, according to their temporal, or diachronic, interconnections" (173). Dialectics employs both systemic analysis and temporal analysis. The formal cause and the material cause are systemic factors in all change, and analyzing those factors constitutes a kind of synchronic analysis. Similarly, the efficient cause and the final cause are diachronic factors in all change, and analyzing them constitutes a kind of diachronic analysis.

The power of this method is, as Goldman (1987) notes, that "It does not leave out any relevant questions concerning the matter at hand (169)...Since a cause is by definition an answer to the question Why, [Four Cause Theory] provides a systematic closure to any inquiry. Once the relevant questions have been posed and answered properly, there is no more to inquire about" (170).

Applying this approach to the current issue, there are seen to be four intimately and necessarily linked aspects of cause involved in human action.

There is the *efficient* cause, in this case, the person or "agent" doing the acting.

There is the *material* cause—here, the "conditions under which an entity's nature determines its action," which is another way of thinking of the "antecedent conditions," which we maintain always determine what a person *will* do. In the case of thinking (or not thinking), the relevant antecedent condition is the agent's *interest* in thinking, which is sufficient (or not sufficient) to overcome motivations for other acts that would preclude thinking in that instance.

Then there is the *formal* cause—one's consciousness, which is a fundamental aspect of one's nature, i.e., one's *power* to engage in certain kinds of actions, including cognition, evaluation, and regulation of action—and, in particular, *thinking*. (Note: It is only in *this* sense, that consciousness is a "cause". It does not *have* causal efficacy. It is the causal efficacy of conscious living beings. It is *conscious entities* that *have* the causal efficacy to do things consciously and unconsciously.)

And there is the *final* cause—the goal of thinking about something, which is something one desires to the point that one chooses and seeks it rather than something else, in a given situation.

None of these aspects of causality is incompatible with the others, and none of them is dispensable to a full understanding of human action and freedom. Furthermore, none of these aspects of causality requires the notion of choices undetermined by existing conditions. Not even the choice to be aware. This suggests that the age-old controversy between volition and determinism may at least partly involve a false alternative.

Thus, the mind's role in human action may best be captured by what Aristotle called "formal causation." Pols (1998) points in that direction in a plausible way, as does as does Dretske (1995), who contrasts a "triggering" (efficient) cause with a "structuring" (formal) cause (159). But what should be avoided, in any case, is the catch phrase "causal efficacy of mind" that some Objectivists (e.g., Locke 1966, Rand (1966-67) 1990, Efron 1968, Binswanger 1998) use when arguing against materialism and epiphenomenalism. It is difficult to understand the term "efficacy" outside the context of *efficient* causation. When people speak of mind-body interaction, surely this is what they mean, the efficient-causal interaction of two entities. Nor is it in any way clear that Objectivists mean something different by "causal efficacy."

Is there any intelligible sense to referring to, say, *formal* causation or a Dretsikian "structuring" cause as a kind of "causal efficacy"? Or to *formal* causation by the mind as being a form of "interaction" with the body? "Causal efficacy" and "causal interaction" don't seem to make sense outside of *efficient* causation. The notion that a *formal* cause, for instance, is "efficacious" and involves "exerting" and "interaction" is perhaps a bit *too* novel.

To say that consciousness is metaphysically "inactive" or refer to its epistemological "activity" gives the impression that *consciousness* is doing the acting. This is the same pitfall as arguing about the "causal efficacy" of consciousness. Consciousness does not *have* causal efficacy. It *is* a causal efficacy—a way of being causally efficacious. Similarly, consciousness does not *act*, it *is* an action—a way of acting. It is not consciousness that thinks, but *I* who (being conscious in a certain way) think or (being conscious in another certain way) imagine, etc.

The point about the "metaphysical inactivity" of consciousness is still valid, but it has to be clarified. Try this: as a conscious living organism, I have the power to be aware of reality. In being aware of reality, I am acting *epistemologically* in the sense of cognitively grasping (knowing) reality, but I am not acting *metaphysically* in the sense of molding, creating, or changing reality. Understood in this way, as a conscious being, I am epistemologically active, but not metaphysically active. (This shifts the attribution from consciousness to the conscious person.)

The sense in which a material or formal cause can "do" or "cause" anything is much different from that of an efficient cause. When we speak of human agency, the latter is what we mean (see below), however important it may be to understand the specific character of the other factors (what information did he have? did he reflect long-

range? etc.) involved in an action. If we want to speak of anything other than an efficient cause as "doing" or "exerting" etc., we ought to tread *very* carefully!

How can a non-efficient-causal factor (especially material or formal cause) be "at work" or "exert" anything? It makes sense to say, for instance, that the sculptor's clay, considered as the material cause of a statue, *determines* what can or cannot be made from it, in the sense that its nature is the *limit* of what can be done with it. But to say that the material cause, the clay, *exerts* an influence on the statue seems strained and unnatural. A word with almost inescapable connotations of "efficient causation" is being stretched to an application that confuses more than it clarifies.

One more comment: we speak of human "agency," in the sense that we as agents carry out actions. Well, this is efficient causation. I reach out, as an agent, and turn off the light switch. Sure, my hand made the actual contact with the light switch—my perception guided the physical motion—my desire to have the room be dark guided the overall action. All of these things are factors, "causes," of the light switch being turned off. But the *agent* involved is not my consciousness, but *I*. At best, my consciousness is the *form*, the power and manner of activation, of my agency. Certainly, there are actions we take that seem very much in the moment, while others are carefully thought out as to long-range implications. One's agency could be considered to be quite different in form in each case, since the consciousness activated is quite different from the one to the other.

Part D. Postscript: Will as a Real, Objective Phenomenon

A growing number of philosophers and scientists have questioned the traditional, dualistic notion of a mind and/or a will that is some kind of entity distinct from the human brain or nervous system, and that does things other than what the brain or nervous system is doing. This essay attempts to provide a home for such thinkers, in arguing that mind and will are the manner in which each human being experiences his brain as being conceptually aware and as directing his awareness. That is, the mind is the form in which a conceptually conscious being is aware of his brain as having conscious capacities and as carrying out conscious functions. In parallel, the will is the form in which a conceptually conscious being is aware of his brain as having the capacity to regulate his conscious functioning and as regulating that functioning.

One important objection to this view is that it amounts to holding that mind and will are in some sense "unreal" or "just an illusion." Our *experiencing* them as entities able to do things is at odds with the *philosophical view* that they are not distinct entities, but instead are the brain as viewed introspectively. This essay's reply to such a charge is to show how Peikoff's explanation of the reality of sense data can be applied fully well to the problem of the metaphysical status of the data of our inward focused, introspective awareness of mental processes and choices. Just as there is a mind, there is a *will*, which is the form in which we experience our brains as regulating our mental processes and our physical actions. The course of human events is not directed by consciousness per se. It is

directed by conscious human beings, i.e., by human beings whose brains and nervous systems engage in processes possessing the attribute of consciousness.

We are *not* ghosts in the machine. Mind, will, and brain are a *unity*, and there is no spooky interaction between the non-material mind and will and the material brain. Mind is the material human brain experienced as acting on the conceptual level of consciousness, and the material human brain furthermore does something that allows us to be aware of its mental functioning. It provides the cranial equivalent of sense organs, so that one part of the brain is monitoring, receiving direct patterned energy input, from another part of the brain that is engaging in a conscious process, and from yet another part of the brain that is regulating the actions we take. Or, to put it more simply, introspection is objectiveC, and mind and will are objectiveE. Just as we are capable of extrospective awareness of an apple as solid and red, we are capable of introspective awareness of our brains as mind and will.

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