

CONCEPTS AND PROPOSITIONS

INTRODUCTION AND PRELIMINARIES

In the *Introduction to Objectivist Epistemology*, Ayn Rand developed a systematic theory of concepts as the foundation of her view of knowledge. But she noted that "The organization of concepts into propositions, and the wider principles of language...are outside the scope of this work." (75) This paper is a first step in developing the Objectivist theory of propositions. My goal is to identify the key questions that such a theory must address, and to propose the outlines of the answers to these questions.

I am using the term "proposition" in the logical sense: A proposition is the content of an assertion or judgment. It is the complete thought expressed by a grammatical sentence. It may serve as the premise or the conclusion of an inference. That man is a rational animal, that I am a philosopher, that the movie I saw last night was terrible, that some people hate politicians, that O.J. Simpson killed Nicole Brown, that a comet struck the Earth about 70 million years ago, that charity is not a proper function of government--all of these are discrete propositions.

We can understand the epistemological task of a theory of propositions by analogy with the theory of concepts. Ayn Rand's theory of concepts addresses two basic questions: 1) What is the process of cognitive integration by which we form concepts? We perceive various concrete, particular things in reality. But a concept is not merely a list of its instances. How do we combine them mentally into categories, forming the concept as a new mental unit to represent them all? 2) What is the relationship between the concept and reality? Are concepts objective? Do they correspond to the way things are? Or are they more or less subjective constructs?

Parallel questions can be asked about propositions. 1) What is the process of cognitive integration by which we form or grasp a proposition? A proposition is not a mere list or collection of concepts, assembled randomly. The elements of a proposition must be assembled in specific ways into a specific kind of structure, a structure that allows us to identify a specific fact, make a specific claim, formulate a specific thought. Why must a complete thought have this structure, and by what mental process of integration is it produced? 2) How do propositions relate to reality? A proposition is said to be true if it corresponds to a fact. What are facts--what sort of existent are they? And what is correspondence--what sort of relationship is it?

These are the questions I will address in this paper, at least in the form of an overview; there are many technical and subordinate issues I will not be able to cover here. To a large extent, I will simply be spelling out the implications of Rand's theory of concepts--although this is not in fact a simple task, and although some new insights will be necessary to complete the task. To appreciate the importance of developing an Objectivist theory of propositions, we need only consider the role it plays in a defense of

Address given at "Objectivism: Theory and Practice," a conference sponsored by the Institute for Objectivist Studies, July 6 - 13, 1996. Copyright held by Institute for Objectivist Studies. All rights reserved.

objectivity.

In philosophy and other fields today, including literary theory, history, law, and the social sciences, there is a widespread assault on objectivity. Objectivity is a myth, we are told--and a myth, it is darkly hinted, that serves as a tool of oppression. There is no such thing as correspondence to facts; facts are socially constructed. Language is a self-contained system of structures, rules, and texts--a man-made system, not a reflection of any reality beyond it. Our beliefs and our theories can be evaluated only by reference to other beliefs and theories, not by reference to facts that are independent of consciousness altogether. It is a movement, in short, that rejects epistemological realism, what Objectivists call the primacy of existence, the principle that things are what they are independently of human knowers, and that the function of cognition is to identify what they are.

Doctrines like that can flourish only by default, only if philosophers fail to explain and defend the epistemological elements of objectivity. And if one examines the writings of the anti-objectivist thinkers, one will find that they rely on various combinations of four key doctrines, corresponding to four central issues of epistemology:

- 1) Scepticism about the validity of sense perception
- 2) Nominalism regarding concepts: the belief that abstractions are more or less arbitrary man-made constructions
- 3) The rejection of correspondence as a theory of truth in favor of coherence theories: the idea that the truth of a proposition is determined by its relationships with other propositions, not with reality; and
- 4) Conventionalism about the logical laws that provide the basis of inference, such as non-contradiction and causality: the view that these laws cannot validly be grounded in facts of reality but instead reflect linguistic conventions, rules of a language game, etc.

Objectivism has definite answers to the first two, regarding perception and concepts. In both cases, Objectivist writers have addressed all the essential issues, answered the objections against realism, and developed well-articulated theories. Objectivism also has a partial answer to the fourth, based on Rand's view of axiomatic concepts; it is only partial because the epistemology of axioms has not been fully developed.

But Objectivism has no answer as yet to the third issue, concerning truth. The Objectivist epistemology has not yet given a systematic account of the structure of propositions, the ontological status of facts, or the nature of correspondence as a relationship between them. Without such an account, the defense of objectivity is incomplete.

In developing the outline of an Objectivist theory of propositions, I am going to take the rest of the Objectivist epistemology for granted as my context. In particular, I am going to take for granted the following three points:

- 1) The first is the primacy of existence, or the thesis of epistemological realism.

This is the thesis that existence-- reality, the world--does exist independently of human knowers; and that the nature of a thing does not depend on what we believe about it. Reality is not constructed by, or malleable by, our consciousness. That much is contained in what is sometimes called the thesis of metaphysical realism. But the primacy of existence also contains the specifically epistemological thesis that consciousness is identification. The function of consciousness is to identify what exists. Consciousness is radically dependent on existence: it can only respond to the things in its environment; it cannot generate its own contents out of itself; it can only combine and integrate contents it derives from outside. In describing the primacy of existence as a thesis, I do not mean to imply that there is anything tentative, uncertain, or hypothetical about it. It is self-evident and inescapable, an axiomatic foundation for all other knowledge. The case for regarding it as such can be found in my book The Evidence of the Senses (Chapters 1 and 6).

2) The second point is also axiomatic. It is that consciousness itself, as something that exists, has a definite identity. Conscious awareness does not occur by magic. It is not a diaphanous revelation of what is outside the mind. It is a function performed by living organisms exercising specific biological organs and processes. Cognition in all its forms is the result of the interaction between the nature of the things known and the nature of the knower's faculties. In particular, it is always the result of processes of integration and differentiation. In perception, for example, these processes are physiological, and the result is that we always perceive an object in a specific form--the object must appear to us in a specific way--determined by the operation of the sensory systems. There is no way for us to step out from behind our senses to see how things "really" look, or "ought" to look. A thing can only look the way it actually does in a given set of circumstances, and this appearance is the means by which we are aware of its actual identity.

3) The third preliminary is the theory of concepts that Rand outlined in the Introduction to Objectivist Epistemology. At the conceptual level, unlike the perceptual, the processes of integration and differentiation are conscious. They involve the conscious, deliberate integration of perceptual awareness. In briefest summary, we form a concept like "table" in two stages. First, we observe that certain objects are similar in shape and function, by contrast with other objects--chairs, sofas, lamps--that differ in these respects. Things that are grouped together mentally as similar Rand refers to as "units," and her great insight was that similarity is a quantitative relationship. Similar things possess the same characteristic, but in different degree or measure. One table is taller than another, for example, one is larger in surface area, etc. The second stage of the process is the omission of the measurements of the units. Since the units differ only in degree, we can abstract from the differences and thereby treat the units as identical. We integrate the units into a new mental unit, the concept "table," on the principle that a given table must have some specific shape and function, but may have any shape or function within a specific range.

The important thing to keep in mind is that there is no such thing in reality, apart

from our minds, as an abstract table lacking specific measurements. Nor is there a universal category table existing apart from us. Things do not group themselves, or shed their measurements, on their own. Abstractness and universality are products of human cognitive processes. As in the case of perception, conceptual knowledge has a particular form that results from the nature and operations of our own cognitive capacities. The validity of conceptual cognition is not compromised by the fact that the abstractness and universality of our concepts is not mirrored in universal, abstract essences existing in the things themselves. Objectivity in cognition does not require that the contents of our mind mirror what is outside. This requirement, which many philosophers have implicitly imposed on cognition, is the product of a false model of the mind as a diaphanous medium. The objectivity of concepts derives from the fact that they are based on similarities and differences that do exist independently of us, in the things themselves; and from the fact that we process these similarities and differences in a manner required by the nature of our faculties.

To summarize, then, I am going to take for granted the primacy of existence, the fact that consciousness has an identity, and the measurement-omission theory of concepts. On this basis, we can now turn to the analysis of propositions. My discussion falls naturally into two parts, corresponding to the two questions I posed earlier. Part I is concerned with the cognitive process by which concepts are integrated into propositions. Part II is concerned with the relation between propositions and reality--specifically with the notion of truth as a correspondence between propositions and facts.

PART I: THE STRUCTURE OF PROPOSITIONS

As a point of departure, consider two ways in which the conceptual level of cognition differs from the perceptual. When I perceive a car passing my house, the perceptual awareness occurs at a specific point in time. It lasts for a specific duration, a brief one, and then it is over. I might retain some image of the car that I could recall as a perceptual memory. But if I do recall it, I will experience it as a memory--the content will be experienced as something from the past--rather than as a percept. When I form a concept, however, I retain the concept as a product. In the process of concept-formation, I become aware of a category of things, such as tables or apples, or of an attribute that things have in common (in different degrees) such as length. The concept is a way of detaching the category or the attribute, as a content of a cognitive action occurring at a specific moment, and retaining it as a cognitive content over time. My concept of apple is not a memory of the original act of concept-formation; it is a permanent possession, even when I am not consciously employing it. In this respect, a concept is to concept-formation as a marriage is to the wedding.

In the same way, the propositional knowledge that whales are mammals was acquired in the form of a conscious judgment, when I first learned this fact, but is retained as knowledge over time, even when I am not thinking about it. The conscious judgment occurs at a specific point in time, and involves a conscious integration of the

concepts "whale" and "mammal." But this action of mind produces the new content--that whales are mammals--along with the acceptance of that content as true. Both the content and the acceptance remain as more or less permanent deposits, available to me the next time I think about the subject.

The second difference from perception is that concepts and propositions can be held in common by different people and communicated among people. Perceptual awareness occurs in an individual mind. You and I may perceive the same car, but our perceptual experiences are distinct and unique. The same is true for our acts of concept-formation or judgment. But you and I may possess the same concept as a cognitive structure defined by its content: the category or attribute that we are aware of. And we may possess the same propositional knowledge as a cognitive structure defined by the fact we are aware of.

Both of these differences are made possible by language. Words, as Rand says, "transform concepts into (mental) entities" (IOE, 11). The process of forming a concept, she goes on to say, "is not complete until its constituent units have been integrated into a single mental unit by means of a specific word" (IOE, 19). If one did not complete the process, there would be no way to retain the conceptual awareness over time; one would have to reenact the process of concept-formation each time one wanted to think about the category or attribute. (It may be possible to retain some simple concepts in the form of images, but this is a marginal and for our purposes irrelevant possibility.) And of course there would be no way to communicate one's conceptual awareness to another person without a concrete symbol that can be spoken or written. In the same way, the propositional grasp of a fact must be formulated in language in order to be retained and communicated.

A concept is not identical with a word, nor is a proposition identical with a sentence. The same concept may be expressed in different words--"mensa" in Latin, "trapeza" in Greek, and "table" in English all refer to tables. The same proposition may be formulated in many different sentences, not only as between different languages but within a given language, using variations in grammatical structure. "John opened the door" and "The door was opened by John" are equivalent: they express the same proposition and assert the same fact. Yet words and concepts, propositions and sentences, are not really distinct, either. A concept is not fully formed, as we noted, until it is associated with a concrete physical symbol. Conversely, the physical concretes--e.g., the letters t,a,b,l,e as marks on paper--are merely marks on paper and not a word if they are divorced from the concept. The relationship between a concept and a word can best be described using the Objectivist theory of concepts: a concept must have some verbal form but may have any (within limits set by the requirements of speech and writing). When we speak of a concept, we are abstracting from the particular verbal form in which it is concretized in order to focus on the identification of certain units through an integrative process of

measurement-omission.

The same pattern holds for propositions and sentences. A proposition is not a

linguistic phenomenon per se. When we speak of a proposition, we abstract from the particular verbal form of a sentence to focus on the cognitive content of the thought it expresses. Divorced from that cognitive content, a sentence would simply be sounds or marks on paper, without content, meaning, or reference. On the other hand, however, we cannot divorce the proposition from its verbal expression. We think in language; the same thought may be formulated in any of a range of possible sentences, but must be formulated in some particular sentence.

There is thus a parallel between concepts and propositions: both are products of acts of cognitive integration, and both are expressed in verbal form:

<i>Integrative act</i>	Concept-formation	Judgment
<i>Product</i>	Concept	Proposition
<i>Verbal expression</i>	Word	Sentence

This schema differs from the Platonic view that concepts and propositions exist independently of the mind, independently of any cognitive act of integration, in some eternal, nonphysical realm of existence. It also differs from the representationalist view that they are inner mental objects of awareness utterly distinct from language. Philosophers of language have raised a host of objections against both of these views, objections which I will not review here except to say that both views involve an unwarranted reification of mental contents.

If we adopt this schema, we have two perspectives we can take on propositions, two routes we can follow in trying to identify their essential structure and function. The first is to reason forward, so to speak, from the cognitive act of integration to its product. That is: we may infer the nature of the proposition from the nature of the integrative act we perform in forming a judgment. The second route is to reason backward from the grammatical structures of sentences. We have an advantage here that Rand did not have in developing her theory of concepts. An individual word has no relevant internal structure (the letters of which it is composed carry no meaning of their own out of which the meaning of the word is composed). Its "atomic" nature gives us no clue to the cognitive structure of the concept, the nature of the cognitive integration by which units are integrated into a new mental unit. But the presence of grammatical structure in sentences does give us such a clue to the cognitive structure of the proposition, as long as we are careful to recognize that many aspects of grammar are optional and will vary from one language to another.

Grammarians recognize different types of sentences, but the basic type, out of which all the others are composed, is the simple sentence: "I am cold," "The man in the corner is bald," "Whales are mammals," "The first human being set foot on the moon in July, 1969," "Most politicians professing selfless dedication to the common good are pragmatists eager for power." Such sentences differ from words or phrases that stand

alone: "cold," "July, 1969," "professing selfless dedication to the common good." A sentence expresses a complete thought, whereas these components by themselves do not. But what does this mean? What makes a thought complete? The answer seems clear enough at one level. A sentence makes an assertion, it declares that something is the case, it makes a claim which is either true or false. A word or phrase by itself asserts nothing. The word "whale," for example, designates a category of animals, but in and of itself does not say anything about them. The phrase "professing selfless dedication to the common good" designates a characteristic, but in and of itself does not say who or what possesses that characteristic.

Grammar tells us something further about the kind of structure required for making an assertion. A simple sentence must have a subject and a predicate. The subject is a noun, pronoun, or noun phrase indicating what the sentence is about. The predicate is the verb or verb phrase, including any

complement or object of the verb, that attributes something to the referent of the subject. Subject and predicate play different roles in a sentence, and both are necessary. A sentence cannot have two subjects without a predicate--e.g., "The whale all mammals." It cannot have two predicates without a subject--e.g., "Went home is hungry."

A sentence thus has a unity arising from the way in which subject and predicate complement each other. This unity is a feature of the sentence as a whole, as a grammatical structure, and not of the component concepts. Bertrand Russell put the point this way:

Consider...the proposition "A differs from B." The constituents of this proposition, if we analyzed it, appear to be only A, difference, B. Yet these constituents thus placed side by side do not reconstitute the proposition... A proposition, in fact, is essentially a unity and when analysis has destroyed the unity, no enumeration of constituents will restore the proposition. (Principles of Mathematics, 49-50)

What is the source and explanation of this unity? Why is it that a grammatical subject and a grammatical predicate are necessary for a complete thought, one that makes an assertion? Philosophers of language have tried to answer this question by looking only at the linguistic characteristics of sentences and/or their logical characteristics as elements in reasoning. But if the proposition is the product of an integrative cognitive action, then the question is really an epistemological one, and indeed the Objectivist epistemology suggests an answer.

One aspect of the primacy of existence is the principle that cognition is identification: the awareness of the identity of what exists. This is a corollary of the law of identity. To be is to be something definite; whatever exists must have an identity. Indeed, an existent is its identity; it is what it is; there is no metaphysical gap or distinction between its existence and its identity, its being and its being something, as if its identity were a suit of clothes it could remove. The function of cognition, accordingly, is to grasp the identities of things.

At the perceptual level, the unity of existence and identity is reflected in the unitary character of perceiving: we never perceive a free-floating identity on the one hand, nor a characterless existent on the other. Such things do not exist to be perceived. Perception is the awareness of entities, which we discriminate as units from their background. To be discriminated, an entity must differ qualitatively from its background in some dimension--color, texture, depth, etc.--and the perceiver must be aware of this qualitative difference. We therefore perceive the entity as an existent in and through our awareness of its identity. As I said in The Evidence of the Senses (158), "The entity is nothing but the qualitative nature before us, taken as a unit."

The process of concept-formation, however, allows us to abstract in varying degrees from the identity of a thing, on the principle that a given unit must have some specific identity in each relevant respect but may have any. Thus the concept of man abstracts from a wide range of attributes that are part of the identity of any particular human being, such as hair color, intelligence, or political views; the concept "animal" abstracts from a wider range of variation in identity; the concept "organism" abstracts even further; and so on. We reach the limit of such abstraction in the concept of "existent" itself. At the same time, concepts allow us to abstract a given feature or dimension of identity--an attribute like length or wisdom, an action like running or thinking, a relationship like marriage--from the existents that possess the attribute, perform the action, engage in the relationship. One again, the principle is that a feature or dimension of identity must be the identity of some existent, but may characterize any existent within a given range. And, once again, we reach the limit of abstraction with an axiomatic concept, in this case the concept of "identity."

This distinction between existence and identity is reflected in the two features of concepts that I mentioned earlier: abstractness and universality. A concept is universal because it subsumes a range of numerically distinct units, an open-ended set of existents. The concept "dog" is not a name for a specific dog; it stands indefinitely for any and all dogs, past, present, and future. A concept is abstract because it omits the specific measurements of its units; it subsumes an open-ended range qualitatively distinct things, an open-ended range of identities. A dog can have any identity within certain limits. When we describe a Chihuahua and an Alsatian as dogs, we are treating them as identical, despite their evident differences in specific characteristics.

In varying degrees, therefore, concepts abstract existents from the identities they possess, and identities from the existents possessing them. But there is no distinction between existence and identity in reality. To make an assertion, to say something that is true or false, one must restore the unity explicitly. This is the basis for the subject-predicate structure of a proposition. It has traditionally, and correctly, been held that the function of the subject is to refer, that of the predicate to describe or characterize what is referred to. This difference in function underlies the grammatical differences. A subject expression like "Most politicians" cannot function as a predicate: it can refer to certain things but does not say anything about them. A predicate expression like "are pragmatists eager for power" cannot function as a subject: it can attribute something but

does not refer. The subject of a proposition specifies one or more existents as the objects of awareness, the predicate specifies some aspect of their identity, and the proposition as a whole attributes that identity to the existents. As a result, every proposition is a particular expression of the law of identity: a thing is what it is.

Let us now look more closely at subjects and predicates from the standpoint of the Objectivist theory of concepts.

In the simplest type of proposition, a perceptual judgment like "This is a chair," the existent is specified by the demonstrative pronoun, which refers to the object I am perceiving. In this case, we see the division of labor between subject and predicate in its purest form. The subject "This" does nothing but refer to a certain existent without characterizing its identity; it is the predicate alone, "is a chair," that attributes identity. Of course, we cannot specify an existent without any awareness of its identity. In the case of the perceptual judgment, that awareness is provided by the perceptual awareness of the thing: the reference of the term "this," as a pronoun, is determined by whatever it is that we have discriminated perceptually as a unit. If I go on to judge "The chair is brown," the subject refers to the entity not merely as an existent, or as the object of perceptual discrimination, but specifically as a chair. Nevertheless, the subject alone, "the chair," does not explicitly attribute an identity to the thing. It does so only implicitly, as a result of some prior explicit recognition of it as chair, and does so for the purpose of going on to identify its color.

Demonstrative pronouns like "this" and "these" can specify one or more particular existents as individuals; the same is true of names (John Smith, the Smiths). Although demonstratives and names are words existing only within a language designed to express conceptual thought, they are not concepts per se, nor do they convey any conceptual information about their referents. They designate individuals qua individuals. But we also--and indeed, more often--specify existents conceptually, with subjects that contain one or more concepts. In this respect, it is important to distinguish designation from reference.

Designation is the relationship a concept bears to its units. Any concept designates its units qua units, i.e., as members of an open-ended category of existents whose measurements (within a given range) are regarded as omitted. It is a uniform relationship, the same for all concepts. The concept "man" designates an open-ended category of things, the concept "red" an open-ended category of color qualities, the concept "running" an open-ended category of actions, etc. In every case, the concept designates all its units, qua units. Within a proposition, however, a concept may be used to refer to all or some of its units in many different ways. We use many different grammatical devices to "target" certain things and specify precisely what we are talking about. Consider the following uses of "man" as the subject of a proposition:

"A man is at the door." "A man" refers to an individual unit of the concept, identified only as an individual unit.

"The man with the toupee is drunk." "The man with the toupee" refers to an individual who was previously identified as having a certain distinguishing

characteristic. This sentence is about a specific person whom I identify, for your convenience, as wearing a toupee.

"The man who committed this crime is a fiend." This is like (2) except that I do not have a specific man in mind; I am referring to whoever fits the description.

"Man is a rational animal." "Man" refers to the category qua category, i.e., as a single unit embracing all the members of the category. This grammatical structure most clearly illustrates Rand's analogy between concepts and variables in mathematics. "Man" refers to man as such, any man, just as the variable x in $x + x = 2x$ refers to a number as such, any number.

"Some men are married." "Some men" refers to one or more units of the category as distinct units that may have distinct characteristics.

"Men have walked on the moon." This is like (5) in referring to distinct units qua distinct, except that the plural form specifically refers to more than one unit.

"All men need oxygen to survive." This is like (4) in referring to the category as a whole, but does not refer to the category as a single unit; "all men" refers to the individual units of the category, specifying all of them without exception.

These examples illustrate the two chief ways in which the English language allows us to refer specifically to certain units of a concept. The first is the use of quantifiers: "all," "some," the plural form, etc. The second is modification, the use of adjectives and adjectival phrases and clauses: "The man with the toupee," "The man who committed this crime." A concept, as I noted, is universal. It designates a plurality of numerically distinct existents. When a concept is used in the subject of a proposition, we can, so to speak, adjust the exact degree of universality we want through quantifiers and modification.

Let us consider now the predicate of a proposition. A predicate per se does not refer, though it may contain elements that do. In a relational statement like "Mickey Mantle hit the ball into the bleachers," the predicate contains expressions that refer to what he hit (the ball) and the place he hit it to (the bleachers). But the predicate as a whole, "hit the ball into the bleachers," does not refer to any existent; it specifies an action that is being attributed to Mickey Mantle. In other words, just as a subject normally cannot refer to an existent without characterizing its identity, a predicate often cannot characterize something without referring to one or more existents. But reference is the primary function of the subject, to which any implicit attribution is a means; and attribution is the primary function of the predicate, to which any reference it contains is a means.

The function of the predicate, we have seen, is to specify the identity of the existents we are referring to. More precisely, its function is to specify particular aspects of their identity. The great advantage of concepts is that they allow us to break down the identity of a thing, which is given to us as a unified totality in perception, into specific features and dimensions of identity: specific attributes, actions, and relationships. In a proposition, the concepts we use in the predicate allow us to attribute

these specific features and dimensions to things. In this sense, to put the matter in basic epistemological terms, a proposition represents the opposite pattern from a concept: in concept-formation, we differentiate a group of similar things from all others in order to integrate them into a new mental unit; in a judgment, we integrate concepts

into a proposition in order to differentiate a particular aspect of the subject's identity from all others.

Since concepts are abstract, a predicate specifies a particular aspect of identity abstractly. The proposition "John is a man" asserts that John's identity falls within the range of omitted measurements for the concept "man": he bears some quantitative relationship to the other units of the concept, along each relevant dimension of measurement, but may bear any quantitative relationship. The same kind of analysis applies to propositions that specify a particular attribute: "John is tall" asserts that his height is within the range of omitted measurements of the concept "tall." "John is married" asserts that John's relation (to someone) is within the range of omitted measurements for the concept "marriage." These propositions repeat the cognitive act of integration involved in forming the predicate concept. We are simply recognizing a new existent as a unit of the concept by omitting the relevant measurements. The same is true for a proposition with an already conceptualized subject, like "Copper is a metal." Here we locate the units of the concept "copper" within the range of omitted measurements of the concept "metal."

But just as we can adjust the degree of universality in what the subject refers to, we can adjust the degree of abstractness with which the predicate specifies identity. Instead of describing John as tall, we can say that he is 6'4" tall, thus reintroducing a measurement omitted in forming the concept "tall," but reintroducing it in an explicitly conceptual way, as a numerical multiple of a unit of height. Again, instead of saying that he is married, we can say that he has been happily married to Beth for five years. Here again we have filled in some of the measurements that are omitted in forming the concept "married": whom he is married to, for how long, with what degree of success in achieving the aims of marriage. When we say that copper melts at 1083 degrees Centigrade, we ascribe to the units of "copper" the capacity designated by the concept "melt," a change of state that must occur at some temperature but may occur at any; but we also specify the specific measurement of temperature at which these units melt.

As an integration of concepts, to summarize, a proposition's cognitive content is a product both of what it integrates--the component concepts (along with names, demonstratives, etc.)--and of the form of the integration. The basic form is the subject-predicate structure. The function of the subject is to refer, to specify one or more existents, and the grammatical structure of the subject allows us to select the degree of universality in the range of existents referred to. The function of the predicate is to characterize, to specify an identity, and the grammatical structure of the predicate allows us to select the degree of abstractness in the specification of identity. The integration of subject and predicate into an assertion reflects the law of identity--in particular the fact that existence and identity are not distinct.

The foregoing is only the barest introduction to the structure of the proposition and the cognitive integration it reflects. Among the many issues I have not addressed, there is one that I want to mention explicitly. I have dealt with subjects and predicates as they occur in natural language. I have not dealt with the efforts of logicians to regiment these elements, putting them into standard logical forms. Modern predicate logic insists that only names and pronouns (variables) can function as logical subjects, and that all conceptual content in a proposition is to be treated as logical predicates. Thus a universal proposition like "All humans are mortal" is analyzed as $(x)(Hx \supset Mx)$: for any existent, if it is human, then it is mortal. In a relational statement like "John is married to Beth," moreover, modern predicate logic insists that Beth is a logical subject along with John. By contrast, traditional term logic insists that subjects as well as predicates can be conceptual. The term "humans" in "All humans are mortal" is not a disguised predicate. Term logic divides both subject and predicate into two elements: a subject consists of a quantifier and a term, a predicate of a copula and a term. The same term can serve either in the subject or the predicate, and plays the same role in either case of designating a category of existents.

As far as I can see, the epistemological considerations I have discussed do not support either logical theory, or favor one above the other. The considerations that lead us to look for common logical forms in the structure of propositions have to do with explaining common patterns of valid inference, and are beyond the scope of this discussion.

II. PROPOSITIONS AND REALITY

Let us turn now to the question of how propositions relate to reality. The Objectivist epistemology is a form of epistemological realism, and realists have always subscribed to the correspondence theory of truth. A propositional judgment is an attempt to grasp reality; in particular, as we have seen, it is an attempt to grasp the identity of one or more existents. That identity is what it is independently of our minds. A proposition is therefore true if it corresponds to the facts about the thing's identity, and false if it contradicts the facts. Yet the correspondence theory of truth has been notoriously difficult to defend, or even to state clearly, chiefly because of difficulties in the conception of facts as existents.

Entities, attributes, actions, and relationships are the categories of existents to be found in the world apart from us. I am speaking here of concrete particulars, not abstractions: my car, not the category car; the specific color of my car, not the abstract attribute white, nor even the specific shade as a color some other car might have; my drive to the post office this morning, not driving in general as an abstract type of action; my ownership of the car as a concrete relationship, not ownership in general.

What sort of being is a fact? The fact that my car is white is not to be identified with the car itself, as an entity, nor with its color attribute. A fact, qua fact, cannot be identified with anything in any of these categories. A fact is always a fact that x is P, or the fact of x's being P, not x by itself, and not

the substantive kind or attribute, action, or relationship designated by "P". Concrete particulars always have a location in space and time, but facts do not. The fact that my car is white does not follow the car around spatially. And it will survive its extinction: years from now, long after the car itself has been flattened for scrap, it will still be true that this car was white. As Peter Strawson observed in a famous essay:

The only plausible candidate for the position of what (in the world) makes the statement true is the fact it states; but the fact it states is not something in the world. It is not an object; not even (as some have supposed) a complex object consisting of one or more particular elements (constituents, parts) and a universal element (constituent, part). [P. F. Strawson, "Truth," in George Pitcher (ed) Truth, 37]

The suspicion that facts are not to be found in the world is compounded when we consider that the term "correspondence" suggests a one-one relationship between propositions and facts: each true proposition has its own fact that makes it true. This implies that there is a plethora of facts surrounding each concrete particular, one for each distinct way of describing that particular abstractly. Consider again the proposition that my car is white. I can specify the existent I am referring to by using a more abstract term (vehicle) or a less abstract one (Mazda). And I can specify its color characteristic more abstractly (as light-colored) or less (slightly off-white with brown tones). With just these three variants for the subject term, and three for the predicate, we could produce nine propositions distinct in meaning. Are there nine facts about the color of my car? Again, my car is not blue. Does that negative truth require a negative fact? If so, the number of facts is limitless, for negative statements about the car can be produced indefinitely: it does not have power locks, it has never been in Idaho, it has never been driven by Tom Cruise, it is not made of plywood....

These reflections strongly suggest that facts are in some way relative to our thoughts. To quote Strawson again: "Of course, statements and facts fit. They were made for each other. If you prize the statements off the world you prize the facts off it too; but the world would be none the poorer." [39] If facts are dependent on knowers in some way, however, then they do not seem qualified to serve as the independent determiner of the truth or falsity of our statements. And from this many philosophers have inferred that there is no independent determiner of truth and falsity, that statements are made true, not by their relationship to reality, but by their relationship to each other in patterns of coherence.

The argument rests, however, on a false dichotomy: the assumption that facts must be either intrinsic existents or subjective projections of our thoughts. This is a false dichotomy because there is a third alternative: that facts are objective in status, i.e., that a fact is an aspect of a thing's identity as grasped by consciousness through certain integrative processes. Objectivity in this sense is an ontological status arising from the fact that consciousness has a specific identity, and in particular from the fact that conceptual awareness operates by a

specific process of integration.

To clarify the nature of this objective status, consider the parallel question about concepts. What is the content of the concept "man"? What does it correspond to in reality? It is natural to say that it corresponds to the type or category man, or to the attribute manness (humanity). A type, category, or attribute is something universal--it has more than one instance--and abstract--it covers a range of qualitatively distinct identities. But everything that exists independently of consciousness is concrete (rather than abstract), and particular (rather than universal). Types, categories, and abstract attributes do not exist as intrinsic features of reality. They are ways of grasping the concrete particulars that do exist apart from us, based on the patterns of determinate similarities and differences among them and on the process of measurement-omission by which we process those patterns. Abstractness and universality are features arising from that cognitive process; these features are analogous to the form in which we perceive an entity.

Facts, I would argue, have the same status in regard to propositions that categories and abstract attributes have in regard to concepts. There are two basic arguments for attributing this status to them. The first is that a fact includes abstract categories and attributes, and so must have the same status. Consider the fact that all elks are herbivores. This is a universal fact, about elks as such, all of them. It cannot be reduced to a series of particular facts about this elk, that elk, the other elk and so on, without including in the list the non-particular fact that these are all the elks there are. Universality in reference cannot be reduced without remainder to particular references.

Nor can we eliminate abstractness in identification. When I describe a table as wooden, I am saying that in regard to material composition it falls within the range of the concept "wooden." Having omitted its measurements, I am not saying anything different about this table from what I am saying about any other wooden object, despite the concrete differences among their material characteristics: one is made of pine, another of oak; one is brightly varnished, another scuffed and water-stained. Consider then the propositions a) that the table is wooden and b) that it is pine. These propositions are made true by the same concrete determinate attribute: the actual material composition of the table. I am simply describing that composition at two different levels of abstractness. Thus if the fact that the table is wooden is a different fact from the fact that it is pine, we must acknowledge that it contains an abstract element, and has the same objective status as the abstraction wooden. In this sense, we may say that facts inherit that status from their conceptual components.

The second reason for attributing this status to facts is their own internal structure *qua* facts. The fact that the table is wooden has an internal subject-predicate structure, with the "is" representing a relationship between the table and its attribute. But there is no intrinsic relationship here. A thing is its identity, not something separate that is related to it.

The copula, in other words, has the same status at the propositional level as abstractness and universality at the conceptual level. For the reasons outlined in the previous section, the explicit reunification of an existent with its identity is a

requirement imposed by the differentiating and abstracting nature of concepts, but there is no bifurcation between existence and identity in the thing itself, and thus no actual, intrinsic relationship for the copula to capture. We cannot speak of a relationship unless there is some distinction between the relata, and if the distinction is objective rather than intrinsic--i.e., dependent on the knower's perspective--then so must be the relationship.

It might be argued that while an existent is its identity, it cannot be equated with any one aspect of its identity: in the judgment that my car is white, the color I attribute to my car is only one part of its identity; there is thus a part-whole relationship between that which I refer to and that which I attribute to it, a relationship that does exist intrinsically. It is certainly true that an existent is not identical with any aspect of its identity, and that it is in some sense the "totality" of its aspects--the term "totality" suggesting a part-whole relationship. But the suggestion is misleading. A part can exist in isolation from the whole. A part of an entity, like a table's leg or a molecule in its surface, can be physically detached. A part of an action, like the first step of a waltz, can occur without the whole if the action is interrupted. But an attribute, action, or relationship, as an aspect of the identity of some existent, cannot be separated.

Because a part is separable, there is an actual relationship--normally a spatio-temporal and/or causal relationship--that it bears to other parts and to the whole. But there is no relationship of inherence between a feature of an existent's identity and the existent itself; the identity of the feature as an existent in its own right includes its being a feature of the particular existent it characterizes; the distinction between them is a conceptual one. This difference between parts and features is captured in the grammar of English by the fact that we can say, e.g., that the apple is red (a feature) but not that it is seeds, skin, or flesh. To predicate a part, we must say that the apple has or is composed of seeds, skin, or flesh; what we predicate is not the part per se but the relational feature of having parts.

(If we imagine that there is some intrinsic relation between a thing and its features, the latter being regarded as existents in their own right, then we are launched on what might be called Bradley's regress, after an argument made famous by F.H. Bradley. The relation between the thing and its feature will itself be a feature of the thing, and thus an existent in its own right. So instead of the complex <thing - feature>, where the hyphen represents the relationship, we will now have the complex <thing - relation - feature>. And now we must ask how the relation is related to the thing: every hyphen will have to be cashed out as a relational existent, producing a new hyphen, ad infinitum.)

A fact, then, is the objective content of a (true) judgment and of the proposition that is its product, just as an abstract category or attribute is the objective content of a (valid) concept. To summarize this analogy and put it in context, we may expand the table I presented earlier to include the status of the content of conceptual awareness (and to compare it with perception):

	Perceptual	Conceptual	Propositional
<i>Integrative act:</i>	Perceptual awareness	Concept-formation	Judgment
<i>Product:</i>	NA	Concept	Proposition
<i>Verbal expression:</i>	NA	Word	Sentence
<i>Objective content:</i>	Entity-in-a-form	Category or abstraction	Fact
<i>Intrinsic content:</i>	Entities, attributes, relations, actions		

All cognition involves some action of consciousness. Above the conceptual level, the action involves the integration of perceptual data; the integration is retained as a product and can be expressed in language. What is the content of the actions and resulting states? Ultimately, the content is existence, and what exists are entities, attributes, actions, and relationships. This is what I have labelled the intrinsic content. These are the ultimate objects of awareness; the function of consciousness at all levels is to grasp their nature. The conceptual level provides us with a more powerful means of grasping them, and a means of expanding our grasp beyond the range of what we can perceive. Metaphysically speaking, however, the conceptual level does not put us in contact with any new ontological category of existent.

The need to distinguish objective from intrinsic content reflects the fact that consciousness operates in specific ways, affecting the manner in which we grasp what exists. Thus in perception an entity must appear to us in a specific form determined by the way our perceptual apparatus interacts with it. (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.) In concept-formation, we reduce a network of similarities and differences among an open-ended class of objects to an abstract type or attribute. And in forming a judgment, we grasp an aspect of one or more existents' identity in the form of a subject-predicate unity: the fact that S is P.

Then what about invalid concepts or false propositions? By the analysis formulated in the table, these have no objective content, yet surely they are of or about something. An invalid concept at least purports to designate an abstract kind or attribute, and a distinctive one at that: the concept "elf" has a different content from the concept "extremism," even though there is no category of elves in reality, nor a single attribute extremism among political positions. Similarly, a false proposition makes a distinctive claim, and the false claim that water runs uphill is distinct from the false

claim that humility is a virtue, even though neither of these are facts.

This objection can be answered by focusing on two points. 1) Every act and product of consciousness, valid or invalid, true or false, has an intrinsic content. By the thesis of the primacy of existence, no cognitive state can have a content made up ex nihilo. There must be some relationship to reality, some input of perceptual data. The integrative processes of the mind can only separate or combine, integrate or differentiate, rearrange or distort, the material provided by the senses. What happens in the nonveridical cases is that the material is misintegrated. Thus the claim that water runs uphill integrates certain existents (those substances designated by "water") with a concept incompatible with their actual identity; the claim that humility is a virtue integrates certain other existents (those character traits designated by "humility") with a distinct concept

incompatible with their identity. Though the two claims are false, and neither has an objective content, they do integrate an intrinsic content into a judgment. It is the differences in their respective intrinsic contents, along with the manner of integration, that explains the difference between the judgments.

2) In regard to valid concepts and true propositions, the objective content is not some new entity existing in the mind, or in the world, or in some Platonic realm. What exists in the mind is the integrative cognitive action and its product; what exists in the world apart from the mind is the intrinsic content. The objective content is not an internal representation standing between the mind and reality, any more than the comparable item in perception--the entity-in-a-form--is an internal image or sense-datum. It is simply our name for the intrinsic content as properly integrated by a concept or proposition. Thus, there is nothing there, ontologically speaking, in the case of a true proposition that is missing in the case of a false one. If there were some reason to do so, we could coin a term for false or invalid contents, i.e., for the intrinsic content as improperly integrated by a concept or proposition. We could refer to it as a putative category, a purported fact, and the like. But we do not often have reason to make such references.

It may then be asked: Why do we need a concept of objective content even for valid concepts and true propositions? Why not just say that there are various existents in the world and various ways of integrating them cognitively, and that when we integrate properly the result is valid or true? The reason is that we do not integrate all the way down, so to speak, in one fell swoop. When we form the judgment that elk are herbivores, we already possess the concepts of elk and herbivore as tools of cognition; what we are integrating is the category elk with the attribute herbivore. If we tried to formulate the full truth conditions of this judgment in terms of what exists intrinsically, we would have an unimaginably long list of items: every elk that exists, past, present, and future; the members of other species from which we contrasted elk in forming the concept; every act of eating by each of these elk during its entire life; and every plant that exists, past, present, and future (since "herbivore" means "plant-eating"). By the crow epistemology, this list could not possibly be held in mind simultaneously and

subjected to a single complex act of integration.

We integrate in stages, forming a new objective content which is then available as input for a higher-order integration. We form concepts to reduce an aggregate of concretes to a category or abstract feature. We form higher-order generic concepts by integrating lower-order ones. We form simple subject-predicate judgments by integrating particulars with concepts ("Tom is running") or concepts with concepts ("Cheetahs run fast"). We form more complex judgments by incorporating simpler ones through embedding ("He acknowledged that taxes are coercive").

At each stage, it is possible to integrate improperly and thus fail to produce an objective new content. This failure may perpetuate itself if the improper integration is incorporated in some high-level integration, but this cannot proceed very far before we produce incoherence. In particular, we cannot evaluate a proposition as true or false unless it makes a definite claim, and this in turn requires that it specify one or more existents and that it specify one or more aspects of identity. If a proposition incorporates invalid concepts or false propositional constituents, it will violate one or both of these requirements, producing a failure of reference or of predication. Thus "elves wear green hats" is neither true nor false because there are no elves, and "The man I met in Vienna was a spy" is neither true nor false because I have never been in Vienna. Both statements fail to refer to anything. "Barry Goldwater was an extremist" is neither true nor false because the concept "extremism" fails to specify any essential and consistent dimension of identity; the statement therefore fails to predicate anything of its subject. The same is true of terminally vague statements like "The reader is simply that someone who holds together in a single field all traces by which the written text is constituted." [An actual example, from Roland Barthes, quoted in Steve Kogan, "Discourse Production" [Academic Questions](#)]

In light of the foregoing, we can see that the standard criticisms of the correspondence theory of truth have a point. It's not that the theory is false, but that it is superficial and incomplete. The theory says that a proposition is true if it corresponds to a fact. The traditional picture is that facts exist in the world, propositions in the mind (or in a Platonic realm); various cognitive processes are required to put us in touch with the facts, but that is an issue of justification rather than truth; it is the sheer co-existence of a fact and a proposition with the same content that yields truth, regardless of any cognitive relationship we have with the fact. But neither facts nor propositions exist apart from cognitive processes: both the proposition as a product of the judgment and the corresponding fact as its content depend on our own integrative processes. Thus the correspondence theory must be interpreted as saying that a proposition is true if it has a fact as its content, but this is a tautology. That the proposition is true and that it has a fact as its content are two ways of saying the same thing: that the integrative act produced an objective content. To go beyond this, we need to specify the nature of that integrative act and the circumstances under which it produces an objective content.

This is what I have tried to do, in outline, in this paper. Assuming that the elements of a given proposition are valid concepts, its truth is a function of the

grammatical integration of those concepts. This integration can be complex, and I have not considered all--or even very many--of the possible forms. But the subject-predicate structure of simple categorical propositions is the foundation on which everything else is built up. So for these propositions, the criterion of truth is simply that the existents specified by the subject possess the identity specified by its predicate.