

In Defense of Nagel

In his review (*JAF*, 85 [1972], 82–84) of Bertel Nathhorst's monograph on structuralism, Dan Ben-Amos cites the work of the well-known philosopher of science, Ernest (not Ernst) Nagel. Part of Ben-Amos' purpose there, as I understand it, was to show by means of comments from Nagel that there is reason to believe that Nathhorst had an erroneous view of certain topics in the philosophy of science. I do not wish to comment

upon whether Nathhorst is right or wrong; instead, I want to offer evidence that Ben-Amos has characterized Nagel's position in an inappropriate manner.

Ben-Amos (82) cites the following as being Nagel's view on the nature of scientific theories, a topic about which he feels Nathhorst's position is mistaken.

As Ernst [sic] Nagel points out in *The Structure of Science* (New York, 1961) there are, in fact, two methods of formulating scientific theories: "abstractive" and "hypothetical." Theories formed by the "abstractive" method [**] "formulate relations between properties common to classes of objects or phenomena 'perceived by the senses' and do not postulate anything 'hypothetical' or conjectural" (p. 125). On the other hand, "theories formed by the second or 'hypothetical' method assert relations between hypothetical entities that are 'not apparent to the senses'; and their empirical validity can be judged only indirectly, in terms of [*] their consequences with the results of observation and experiment" (p. 125). Furthermore, while the fundamental terms of hypothetical theory need not be associated by correspondent rules with experimental notions, the postulationally defined terms in an abstractive theory do seem to be coordinated by such rules with some experimental data.

This quotation from Nagel is significant, not especially in terms of what it says but in terms of what is left out by Ben-Amos. First of all, there is a phrase missing from one of the sentences. In the above citation, in order to have what Nagel actually wrote, one should insert the phrase "the agreement of" at the point of the bracketed single asterisk, obtaining the following: "in terms of the agreement of their consequences . . ." This, obviously, could be a printer's error, and its correction would have no serious effect upon the impact of Nagel's comment as presented. There is, however, a more important difficulty with the way Ben-Amos presents Nagel's position. Just before the first sentence of the material cited by Ben-Amos, Nagel writes the following (p. 125, my emphasis).

A distinction, relevant to the present discussion, is sometimes drawn between two types of theories. The distinction was apparently first formulated explicitly in 1855 by W. J. M. Rankine, one of the founders of a school of physics which sought to develop thermodynamics as the basis for a unified system of natural science (called the "science of energetics"). Rankine declared that there are two methods of framing a physical theory. Theories formed by *what he called* the "abstractive" method *allegedly* formulate relations between properties . . . [continuing as at **].

These few sentences from Nagel's book put an entirely different light upon the material selected by Ben-Amos to represent Nagel's position. By taking note of these omitted sentences, one is given strong evidence for supposing that Ben-Amos has taken Nagel's summary of Rankine's view as being Nagel's view. This supposition is further supported by Nagel's statement (pp. 128-129) that

in effect, therefore, the view under discussion [Rankine's view] coincides with the second position mentioned earlier [see p. 118, on the Instrumentalist view of the cognitive status of theories], according to which theories are best regarded as instruments for the conduct of inquiry, rather than as statements about which questions of truth and falsity can be usefully raised.

There is one other aspect of Ben-Amos' use of Nagel's book that deserves mention. In the review of Nathhorst, one finds the following statement just prior to the mention of Nagel (*JAF*, 82):

Nathhorst's intent is commendable. Propp, Lévi-Strauss, and Dundes all envisioned structural analysis as the method that would transform folklore and myth

studies from uncritical speculations to science. It is, therefore, legitimate to inquire, as Nathhorst proposes, whether it has fulfilled the expectations of its exponents; that is, whether structuralism has indeed provided a scientific system for tale analysis. In doing so, however, Nathhorst begins with an erroneous view of scientific theories. He conceives of the hypothetic-deductive technique as the sole method of advancing scientific theories and thus demonstrates a misunderstanding of the theoretical nature of structural studies in folklore. As Ernst [sic] Nagel points out . . .

On the basis of these comments, I assume that Ben-Amos also wishes to use Nagel's book in taking Nathhorst to task about "methods of advancing theories," including among these the "hypothetic-deductive method." If that is one of the goals Ben-Amos had, then he consulted the wrong chapter in Nagel's book, for the chapter surrounding the sentences Ben-Amos quotes deals with the cognitive status of theories. This topic involves such issues as whether it is correct to describe scientific theories as being statements or as being true or false. In short, that chapter deals with the following general question: "What sort of animal, epistemically speaking, is a scientific theory?" This is a different matter from the topic Ben-Amos is interested in considering, namely, "methods of *advancing* scientific theories."

Finally, I do not want to offer a characterization of what Nagel's position is actually supposed to be. He has written extensively, and it would be inappropriate for me to try to condense his work here. Nor do I intend to undertake to assess Nathhorst's book. Instead, my goal has been a more limited one. I propose that this appeal to Nagel's comments does not succeed because it presents Nagel's position in a misleading way. I leave it to other interested parties to determine whether this conclusion has some bearing on the correctness of Nathhorst's work or the correctness of Ben-Amos' assessment of his work. The message I want to convey here is that, if folklorists find it useful to consult the works of philosophers (and there are many occasions for which that tactic would be fruitful), then proper care should be taken to ensure that the pertinent philosophical writings are relevant and are represented carefully and accurately.