The Criterion of "Connectibility"

POSITIVISM: A STUDY IN HUMAN UNDERSTANDING, by Richard von Mises. Cambridge: Harvard University Press, 1951. 404 pp. $6.

ONLY A HANDFUL of technical philosophers have found it easy to grasp the historical and conceptual foundations of modern "semantics." The layman who is otherwise sold on the value of language analysis has found most of the background literature to require a schooling in logic, mathematics, and the history of philosophy far too remote and arduous for his tastes. Hans Reichenbach's *Rise of Scientific Philosophy* was an overt effort to give the educated public the ideas of "logical-empiricism" from which the current linguistic critique of traditional absolutes mainly arose. Karl Popper's *The Open Society and Its Enemies* was a versatile polemic on behalf of positivist values in modern society. The work of the late Richard von Mises, here reviewed, is filled with difficult and sophisticated content, yet comprises what stands to date as the richest and most encompassing statement of the positivist "world-outlook." It is sufficiently free of specialized nomenclature and scholastic orientation to communicate much of its thoroughgoing perspective to brave and willing readers outside the philosophical field. Although somewhat dated and involved in pre-war Viennese controversy, it presents a broad scientific humanism which still invites honest thinkers in any area of inquiry.

"The only way out," von Mises writes in his introduction, "is less loose talk and more criticism of language, less emotional acting and more scientifically disciplined thinking, less metaphysics and more positivism." Such a premise unites a diversity of contemporary thinkers, ranging from the Polish logicians to the general semanticists. Yet von Mises rejects the early extremists of the "logical positivists" who tended to over-emphasize the importance of immediate sense-observation in determining not only the truth but also the meaning of language. What has since become known as the "verification principle" held that all statements not containing rules for their verification in sense experience were "meaningless." By renouncing this brand of counter-absolutism, von Mises clears the air for a fairer evaluation of historic ideational systems. And by covering sympathetically many achievements in such fields as art, poetry, religion, philosophy, psychology, and the social sciences, von Mises permits a panoramic appreciation of human culture—gainsaying a charge often thrown at his school of thought.

The most important chapter in the book is the one on "Connectibility." Here von Mises states that consistency with "the stock of linguistic rules" on which either the ordinary language or any of the scientific languages are based, is desirable for all significant discourse. Failure of a sentence to be so "connectible with the statements which regulate the use of language"—and nothing

except such failure—entitles the sentence to be classed as "meaningless." The sentence "They were married on the 34th of January" is therefore neither true nor false, but meaningless, because the accepted rules of language stipulate that "34th" and "January" cannot occur in this kind of relationship in a sentence. Yet the sentence "John is a man of good character" is admissible, because, in spite of its ambiguity, it is connectible with other statements in such a way that its ambiguity may be resolved without altering the original sentence or negating its usefulness. The sentence *is* connectible with the rules of ordinary language; and von Mises also suggests that it *may* be connectible with "some specific, rigorously constructed system of psychology" which has "applicable criteria fixed for the truth of the statement." (One thinks here of psychological systems which make much of such equally vague expressions as "emotional maturity" and set forth rather clear-cut standards for determining the relevant symptoms.) Von Mises thus refuses to use the "verification principle" as the "sole criterion of a sentence's admissibility, because the question of verification depends upon the accepted definitions, and hence upon the linguistic rules" (p. 76).

Now the obvious danger in stressing such pure connectibility as the chief criterion of meaning is that it opens the door to certain kinds of syntactic tyranny; for example, the language systems of dianetics, theosophy, pentecostals, and Hegelianism all have a kind of internal consistency and at least *claim* some kind of connectibility with common speech, otherwise they could never embark on spreading their message. Von Mises here, I feel, simply assumes with a traditional humanist faith that, in the long run, street-corner discourse will tend to reject such linguistic innovations as these systems propose as not being fruitful in the context of common experience.

ONE MIGHT SUSPECT at this point a high regard for the "ordinary idiom" characteristic of some of our modern "analytic" philosophers. But von Mises shows ample recognition of the limitations of common speech—if not of common experience. He considers the development of new, artificial languages as an imperative for the sciences—languages which "explicitly cancel . . . or change" some of the rules on which ordinary language is based. "Only the replacement of the vaguest expressions of everyday language by more precise ones makes it possible to attack the problem of unambiguous description"; lack of such "artificial improvement . . . would make impossible any comprehension of the happenings open to our experience that go beyond the level of the ordinary man on the street" (p. 51). On the other hand, mere vagueness of expression does not make the vernacular useless. For there are realms of almost unambiguous agreement about *most* of the references of everyday language; the problem is to confine our common expressions to these "core areas." It is when we go beyond these areas—in borderline cases of classification (e.g., whether a doll's house is a *house*), and in regions of special scientific data and of unfamiliar experience,

where the ordinary idiom is inadequate and linguistic improvement is needed.

Von Mises disposes of some of the problems arising from his theory of connectibility by accepting the modern positivist ideal of reducing discourse into its simplest statements—in line with the pattern of Mach's elements, Wittgenstein's "atomic propositions" and Carnap's "protocol sentence." Because *so many* of the simplest sentences of both ordinary and scientific language accurately describe well-known kinds of experience, we find in such sentences the broadest base for "a connectible system of knowledge" which *at the same time* rests on sense-observation. Here we encounter the "unmisunderstandable basic sentences" on which both social and scientific communication rely. On the assumption that the experiences reported by these basic sentences are *relatively* constant and uniform among men, such a "protocol language"—although never completely attainable—is *both* connectible *and* empirically verifiable. In this way von Mises readmits much of the "verification principle" through the back door—because the "connectibility" which is his chief criterion for meaning, is so commonly associated *de facto* with immediate sensory verification.

Some of the other chapters of the book deal with such subjects as "Axiomatics," "Deterministic and Statistical Physics," "Probability," and "Logistic"— and although acquaintance with technical notations is not required for comprehension, a prior philosophic understanding of the issues is almost essential. The second half of the book, however, is concerned with problems of society, ethics, psychology, and art—and with some plodding should be clear to the literate reader. In these pages the implications of positivism for moral, academic, and social values are made clear. Von Mises is in part a descendant of Comte—to whom he pays frequent tribute—and shares the original positivist's faith in the progress of knowledge from the religious and metaphysical to the scientific stage. En route he is deeply respectful towards Hume's scepticism; but above all he shows the influence of Ernest Mach, to whom he imputes the strongest inspiration for developing a language that can unify psychology, physiology, and physics. The result is to more than justify the author's prefatory statement offering the book as a "modest contribution" to the goal of the "Unity of Science" movement founded by the late Otto Neurath.

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[E]very concept claiming to represent human reality carries a date inside, or, which is the same . . . every concept referring to specifically human life is a function of historical time.

JOSE ORTEGA Y GASSET, *Concord and Liberty*