My purpose in this paper is to attempt a vindication of phenomenalism, which seems presently quite discredited. I shall try to establish the following points: (i) The currently admitted inter-to establish the following from a merely “linguistic” point of view, — translational phenomenalism as I shall call it — is solely responsible for this discredit. (ii) Phenomenalism is in its primary sense an ontological view, while translational phenomenalism is neither a necessary nor a sufficient condition for ontological phenomenalism. (iii) Ontological phenomenalism can be construed as a logically consistent and practically satisfactory philosophy of natural science. (iv) Empiricism (whose position — even in the form of a “modest empiricism” — seems to be much threatened nowadays) is ipso facto restored in the strongest sense.

I

Modern analytical philosophers have formulated the phenomenalist’s position by the following statement to which I shall refer as the thesis of translational phenomenalism, (TP) for short:

(TP) Every sentence about physical objects is translatable (in the sense of mutual entailment) into a sentence about sense-data.

Using the prefix ‘T-’ for referring to a language about physical objects (a thing-language) and the prefix ‘S-’ for referring to

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one about sense-data (a sense-datum language), we can state the objections raised against (TP) in the following way:

(a) No T-sentence is translatable into an S-language.³
(b) There is no S-language at all.⁴
(c) There are no such things as sense-data, or rather the very assertion of the existence of such entities is meaningless.⁵

I agree emphatically with (a), maintaining that the translation in question would still be impossible, even if infinite classes (or classes of classes) of S-sentences were admitted and all other difficulties (viz., those connected with “normality”, “counterfactuals”, “open texture” and the “analytic-synthetic” distinction)⁶ had been removed. Indeed, if a given T-sentence were translatable into an S-language at all, (possibly by means of an infinite class, or class of classes,... of S-sentences) it would possess a range composed exclusively of S-state descriptions, i.e., of state-descriptions of the universe of discourse of the S-language. Conversely, if a T-sentence had such a range, it would be translatable into the S-language, the range itself being then a suitable translation of that sentence.⁸ But (as overemphasized by the classical theory of psychophysical parallelism, which is itself an expression of the unsolvability of the Mind-Body problem) S- and T-state descriptions are logically⁹ independent, so that no T-sentence can have a range composed of S-state descriptions. Hence no T-sentence is translatable into an S-language. This argument which refutes (TP), can also be used mutatis mutandis for the refutation of “translational physicalism”, i.e., the thesis that every S-sentence is translatable into a T-language.

Let us now examine the meaning of the key term ‘sense datum’, in order to weigh the objections (b) and (c) mentioned in Section I. A “sense-datum” is construed by the classical sense-datum theorists as that which I really see when I merely seem to see something. E.g., consider the sentence

(1) It now seems to me that I am seeing a table.¹⁰
According to the sense-datum theory, if (1) is the case, I am supposed to see really a "seeming-table", so that (1) is construed as standing for

(2) I really am now seeing a seeming table.\(^{11}\)

But it has been objected that (1) does not imply that there is anything (physical or mental) which I see. If (2) had been true without there being any physical object before my eyes, it would be appropriate for me to describe this situation in the following way: "It seemed to me that I saw a table, but I was really not seeing anything."\(^{12}\)

On the other hand, the physicalistic opponents of the sense-datum theory construe (1) as standing rather for a sentence of the form

(3) \(P(s)\)

where 's' designates my body and 'P' is short for a description of a particular state of my body, namely the state in which my body lies if and only if it seems to me that I am seeing a table. But I object, arguing that (1) and (3) are logically independent. (Indeed that is a case of "translational physicalism".)\(^{13}\)

We see that (1) is neither about a sense-datum (in the classical meaning of 'sense-datum'), nor about a body or a self. But I hold that this statement is nevertheless about a certain object, though not a physical one. Indeed, although it does not follow from (1) that there is anything seen by me, it still follows that there is such an event as "my seeming to see a table"; for if it seems to me that I am seeing a table, it is really undeniable that I do have such an experience, as a particular event, or episode, in the stream of my consciousness. Let me call such an event a "datum". Then any sensation, perception, observation or experience (if taken not in the sense of that which is sensed, perceived, observed or experienced, but rather as meaning a particular event of sensing, perceiving, observing or experiencing) is a datum. I propose to consider this concept of a datum as an explicatum for the classical term 'sense-datum', the latter being used intuitively for referring to those entities which constitute the "ultimate furniture" of the phenomenalist's world. In this way we can re-introduce sense-data as unobjectionable entities. Sentences like (1) will be then typical S-sentences, so that the existence of an S-lan-
guage becomes undeniable. Sense-data can then be said to be "subjective", "mental", "private" entities; but these epithets merely emphasize the fact that S-sentences are logically independent of T-sentences, i.e., from sentences supposed to be about "objective", "physical", "public" entities.

III

Phenomenalism, in its traditional sense is an ontological view, viz., the view that there are no such things as physical objects, but only sense-data. Using the term 'sense-datum' as explained in Section II, I shall formulate this view in the "semantic mode of speech" by the following statement to which I shall refer as the thesis of ontological phenomenalism, (OP) for short:

(OP) The ontological commitment of any T-language is fictitious; only that of an S-language is real, in the sense that only an S-language is directly about really existing entities.

It can be shown easily that (OP) is logically independent of (TP). (TP) neither entails, not is entailed by, (OP). Consequently (TP) can not be considered to be an adequate explicatum of the term 'phenomenalism' taken in its original sense. So my aim consists in justifying (OP). I shall, however, not attempt in this paper to prove the purely ontological part of (OP). I shall rather consider (OP) as a methodological rule (such as Ockham's razor, Descartes's methodic doubt, Husserl's phenomenological reduction, or Carnap's methodological solipsism), or perhaps as a stipulative definition for the terms 'existence' and 'physical object'; inquiring then whether a logically consistent and practically satisfactory interpretation of all natural science can be established on the basis of such a meagre ontology admitting no other entities than those which are unanimously and undeniably accepted, viz., the sense-data as explicated in Section II.

Now the simplest solution which comes to mind is to construe any T-language, even the so called "observation languages" ("O-languages" for short) as "theoretical" with respect to the S-languages — which would be then considered as the sole fully inter-
preted languages. But I object to such a proposition for the following reasons:

(a) It would be too great a departure from ordinary languages to consider an O-language as not fully interpreted.

(b) There is no S-language whose meaning can be determined prior to, and independently of, an O-language, so that it cannot be said that the meaning of any O-language is determined only on the basis of an S-language.

(c) There are no explicitly statable "correspondence rules" between S- and T-sentences. Indeed if there had been such rules, then C being their conjunction, T the conjunction of the postulates of the T-language and, R the Ramsey-transform of TC; we would obtain an analytic sentence, viz., $R \rightarrow TC$ ("if R, then TC"), which contains (non-vacuously) both S- and T-expressions. But according to the results established in Section I, there cannot be such an analytic sentence.

The solution that I shall adopt is based on the following facts:

(i) No S-language is used (as an object-language) in natural science; while the contrary has been assumed for the observation language (when construed as a T-language).

(ii) The statements of natural science are ultimately confirmed or disconfirmed by means of observations, i.e., of "sense-data"; or at any rate these statements are used to predict and control future observations.

(iii) At least certain of the statements of natural science, the so-called O-sentences are accepted or rejected on the basis of a finite, even a small, number of observations. (Such sentences may be considered to be completely interpreted.)

(iv) All the statements of natural science are open to revision, in the sense that any T-sentence previously accepted can be rejected later, or *vice versa*, on the one hand, on the basis of new observations, and on the other hand, as a consequence of a change in "theories". Therefore, there are no purely observational sentences at all.
Taking into consideration these facts, I propose — on the basis of the “methodological rule” (OP) — to adopt the following “empiricist criterion of reference”, (ECR) for short:

(ECR) Every empirically cognitive T-language refers exclusively to the observations (i.e., to the sense-data) on the basis of which the statements of such a language are accepted or rejected.

I propose (ECR) as a substitute for the rather discredited “empiricist criterion of meaning”, replacing the worn-out concept of a cognitive T-language, which is on the one hand, consistent with my assumption (OP), and on the other hand, which in conjunction with (OP) explains the above mentioned facts (i) - (iv). (ECR) obviously implies the restoration of empiricism in the strongest and most extended form, but it discards the currently fashionable “linguistic” or “objectivistic” empiricism, as I would put it. The latter, which has substituted “observability” for “observation” and is based on the dubious dichotomy of “observation language” vs. “theoretical language”, is unable to explain the above mentioned fact (iv); it is already severely attacked by many philosophers of science,17 and I do not think that it can be rescued even in the form of a “modest empiricism”18.

The most important consequence of (ECR), — besides the ontological consequence that all natural science refers really, though indirectly, to sense-data exclusively — is that the concept of truth (in the strict sense of a “semantic concept of truth”) is inapplicable to natural science. Indeed the truth-condition of a sentence, in order to be epistemologically relevant, must be formulated in a directly referential semantic metalanguage. But according to (OP), there is no other directly referential language than the S-language. So we must define the concept of truth by using an S-language as the metalanguage. But since no T-sentence is translatable into an S-language, it follows that the truth of any T-sentence, (even if it were an O-sentence) could not be defined. (The attempt to define the truth of such sentences by using a T-language is, if not logically, at least epistemologically, pointless.) The
impossibility of defining the truth of a T-sentence reflects the fact that the referent of no such sentence can consist in a closed set of sense-data (since all the sentences of a T-language are interconnected, so that the referent of any sentence of such a language is in principle also a referent of all other sentences of the language).

We arrive thus at a "pragmatist theory of truth". But this theory applies only to the T-sentences, a strict "correspondence theory of truth" (i.e., the "semantic truth concept") being still applicable to the S-languages.

Using Prof. I. Scheffler's terminology, we may say that (ECR) constitutes an interpretation of the language of natural science which is based both on "pragmatism" and on "syntactic fictionalism", so that these two views are not incompatible. I may conclude by saying that (ECR) is a "syntactic re-interpretation", or better, a "re-interpretation on the metalinguistic level" of natural science, which is consistent both with empiricism (though not with its "linguistic" and "objectivistic" variety) and with pragmatism (though not with a universal one).

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1 Cf. I. Scheffler, Theoretical Terms and a Modest Empiricism in Danto, A. and Morgenbesser, S. (eds.) "Philosophy of Science".
2 Cf. e.g., A. J. Ayer, Phenomenalism in "Philosophical Essays", p. 133.
3 Cf. e.g., A. J. Ayer, op. cit.
4 Cf. W. V. Quine, Word and Object, p. 2.
5 Cf. G. A. Paul, Is there a Problem about Sense-Data in Flew, A.G.N. (ed.), "Logic and Language, First Series".
6 Cf. W. Stegmüller, Der Phaenomenalismus und seine Schwierigkeiten, Archiv für Philosophie, pp. 70-94.
7 Cf. R. Carnap, Meaning and Necessity, p. 9.
8 Oddly enough, we get rid in this way of the necessity of having recourse to hypotheticals.
9 "Logical" is used here in the wider sense of "analytic".
11 Cf. ibid.
13 The same would hold in case 's' had been construed rather as designating my noumenal ego and 'P' a certain attribute of such a transcendent entity; for sentences about noumena are logically independent from S-sentences.
14 That was indeed suggested by A. J. Ayer, vide Phenomenalism, p. 165-6.
16 Cf. e.g., P. K. Feyerabend, Explanation, Reduction and Empiricism (in Minnesota Studies in the Philosophy of Science, vol. III) and H. Putnam, What Theories are not (in E. Nagel, P. Suppes, A. Tarski (eds.) Logic, Methodology and Philosophy of Science).
17 Cf. n. 16.
18 Cf. n. 1.