

Lecture 8: Was Carnap Entirely Wrong, After All?

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Contents

1 Overview	1
2 Carnap’s Program	2
3 The Glib Quinean Apohorism	4
4 Stein’s Discussion	4
4.1 Problems with Quine’s Criticisms	4
4.2 Stein’s Account of Carnap	5
4.3 Stein’s Critique of Carnap, and Suggested Revisions	6
References	7

1 Overview

This lecture covers [Stein \(1992\)](#). Citations of page numbers with no accompanying bibliographic reference should be understood as references to it.

1. Stein’s broad outlook on philosophical discussion, argumentation, controversy, and one’s attitude to all this: charity; a search for common ground; a search for clear ways of articulating differences that suggest fruitful ways of understanding grounds for dispute and so fruitful ways of trying to resolve them—which will yield understanding, and thus progress; and scrupulous honesty in criticism of oneself as well as of others—*cf.* his remarks in [Stein \(1967\)](#) on the “level of discourse” among philosophers in the 17th Century as compared to in present day. But see especially his discussion of the contrast between Quine and Carnap starting on p. 292.

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2. This is intimately tied up with the possibility of *progress* in philosophy, which Stein thinks is possible: something was *lost* when the Logical Empiricist program was rejected *in toto* (p. 275); the idea that future work could determine whether the Carnapian or the Quinean program more fruitful (p. 279, pp. 292–293); philosophy has continuing tasks (p. 288), which, without the idea that progress can be had with respect to them, would make philosophy Sisyphean, which Stein clearly does not believe. And see especially the remarks on p. 293 of the superiority in clarity in Carnap’s way of expressing the disagreements between himself and Quine, and how they may be resolved.
3. what “epistemology/methodology” and “ontology” may come to, and why there may be reasons to make use of one attitude towards them rather than another
4. Quinean naturalism and holism, with its special emphasis on ordinary experience, as opposed to Carnapian emphasis on formalization, a sharp distinction between the formal and informal, and a special place for science as opposed to ordinary experience; and thus the differences in their forms of pragmatism
5. Stein’s own attempts to emend and reshape the Carnapian program.

2 Carnap’s Program

The most important work, for our purposes, for understanding those parts of Carnap’s program Stein discusses, is Carnap (1956a). Deeper and more extensive treatments of the issues are given in Carnap (1936, 1937, 1942, 1956b, 1956c, 1962).

The most important Carnapian concepts we need to understand, according to Stein’s analysis and exposition (with a few of my own elaborations).

analytic see entries for *framework* and *principle of verification*

cognitive content see entries for *internal question* and *external question*

epistemology see entry for *pragmatics*

explication the formal characterization—“philosophical clarification”—in a framework (*vide*) of a “pre-systematic” (vague, intuitive, non-scientific) concept, *i.e.*, the logical construction of a precise definition of a concept; as such, explications are analytic (*vide*) sentences. The question of the relation between the *explicatum* (the sentence providing the explication) and the *explicandum* (the idea to be explicated)—the accuracy, goodness, *etc.*, of the construction—is itself necessarily an external question (*vide*), given that the latter does not “live” in a framework, whereas the former does.

external question a question that cannot be formulated, addressed or answered in the context of a given framework (*vide*). Canonical examples are: whether one should choose to use a given framework to investigate a given subject area; traditional “metaphysical” questions (*e.g.*, “do numbers exist?”). External questions are either meaningless in the sense that there are no principled grounds for attempting to answer them (such as the traditional metaphysical ones), or else they have meaning in a certain restricted sense, in so far as there may be

principled *pragmatic* grounds for attempting to resolve them. The external question of the choice of framework to use in investigating a given subject area is of this form, and one may use pragmatic considerations such as simplicity, cognitive economy or efficiency, potential fruitfulness, flexibility, and aesthetics to attempt to resolve it. The choice of a framework—the “answer” to that kind of external question—is, in any event, not a proposition to be asserted or denied (*i.e.*, one whose truth value is to be evaluated), but rather is an *action one takes*: one accepts or rejects the use of the framework. External questions, strictly speaking, have no cognitive content. This does not mean that every way of settling them is necessarily irrational, only that what principled ways there may be for settling them will be, of necessity, pragmatic in character. (See also the entry for *internal question*).

framework a (formal) linguistic system that allows one to formulate propositions, derive them, and affirm them in principled ways based on evidence gathered according to good principles and applied as evidence based on good principles (as regulated by the framework). Propositions are meaningful only in the framework in which one can formulate sentences that assert them. The sentences of a framework are partitioned (mutually exclusive, exhaustive subsets) into the *L-sentences* and the *F-sentences*. *L-sentences* are analytic, *i.e.*, they are necessarily true (in the framework), or “true by definition” (or “by stipulation”); they are *L-true*, which means their truth can be established solely by use of the semantic rules of the framework. *F-sentences* are synthetic, *i.e.*, factual or contingently true (if true at all); their truth value must be established by investigative methods going beyond the semantic rules of the framework, *e.g.*, empirical investigation, though the rules of such investigation (valid forms of argument, rules of evidential warrant, *etc.*) are also fixed by the framework. Frameworks determine the set of possible states of the world—what is possible *according to that framework*.

internal question a question that be formulated, addressed and answered using only the resources available in a fixed framework; the answer may be analytic or synthetic. Such questions have *cognitive content*. (See also the entry for *external question*).

ontology see entry for *pragmatics*

pragmatics all aspects of language use and meaning not purely syntactical, and not purely semantical (“analytically connected to truth conditions”, scare-quotes, not a quotation from anyone): in particular, everything involved in the choice of a framework (*vide*); thus, at least in later Carnap, ontology (including modality—the fixation of what is possible) is embodied in the semantics of a framework, and epistemology is involved in the consideration and articulation of frameworks generally speaking (including the specification of their analytic, and *a fortiori* of their empirical, parts), and so including as well their assessment and inter-comparison.

principle of verifiability the meaning of a sentence is its method of verification: “. . . to understand a sentence, to know what is asserted by it, is the same as to know under what conditions it would be true” (Carnap 1942, ch. B, §7, p. 22). This is, if one likes, a pragmatically or empirically founded truth-semantics. Note, however, this this applies also to the meaning of *analytic* sentences: we know them because their triviality makes them *obvious*, *i.e.*, epistem-

ically transparent, in need of *no* verification—all “conditions” make them true, so they have no non-trivial semantic content content.

semantics see entry for *pragmatics*

synthetic see entry for *framework*

3 The Glib Quinean Apohorism

The most important works containing Quine’s criticisms of Carnap, as discussed by Stein, are Quine (1960, 1980).

The fundamental grounds of Quine’s criticisms.

1. The dogma of the analytic/synthetic distinction (Quine 1980): there is no principled distinction between “a linguistic component and a factual component in the truth of any individual statement.”
2. The dogma of reductionism (Quine 1980): the principle of verification cannot ground meaning, as its own truth cannot be *empirically* investigated; Quine claims this is, at bottom, identical to the first dogma, in so far as the failure of reductionism leaves one with no principled way to distinguish analytic from synthetic sentences, and so there can be no “physical fact of the matter” about the *sameness* of meaning of any two sentences (as required for claims about analyticity).

4 Stein’s Discussion

4.1 Problems with Quine’s Criticisms

1. p. 276: “How is one to understand [Quine’s] demand for ‘experimental meaning’ [as putatively required grounds for Carnap’s doctrine of analyticity], in the light of Quine’s rejection of the dogma of reductionism?” Quine rejects Carnap’s “linguistic doctrine of logical truth” (analyticity), in other words, because it cannot be construed as saying anything about the physical world—but Carnap would happily agree, exactly in so far as the doctrine is supposed to be itself analytic, *i.e.*, logically trivial. (This is the nub of Stein’s analysis of Carnap’s “joke at the expense of a glib Quinean apohorism,” p. 277.) Carnap’s doctrine is to be viewed as an explication of the pre-systematic concept of logical truth in a framework embodying Carnapian linguistic theory, or, more accurately, as the sketch of an explication in a sketch of such a framework, since Carnap never succeeded in fully constructing one (pp. 280–281). Within such a framework, the doctrine of analyticity (and the principle of verification) is analytic (trivial); the (external) question of whether such a framework should be accepted and used is highly non-trivial, and itself should be a question that Quine, with his naturalistic methodology, should be willing to argue about.

As much as I hate trying to be fair to Quine, I feel it is important to remark that one can reasonably disagree with Stein’s analysis here, on the grounds that he himself has not accurately characterized Quine’s position. On Stein’s reconstruction of Quine’s views (p. 278,

and p. 282), Quine rejects the possible utility or fruitfulness of the construction of Carnapian frameworks as formal systems (though Stein is uncharacteristically vague on this point, *viz.*, the sense of Quine's rejection, how thoroughgoing it is and what its grounds are); but I think the case is rather that Quine dismissed the *very possibility* of a coherent distinction between informal and purely formal systems—as part and parcel of his holism, and the primacy of ordinary experience in (naturalized) epistemology. Nonetheless, if I am right in this, then I think Quine does so for reasons that beg the question against Carnap, as Stein's analysis shows.

2. One issue Stein does agree with Quine on: triviality and obviousness, especially with regard to logic and mathematics, have become only more complex issues philosophically, not less, and that triviality cannot be used as an epistemic basis to “explain” how or why it is we know something (in particular, a Carnapian analytic proposition), as Carnap seems to have held.
3. Quine's objections to the Carnapian articulation of modality (determination of what is possible), and its use in Stein's explicative reconstruction of the Quinean notion of “fact of the matter”: Stein does not see how Quine can do without the Carnapian notion of “possible state”, since this is central to all of science, and to physics in particular (p. 288)

4.2 Stein's Account of Carnap

1. *frameworks* (p. 285):

[A]lternative possible ‘frameworks’ are alternative in a very serious sense. What sense? I would put it this way: that a linguistic or theoretical framework envisages a distinct set of possibilities for the world; that alternative frameworks are, in effect, constitutive of alternative notions of possibility.

N.b.: *not* “different possible worlds”. The fact that frameworks characterize what is possible is closely tied up with its determination of what is analytic: for the analytic is exactly that which cannot be otherwise, *viz.*, what holds in all possible states, and so is inextricably involved in the articulation of the possible. This modal aspect of frameworks is what allows us to fix the truth conditions of *all* its sentences in their application to the world.

2. *ontology* (pp.283ff.): the semantics of a framework, as embodied in the formal notion of the collection of its “possible states”
3. *epistemology/methodology* (pp.283ff.): everything involved in consideration and articulation of frameworks generally speaking (including the specification of their analytic, and *a fortiori* of their empirical, parts), including their evaluation and inter-comparison
4. The doctrine of analyticity is itself trivial (in a perhaps planned and foreseen, but never implemented, Carnapian framework for treating linguistic frameworks), but the *choice* of analyticity, which is involved in the construction and choice of a framework, is highly *non-trivial*.

4.3 Stein's Critique of Carnap, and Suggested Revisions

1. A kind of holism is perhaps still warranted even in the semantics of a framework: there can be, at least not in our current epistemic state, a clean division between the purely formal and analytic parts of a framework and its empirical part, because we, in actual fact, and perhaps even in principle, do not know how to *derive empirical predictions* in a purely formal sense from the theoretical machinery in any branch of physics (pp. 290–291). This is *not* a Quinean form of holism, for it is restricted to the context of a particular framework, and does not apply to language and knowledge as a whole. (Our “theory of everyday life” is epistemologically under control in this way.) Also, no terms, on Stein’s view, are *purely* observational, though some may be purely theoretical (or “analytic”).
2. Nonetheless, Carnap’s framework is “admirably suited” (p. 291) to the attempt to analyze, understand and possibly address these problems: this becomes a question of the pragmatics of frameworks. It does, however, require a change in conception of a Carnapian framework: Carnap seems to have conceived of a framework as a synoptically over-arching structure, a language “for all science”, such as to encompass the possibility of the construction, within it, of all (or, at least, many) different physical theories, even those that supercede and are superceded by others, simultaneously. Stein thinks it more reasonable to conceive of a framework as a single physical theory itself. Thus, the possibilities embodied in a framework will be determined by the principles of a physical theory itself, and one would be loath to understand these as analytic, and so also entails a blurring between the purely cognitive (or theoretical) and the practical.

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