

fullest glory, and conversely strengthening Isaac in the resolute rejection of such a blatantly Christological figure. "In essence the drama of Isaac's clash with Abraham was a repetition of one whose final act he had already resolved within himself before he left Spain. The issues which Abraham now raised in connection with Sabbatai Zevi were essentially the same that Isaac had already hammered out with regard to Christ, and on which he had staked his existence."

From Spanish Court to Italian Ghetto is a model of erudition and scholarly thoroughness. In tracking down his elusive subject Yerushalmi ranges from the baptismal records of Celorico, to the archives of the University of Valladolid, to the dossiers of the Inquisition, to the archives of the Jewish community of Verona, not to mention the often obscure references and allusions he has managed to locate and elucidate in the rich literature of 17th-century Madrid and in Cardoso's own extensive writings on diverse subjects. The result of his painstaking and imaginative investigation into the complexities of Marrano existence is a major contribution to our understanding of this small band of 17th-century Jews who exercised such a disproportionate influence on modern Jewish life and thought.

Philosopher as Scientist

PROBLEMS AND PROJECTS. By NELSON GOODMAN. *Bobbs-Merrill*. 463 pp. \$15.00.

Reviewed by ROGER WERTHEIMER

NELSON GOODMAN refers to Hume as "the greatest of modern philosophers"—an assessment sufficiently peculiar to suggest a peculiar set of preferences. The preferences can be seen guiding Goodman's own work, which strikingly resembles Hume's.

One superficial similarity is that

they are among the appallingly few philosophers who can be read with pleasure as well as profit; both have the gift of discussing abstruse matters with style and clarity. But after two centuries, matter, style, and standards of clarity have altered considerably. Goodman's style is crisp and witty. (Alas, his celebrated concision is too often the brevity of indecent impatience, and his charms rely too much on a cuteness that works against him by being overworked.) Moreover, like every other subject, philosophy has become increasingly technical and specialized. What enables Goodman to be the clearer and more precise writer (e.g., the progress of philosophical debate, the employment of symbolic logic, specialization itself) bars comprehension of some of his work to the lay reader. Yet much of his work presupposes no more specialized training than does Hume's. This could be said of one or more major essays in most of the ten sections of *Problems and Projects*. Even so, Goodman, like Hume, is not easy reading because the issues are highly abstract and inherently difficult, and the discussion sophisticated and rigorous.

With regard to content, the obvious analogy lies in the problem of induction: Hume discovered it, and Goodman has made what is widely if not universally judged the single most important advance on the problem since Hume. The seminal achievements of both are within the philosophy of science. Of course, philosophers frequently dabble elsewhere than their central concerns, but the results are usually uninteresting, if not embarrassing. Hume is exceptional in this respect; so too is Goodman, for there are few issues he writes about that he does not significantly contribute to, and his writings span not simply the philosophy of science, but also philosophy of language, and the broader issues of metaphysics, epistemology, and aesthetics.

But such comparisons are uninteresting. Nor does it help to add that Goodman calls himself an empiricist, someone working in the tradition of Hume. That self-description is, on its face, unintelligible, since Goodman's favorite

critical targets "are the characteristic tenets of traditional empiricism. True, he calls himself a nominalist, but his version of nominalism is tenuously related to Hume's. True, too, he develops a form of phenomenalism, but his version claims no special genetic, epistemological, or metaphysical priority. True, again, he shares a deep skepticism of all dogmas, religious, political, or commonsensical, but his skepticism encompasses the traditional doctrines of empiricism as well. However, his critique of empiricism is also a critique of rationalism and much of pragmatism, for he rejects not only the empiricist description of cognition as a passive process, rather than an active one in which experience becomes knowledge only in and through its systematization by means of conceptual structures; more, he rejects the very terms of the description that constitute the common vocabulary of all forms of epistemological absolutism and their metaphysical counterparts: namely, the conceptions of *a priori* knowledge and of irreducible, incorrigible givens in experience.

For Goodman there simply is no necessary truth, no *a priori* knowledge, innate or conventional. Our conceptual structures do not comprise or contain a permanent or rigid framework defining the limits of possible experience; they are to be understood as scientific theories and evaluated and modified accordingly. They are revisable, not only or even primarily because of their possible conflict with experience, but for reasons which make such conflict possible, most notably considerations of simplicity and internal coherence. Goodman views simplicity as the essence of systematization, the organization of experience that constitutes the essence of science, and of our comprehension of the world.

Moreover, the world no more compels us to accept a particular content of experience than we are compelled to impose a particular structure upon it. There is no absolute given, and no one way that the world "really" is. All experience is variously describable by means of various systems of description, and, for that same reason, no description of experience is immune to doubt or denial

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if it conflicts with the system we employ. Experience itself cannot conflict with a theory or system; only certain descriptions of an experience can. Such conflicts are adjudicated, not by reference to some alleged indubitable character of a law or an experience, but by principles of simplicity, coherence, and the like, which regulate the structure of a system and thus the description of experience.

BUT Goodman does not simply exchange the traditional "certainties" for another set of fixed beliefs, the principles of system construction. Instead, he opens new fields in his attempts to formulate theories about those constructional principles we presently employ, and, consistent with the principles he is systematizing, he is sometimes led to revise or reject some of them. By calling this particular enterprise "the science of science," he signals his ties to Hume for whom philosophy in general was "the science of man." Goodman's essential continuity with Humean empiricism lies here in the shared conception of the philosopher as a scientist studying man and his systems of belief; the discontinuities are due to Goodman's radical break with Hume's naive positivistic conceptions of science and the scientific method. No doubt, since the general public still accepts Hume's picture of science, they are likely to suppose smugly that a philosopher *qua* scientist is ill-equipped to explore the full panorama and subtle nuances of human phenomena. A reading of some Goodman essays in aesthetics would disabuse many nice people of their preconceptions about philosophy, science, and art all at once.

Alas, when a philosopher styles himself "scientific," he is usually about to flout common sense outrageously while using the progress of science as a handy—and misleading—model of how once-popular beliefs can come to be recognized as ridiculous. (I speak as a practitioner of this rhetoric.) Goodman is no exception; like Hume, he is notorious for devising arguments as deft as their conclusions are daft. Sometimes the daftness is only apparent; his new riddle of induction is as genuine a

discovery about induction as Russell's paradox is about set theory. In other instances his results are sports of logic, as unacceptable as they are novel: e.g., that no two words are synonymous or that a musical performance deviating by even one note from a score is not in fact a performance of the work in question. Goodman, like Hume, prefers to pose as the impartial researcher driven willy-nilly to such conclusions by the logic of arguments revealing incoherences in our presently accepted systems of belief; the paradoxical character of his solutions to the problems thus posed is supposedly an unavoidable consequence of paradoxes latent in our existing beliefs. But, as with Hume, one suspects Goodman of being delighted in being so "driven." If he is driven, it is only by a desire to be as provoking as possible, even as regards the formulation of his conclusions. Take, for example, his claim that no words are synonymous. The claim presupposes extensionalism, the denial of intensionalism, the denial that words have a meaning which is something distinct from a word's denotation. Since his gibes at intensionalism are altogether too glib to be probative, what he really proves, if anything, is that extensionalism cannot make good sense of the claim that some word pairs are synonyms. To express that platitude by saying that no words are synonymous is like explaining the effect of sterilization in terms of the nonexistence of identical twins.

Moreover, the talk of science here is pure cant. In their structure Goodman's arguments are no more distinctively scientific than Zeno's "proofs" of the impossibility of motion. They are, forgive the expression, *a priori*. They do not proceed, e.g., by an inventory of word pairs in every lexicon, and they do not conflict with what is properly described as a widely held opinion, but rather with norms which form the structure of our systems of belief. The isolated and spectacular instances in which scientists attempt conceptual revision are impressive, but not as analogs here: e.g., it's not as though Einstein's arguments against simultaneity showed that I can't talk

while I walk. Goodman attacks common sense (what he calls "our common nonsense") as though it were a body of beliefs, what people call common knowledge. But a man lacking in common sense is defective not so much in *what* he thinks as in the *way* that he thinks (judges, decides, etc.), and the defect may be undetectable by the canons of deductive logic. Not surprisingly, philosophers are often thought to be such men.

GOODMAN may rightly insist that the conflict of his claims with common "belief" is no refutation; so, too, a wiggled toe would leave Zeno unmoved. And he may insist that it is possible that our belief, for instance, in the possibility of synonymy is mistaken; so too it is possible that our belief in the possibility of motion is mistaken. Fat chance! (The parallel is, however, imperfect. It is not altogether unlikely that an adequate non-extensionalist linguistic theory would drop our present notions of meaning, synonymy, and the like in favor of a more manageable set of concepts which collectively covered the same ground. Our notion of motion seems far more secure.) Even if Goodman's arguments were as clever as Zeno's we would be no more compelled to accept his conclusions than Zeno's. On the contrary, given the conclusions, we are compelled to wonder how the arguments go wrong. The arguments may yet be important if their refutations are difficult and instructive: after 2,500 years of attempts by the best philosophical and mathematical minds, the fallacies of Zeno's "proofs" have not been decisively determined. Goodman ranks as one of the more important philosophers of this quarter century partly because of his talent for devising such puzzles. Hume's rank is comparably based, though incomparably greater partly because his paradoxes are incomparably more fundamental and instructive. One further point: while Goodman, like Hume, realizes that his solutions are believable only by a philosopher and only while he is doing philosophy, Hume, unlike Goodman, also realized that that fact constitutes a problem for those solutions.