ABSTRACT. According to the received view, the philosophy of C.I. Lewis is a form of phenomenalism. The first part of this paper is an argument designed to show that Lewis does not support one of the necessary conditions for ontological phenomenalism; namely, the sense-datum theory. The second part is an argument designed to show that Lewis' theory is incompatible with linguistic phenomenalism, a view according to which there is an equivalence of meaning between physical object statements and sense-data statements. The argument is not merely that terminating judgments are not sense-data statements, but that they cannot be equivalent to objective statements.

The received view of the philosophy of C.I. Lewis is that it represents a form of phenomenalism. For example, R.J. Hirst, in his contribution to the Encyclopedia of Philosophy entitled "Phenomenalism", characterizes it as a "sophisticated version" of phenomenalism. It is the burden of this paper to demonstrate that the characterization of sophistication belongs, not to Lewis' theory, but to those interpretations of it which classify it as phenomenalism. This is a heavy burden because of the sheer weight of opinion on the other side. Not only that, but I shall be taking issue with some of the most respected members of the philosophical community, many of whom actually studied under Lewis at Harvard.

Part I of this paper sets forth an argument to the effect that Lewis' views are not properly to be thought of as factual, or ontological, phenomenalism. Part II is an argument meant to show that Lewis' position is not an instance of linguistic phenomenalism.

PART I: ONTOLOGICAL PHENOMENALISM

A necessary condition for accepting phenomenalism is the holding of some form of the sense-datum theory. All who espouse phenomenalism espouse some form of the sense-datum theory. The converse, however, does not hold. It will therefore be an essential part of my study to show decisively that, the received view notwithstanding, the philosophy of C.I. Lewis is not an exemplification of any form of the sense-datum theory. In order to show this I shall set out what I take to be the essential minimum commitments of the sense-datum theory. I shall then
set out Lewis' theory of perception with a view to showing that, not only is it not intended by Lewis to be an instance of the sense-datum theory, it is actually incompatible with that theory. If I succeed in my purpose, the attribution of phenomenalism will be short-circuited.

One of the motives behind the development of the sense-datum theory is the view that our knowledge of the world must be somehow limited because it is a product, at least in part, of defective senses. This has led some philosophers to offer a number of arguments for the introduction of what we actually, or directly, see when we find ourselves in a perceptual situation. First, in the article already referred to above, distinguishes three such arguments: the certainty argument, the partitive argument, and the argument from the content of illusion.

Proponents of the certainty argument claim that directness or givenness implies certainty and, therefore, that the only thing to be called "given" must be something about which we are absolutely certain. Inasmuch as we are never certain that we are seeing a physical object in any perceptual situation, physical objects are not seen directly and are not given. Nonetheless it is certain that we are seeing something. That something must be a sense-datum. The point of the partitive argument is that, in any perceptual situation, what we see is not the whole of the object, but only a part of it. The sense-datum is thought to be the "part" that we see. In the case of illusion, if I should seem to see two objects where I know there to be only one, nevertheless, I am seeing something. That something is a sense-datum. Again, when I view a round plate at an angle, it appears elliptical. Since the plate is round, not elliptical, I must be seeing an elliptical sense-datum. Another argument used to introduce sense-data is the causal argument. According to this argument, the light from the sun left the sun eight minutes before it came into contact with my eyes. I cannot, therefore, be seeing the sun as it is now, but the sun as it was eight minutes ago. Since I am not directly seeing the sun, I must be directly seeing a sense-datum.

Inasmuch as the sense-datum theory is not widely held today, there is no point in going over what are generally conceded to be fatal objections to it. What is germane is to show that one will search in vain in the corpus of Lewis' writings for arguments of the above type intended to establish the existence of some entity which is directly seen rather than physical objects. What I wish to establish is that when Lewis talks about "the given", "sense-datum","the immediate", "presentations of experience", and "appearances", he is never talking about sense-data. In all cases where he uses such language, we are free to understand that he is talking the way someone innocent of the sense-datum theory would talk. He is never talking about an inner object or "idea", or an outer entity which is not yet a physical object. If one reads Mind and the World Order and An Analysis of Knowledge and Valuation with a sense-datum gestalt one finds an inconsistent theory which deserves the neglect it has suffered. If one reads these works with a non sense-datum gestalt, one will discover a consistent pragmatic theory of meaning and knowledge.

Lewis tells us that realism cannot be proved, but rather, must be posited. Where in the argument does this posit fit in? If it were tacked on the end of an analysis of subjective perceptual states, such as sense-data or the traditional "ideas", for the purpose of letting Lewis escape the egocentric predicament, it could not possibly be of any use
in salvaging Lewis' theory from the charge of phenomenalism. Clearly, however, this is not the case. The presupposition is at work from the very beginning. For example, "We do not see patches of color, but trees and houses; we hear, not indescribable sound, but voices and violins. What we most certainly know are objects and full-bodied facts about them which could be stated in propositions." This passage occurs in Chapter II of *Mind and the World Order*, entitled, "The Given Element in Experience." That is to say, early in the discussion. At the beginning of Chapter Two, Lewis sets out his principle theses. The first states that "The two elements to be distinguished in knowledge are the concept, which is the product of the activity of thought, and the sensuously given, which is independent of such activity" (emphasis supplied.) Just a few pages later in a discussion critical of idealism, Lewis says that it is "characteristic of idealism to point out that the moment of pure given-ness is a fiction, and its data an 'unreal abstraction.' There is no apprehension—he will insist—without construction; hence the distinction of subject and object, act and given, must be within thought, not between thought and an independent something thought about." A few lines later, Lewis asks rhetorically "Whether there is the beginning of a fallacious train of reasoning in this stretching of the 'thought' to cover the cognitive experience as a whole . . ." Phenomenalism requires thus stretching the term "thought". The third thesis states that the conceptual element and the given element do not limit one another.

If we look at an actual example of "the given" in *Mind and the World Order*, the first one offered, in fact, we find Lewis writing about objects, not sense-data. The object in question is a fountain pen. If this were intended to be an attempt to elicit the concept of a sense-datum in the reader, it is a miserable failure unless the reader comes to the analysis already with the concept and reads it into the analysis. A typical sense-datum philosopher would introduce the concept with arguments such as those to which I have called attention above. In talking about a fountain pen, the sense-datum theorist would attempt to cash "fountain pen" out in terms which do not refer to physical objects. For example, he might argue that the meaning of his claiming that there is a fountain pen present is that he is directly perceiving a black color patch of a long rectangular shape divided roughly in the middle, the above portion slightly broader than the lower and juxtaposed to a smaller slender rectangular silver colored patch.

What does Lewis say about the fountain pen? He notes that his present understanding of it is colored by his previous experience with such objects. An infant might classify this object as a smooth biteable. A twentieth century philosopher sitting at his desk in his study might classify it as a device especially useful for setting down on paper his thoughts about experience. "A savage in New Guinea, lacking certain interests and habits of action which are mine, would not so classify it." What is the denotatum of "it"? Surely a physical object! A tribesman in New Guinea cannot have an experience of Lewis', your, or my, sense-data. The discussion proceeds: "There is, to be sure, something in the character of this thing as a merely presented colligation of sense-qualities which is for me the clue to this classification or meaning; but that just this complex of qualities should be due to a 'pen' character of the object is something which has been acquired" (emphasis supplied.) Someone might wish to object at this point that Lewis uses terms such as "merely presented," and "sense-qualities". Is this not sense-datum language? But, how else would you have someone describe his experi-
ences? Is there some magical terminology reserved for talk about the everyday world that one must never trench upon? The passage continues:

Again, suppose my present interest to be slightly altered. I might then describe this object which is in my hand as "a cylinder" or "hard rubber" or "a poor buy." In each case the thing is somewhat differently related in my mind, and the connoted modes of my possible behavior toward it, and my further experience of it, are different. Something called "given" remains constant, but its character as sign, its classification, and its relation to other things and to action are differently taken.

The terms in quotes are all physical object terms. The phrase, "In each case the thing is somewhat differently related in my mind" means that "In each case I bring a different conceptual apparatus to bear". To bear on what? On publicly observable objects, not private sense-data.

This meaning or interpretation or construction which is attached to the given is significant in two directions, connected but different. The one is the relation of this which is immediately presented to further actual and possible experience; the other is its relation of my interest and action . . . "which connotes an interplay between the temporal process of further possible experience and my own purposes and behavior. Since I not only think but physically act, I enter into the temporal process of the future as a factor which determines, in some part, what it shall present. Thus my interpretation is predictive of my own physical behavior as forecast by my present interested attitude, and of further experience as affected by that behavior. Is Lewis inadmissibly mixing sense-data talk with physical object talk? I think not. Instead, in all cases Lewis is talking about what philosophers are fond of calling the "external world" and what everyone else calls "the world". Lewis points out that "we cannot describe any particular given as such, because in describing it, in whatever fashion, we qualify it by bringing it under some category or other, select from it, emphasize aspects of it, and relate it in particular and avoidable ways". Lewis' own attempts to write about the given exemplify the point he is here making. Any language he might use to refer to it can be interpreted to be sense-data language. It is that interpretation that I am attempting to block.

"The given, as here conceived, is certainly an abstraction". And that is because it is half of the knowledge situation, the other half of which is the conceptual. "Any Kantian 'manifold' as a psychic datum or moment of experience, is probably a fiction, and the assumption of it as such is a methodological error". In other words, the given is not something found in a "mind". "The only important question is whether this abstracted element, the 'given', is genuinely to be discovered in experience. On this point I can, of course, only appeal to the reader. I shall hope that he has already identified provisionally what the word intends, and proceed upon that basis". I contend that if the reader
proceeds upon the basis of believing that "the given" is a sense-datum, he will seriously misunderstand the whole of what Lewis has to say.

Some of Lewis' critics have conceded that Lewis did not fall into the trap of sense-datum philosophy in Mind and the World Order but find An Analysis of Knowledge and Valuation another matter altogether. The first thing that needs to be pointed out to these people is that Lewis stated explicitly in his autobiographic statement, found in The Philosophy of C. I. Lewis, that "there is nothing in Mind and the World Order which I would now recant". Let us turn, however, to An Analysis of Knowledge and Valuation and see for ourselves what Lewis writes there about the given. We shall, of course, continue to be plagued by the ambiguity introduced into philosopher's English by the sense-datum theorists. When they talk of "experience", "presentations", "the sensuous", "appearance", and "sense-data", they are talking about mysterious entities with peculiar properties that no one else has ever thought of. When Lewis uses these terms, he means what you and I and other sensible people mean who have not been corrupted by "logical howlers".

"The sense of the possible-to-experience but not actually experienced is, at one and the same time, our sense of ourselves as active and our sense of an objective reality which presentation signalizes". (Emphasis supplied) How can a presentation, understood as a sense-datum, signalize anything but another sense-datum? The front side of a physical object, however, signalizes quite nicely the back side should one wish either to turn it around or walk behind it. "The epistemological significance of any statement 'A is real' is correlative with some statement of the form, 'Experiences a₁, a₂, a₃, ... (e.g., the unseen sides of the object presented to vision, and the inside of it) are possible experiences not now given, though signalized by what is given'". If the variables are to be instantiated by sense-data, why does Lewis in fact instantiate them with the "unseen sides of the object "n.b. presented to vision, and the inside of it"? Again, the use of the term "signalize" points away from a sense-datum interpretation.

"The world", Lewis writes, "contains not only what is felt and what in fact will be given in experience but also all that could be. "The world", not "the mind", whatever that term might possibly mean. The point is brought home:

Those philosophic skeptics who suggest that perhaps the objects we observe lapse from existence when we cease to observe them and come back when observed again, talk nonsense. That which can be realized in experience whenever we choose to take appropriate action, verifiably exists though unobserved. The challenge is correctly met in the manner in which common sense "emphasis supplied would meet it: tell us when the north side of the house no longer exists, and we will then show you that it is still there. "No sense-datum theorist worth his salt would be even slightly moved by this challenge. Whether this character of objective factuality be expressed in common-sense cosmological terms, by saying that the experience can be recovered because the thing is there to be observed, or is formulated epistemologically, by saying that existence of an object through a time empirically means the continued possibility of
verifying it if appropriate routines of action be followed [observe that Lewis takes the two formulations to be equivalent], it is in either case the same character of *objective reality in the thing observed* [emphasis supplied] which is expressed. 17

**PART II: LINGUISTIC PHENOMENALISM**

In *An Analysis of Knowledge and Valuation*, Lewis has further elaborated and refined the theory of knowledge which he set out initially in *Mind and the World Order*. In Part II of this paper I shall confine myself to a consideration of only one important detail to be found in Lewis' epistemology. I shall be concerned with the relation obtaining between an objective statement, or as Lewis himself often calls it, a nonterminating judgment, and the set of judgments which Lewis claims to follow from an objective statement. An example of an objective statement might be, "This is my cat, Ananda". This statement intensionally entails a set of further judgments such as "If this appearance is indeed that of Ananda, then if I should call out his name he will in all probability respond". These further judgments Lewis calls terminating judgments. The relation in question between an objective statement and the (infinite) set of terminating judgments is one which Lewis characterizes in a variety of ways, but spells out most clearly in Chapter VIII, Section 17, entitled "Summary with respect to critical points". In order to fully understand this account, it is necessary to understand Lewis' theory of the *a priori*. This theory is an original contribution to philosophy on Lewis' part. I shall refer to it as "the theory of the relative *a priori*" to distinguish it from its chief rival, the theory of Kant, which I shall call "the theory of the absolute *a priori*". 18

My procedure shall be to set out briefly in Section A the theory of the relative *a priori*. Next, in Section B, I shall state Lewis' characterization of the relation between terminating and nonterminating judgments. In Section C, I shall turn to what I consider to be two typical misunderstandings of this relationship. Finally, in Section D, I shall state what I think to be the correct interpretation of the relationship.

**A. The Relative *A Priori*: Meaning**

The relative *a priori* is to be distinguished from the viewpoint of Kant, which I call the absolute *a priori*. Students of Kant are familiar with this theory, which proposes to explain human possession of a kind of knowledge which is universal and necessary and therefore not vulnerable to the slings and arrows of experience, as are empirical claims to knowledge. For Kant, this kind of knowledge owes its existence to the constitution of the human mind and is the same in all minds we call human. It is an innate endowment.

Lewis takes issue with this account and argues that the universality and necessity of *a priori* knowledge has a basis, not in innate structures, but in the definitive nature of concepts. All concepts, for Lewis, are definitive. "The paradigm of the *a priori* in general is the definition". 19 To grasp fully a concept we must be in possession not only of its dictionary definition ("linguistic meaning") but also of its sense meaning; that is, we must be able to recognize on the basis of
previous experience future instances of what would assure the truth of
the application of the concept to appearances. This constitutes Lewis' appreciation of Pierce's pragmatic maxim: "Consider what effects, that
might conceivably have practical bearings, we conceive the object of our
conception to have. Then our conception of these effects is the whole of
our conception of the object". The linguistic meaning and the sense
meaning go together to make up the intension. A sense meaning is a cri-
teron in mind which "when precise and explicit, is a schema; a rule or
prescribed routine and an imagined result of it which will determine
applicability of the expression in question". To be in possession of the
concept "apple" is to be prepared to recognize an apple when con-
fronted with one. Since there are inexhaustible opportunities for future
experience arising from the presence of an apple, there are unlimited
consequences in possible experience flowing from the predication of the
concept, "apple", to an appearance. For example, the concept "apple" in-
cludes the concepts of "tart sweetness", "ruddyness", "crispness", and
so on. The concept intensionally entails, then, an unlimited number of
further concepts making up the meaning of "apple". We are, of course,
in possession of only some of these and to that extent must be ignorant
and not fully understand what we mean. This sense of "entails", how-
ever, is clearly not just a truth-functional or logical one, say of de-
ducibility. Anyone who does not already know from experience at least
part of the sense meaning of "apple" will not be able to deduce the
sense meaning from the concept.

It is important to realize, and often overlooked in discussions of
this theory, that a concept includes such things as scientific general-
izations and the effects of perceptual relativity. "Indeed," Lewis claims,
"all definitions and all concepts exercise this function of prescribing
fundamental law to whatever they denote. . . . The definition provides
criteria of the thing defined which, in application, become necessary or
essential laws of its behavior". For example, being a fruit is included
in the concept of an apple together with whatever is entailed by being
a fruit. Included also in the concept of an apple is being a physical ob-
ject with all that is entailed by that. In addition, the fact that if one
were to bite into an apple after having just eaten some very sweet
candy, the apple would taste sour, is also included in the concept of an
apple as part of its meaning. Lewis notes that "The reader will perhaps
feel that, in so far as this is true, what is here represented as a priori
is nothing of the sort but is merely something that we learn from expe-
rience".

A typical example of an analytic, and hence, a priori sentence is,
"All apples are fruit". Anyone with an adequate concept of "apple" and
an adequate concept of "fruit" will recognize that the appearance of an
apple is at one and the same time the appearance of a fruit. Necessarily
then, all apples are fruits. Lewis recognizes the possibility, however,
that some future botany may recategorize either apples, or fruits, or
both, just as botany classifies tomatoes as fruits rather than as vegeta-
bles. How then can "all apples are fruits" be true a priori? "That is a
priori which is true, no matter what". The answer is that the concept
"fruit", no longer exhibiting in experience the former consequences, is
withdrawn and replaced by another concept, dictated by the new botani-
cal taxonomy. The a priori for Lewis is thus relative to a conceptual
scheme and not an absolute fixed endowment of the human mind, as it is
for Kant.
Inasmuch as all concepts are definitive, their definiendum together with their definiens constitutes an analytic statement. Thus, the concept "apple" includes in its definiens the concept "crispness". "Crispness" then is an analytic consequence of "apple". Of course, I can only know this if I possess the relevant sense meanings as well as the relevant linguistic meanings.

B. The Relation Between Objective Statements and Terminating Judgments: Knowledge

An objective statement, Lewis tells us, entails an infinite set of terminating judgments. When we examine this claim in more detail, we shall see that the sense of "entails" at issue is the same as that involved in the meaning of a concept. The terminating judgments spell out the passages of experience which are expected to accrue in the event that the objective statement is true. Thus, if I claim that "This is an apple", then I shall expect that given a certain sensory cue (S), and given that I perform a certain action, say biting (A), I shall expect that, in all probability, I shall experience a certain tart sweetness in my mouth not unlike similar experiences in similar situations in which I have found myself in the past (E). The expected experience is part of the concept of an apple. There will be a similar terminating judgment corresponding to each of the concepts associated with the intensional meaning of the concept "apple". Since these are unlimited in number, so must be the correlative terminating judgments. It is easy to see then that the notion of entailment as applied to the relation between objective statements and terminating judgments cannot be coextensive with the notion of logical deducibility in the truth-functional sense any more than the notion of entailment between a concept and its intensional meaning is coextensive with logical deducibility. For example, suppose that I am offered an object and I think to myself, "Here is an apple". The intensional meaning of my concept of an apple has two components, a linguistic meaning and a sense meaning. I possess the linguistic meaning because I am a member in good standing of the English-speaking community. I possess the sense meaning because I have had past experience with apples. Since my criterion in mind with respect to apples includes such further concepts as tart sweetness, ruddyness usually but sometimes pale greenness, juicyness, a feeling of crispness in my mouth and so on, I formulate the terminating judgment, "If this is really the appearance of an apple, then if I should bite into it, in all probability I shall encounter crispness". Clearly I cannot by logical means alone deduce that "apple" entails "crispness" because of the intensional factor involved. There is no ordinary sense of deduction such that I can claim that "apple" entails "crispness". Only experience with apples can teach me this. Moreover, if the relationship were one of truth-functional deducibility, then it could not be the case that the objective statement is true but the corresponding terminating judgment is false. Lewis explicitly states, however, that this is a possible state of affairs. For example, suppose that I really am in the presence of an apple and that I claim to see an apple, but when I bite into it, rather than the expected taste of tart sweetness I experience a certain sourness. If the relation between the objective statement and the terminating judgment were one of truth-functional entailment, then I should have to conclude that I was mistaken in believing in the real presence of an apple. It is at this point that the question of perceptual relativity enters the picture. It suddenly occurs to me that I have just
had a piece of candy. I recall from past experience that there is a natural connection between eating very sweet things and then experiencing less sweet things as not sweet at all or, perhaps, as in this case, actually tasting sour.  

C. Questionable Interpretations of this Relation

E.M. Adams, in "C.I. Lewis and the Inconsistent Triad of Modern Empiricism"," interprets the relation I have been discussing as one of truth-functional equivalence. A truth-functional equivalence, however, is a relation of mutual implication. In that case, if the truth of the objective statement implies the truth of the set of terminating judgments, the finding true in experience of the set of terminating judgments must imply the truth of the objective judgment. Lewis, however, argues that a terminating judgment is found decisively true only in the sense that any probability judgment is decisively true. Although the issue is much too complex to enter into here, a sense of the claim may be illustrated. If it is 99 percent probable that the sensory cue is the presentation of an objective apple because the expected taste was experienced, then it is absolutely certain that there is a 99 percent probability that there is indeed an objective apple present. This 99 percent probability simply will not license a deductive inference to the objective statement that there is indeed an objective apple present. Moreover, if the relationship were one of truth-functional equivalence, then the finding false of a terminating judgment would decisively falsify the objective statement. Lewis, however, explicitly denies this possibility. Indeed, he entitles Section 13 of Chapter VIII "Objective beliefs are not decisively falsifiable". The point is reiterated in Section 17, where Lewis writes that "a negative result of the test would not decisively disprove the belief".

Sandra Rosenthal, in her book The Pragmatic A Priori: A Study in the Epistemology of C.I. Lewis, characterizes the relation in question as one of strict implication. The notion of strict implication is Lewis' attempt to capture the meaning of logical deducibility. That the relation between an objective statement and a set of terminating judgments is not one of logical deducibility has already been shown above. It is further to the point that, if the objective statement strictly implied the terminating judgment and the latter were falsified, then the former, by modus tollens, would also be falsified. Because of the probability factor in terminating judgments, as pointed out above, the finding false of the expected experience does not falsify the objective belief statement.

D. The Logic of Intensional Implication

The relation between objective statements and terminating judgments is clearly a relation pointed out uniquely by Lewis and firmly based on his theory of the relative a priori. I have argued that it is neither a truth-functional equivalence nor a strict implication. I presume it would take no argument to claim that it is neither a material nor a formal implication. What then is left? Let us turn to Lewis' own statement, to be found in Chapter VIII, Section 17, entitled "Summary with respect to critical points".

This relation [between an objective statement and a terminating judgment], ‘<’, covers not only that of any premise
to a conclusion derivable from it by rules of deductive logic [which would make the relation a strict implication] but also, for example, that of "T is red" to "T is colored," which cannot be certified by logical rules alone but only through knowing the meaning of 'red' and of 'colored' and understanding the relation of these two meanings to one another.

The specific mode of meaning in question is that called 'sense meaning' in Book I. The sense meaning of a statement consists in the experiential criteria of its applicability to reality. To understand what a statement means, in this mode of meaning, is to be able to recognize what would assure the truth of it. Hence the meaning of 'P' [the objective statement] includes what would confirm it as holding; and any such confirmation is an analytic consequences of 'P'.

It is clear enough from this quotation, I believe, that the relation in question is part of what might be called the logic of intensional implication by perity with the logics of material and strict implications. This is clearly not a truth-functional logic. All those criticisms in the literature which attempt to make Lewis out as a linguistic phenomenalist are invalid, for they assume that the relation we have been discussing is truth-functional. In particular, Roderick Chisholm's criticism in "The Problem of Empiricism" is based on this mistake.

It is also worth pointing out that Lewis uses a special symbol for this relationship, used nowhere else, rather than the fish hook symbol used elsewhere in the text to denote strict implication. Moreover, he states that expressions which include this symbol "are not formulas and cannot be manipulated according to the usual rules of the logical calculi".

I believe that as a result of the considerations which I have here adduced, the relationship between objective statements and terminating judgments must be regarded as being neither truth-functional equivalence nor a strict implication. In consequence, Lewis' theory cannot be an example of linguistic phenomenalism as that term is ordinarily used by philosophers.

If I have succeeded in establishing the incorrectness of interpreting Lewis as an exponent of the sense-datum theory, then it follows that he cannot be a phenomenalist either. He cannot be a factual, or ontological, phenomenalist because physical objects are not for him—indeed, could not be—reducible to sense-data. He cannot be a linguistic phenomenalist because he does not claim that objective statements are equivalent in meaning to sense-datum statements. Since there are no sense-datum statements, terminating judgments cannot be examples of sense-datum statements. And, even if terminating judgments were intended to be sense-datum sentences by Lewis, they are not equivalent to objective statements. To interpret Lewis as a phenomenalist in either sense is to make a perfect mare’s-nest of his theory.
ENDNOTES

1. Vol. 6, 135.


28 Lewis, *Analysis*, 249, emphasis added.

29 See note 8 above.