

basis for these figures. This is the ratio of uncertainty controlled by the independent variable, termed "transmitted information" by Shannon, to the uncertainty in the dependent variable, again measured by the usual logarithmic information measure. This measure was chosen because it is identical in structure and meaning to the other measures used in this paper and applying it to normally distributed equal interval scales would produce results identical to an analysis of variance. For further information consult: McGill, W. J. "Isomorphism in Statistical Analysis" and G. A. Miller, "Note on the Bias of Information Measures," both in Quastler, H. (ed.) *Information Theory in Psychology*. Glencoe, Ill.: The Free Press, 1955; and also Senders, V. *Measurement and Statistics*. N.Y.: The Oxford University Press, 1958, pp. 89-98.

^b These figures are based on unbiased estimators of the variance in the dependent variable attributable to the independent variable and to the total variance of the dependent variable. These estimators were derived from what is called "components of variance analysis." The percentages are simply the ratio of these two terms. The best introduction to this ratio is given by Haggard in his book on *Intraclass Correlation and the Analysis of Variance*. N.Y.: The Dryden Press, 1958.

^c These figures are based on biased estimators of the variance in the dependent variable which is attributable to the independent variable and the total variance in the dependent variable. The ratio of these variances is given by the square of the correlation coefficient. Unfortunately, unbiased estimates could not be derived from the information made available in the articles. However, they may also be derived from component of variance analysis. This is discussed in Acton's book, *Analysis of Straight Line Data*. N.Y.: John Wiley and Sons, 1959.

TABLE II THE RELATIONSHIP BETWEEN RISK AND STATISTICAL DETERMINANCY FOR RELATIONSHIPS SIGNIFICANT BEYOND THE 5 PER CENT LEVEL.

Null hypothesis rejected at	5%	2%	1%	.1%	Total
Percent Determinancy	.15,4	.07,0	.03,9	.13,3	.10,7
N	41	10	29	19	99

VERSTEHEN AND EXPLANATION

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The use of *Verstehen* in sociology has had a checkered history. Indeed one might think that the "operation called *Verstehen*" had been laid to rest twenty years ago by an oft-cited article of that title by Theodore Abel. (1) Abel concludes that *Verstehen* has to do with relating the behavior of others to "our personal experiences". (1, 685) Accordingly:

Primarily the operation of *Verstehen* does two things: It relieves us of a sense of apprehension in connection with behavior that is unfamiliar or unexpected and it is a source of "hunches", which can help us in the formulation of hypotheses. (1, 687)

Professor Ernest Nagel, at the conclusion of a discussion of "meaningful" explanations of human behavior, concludes that:

(The social scientist's) ability to enter into relations of empathy with the human actors in some social process may indeed be heuristically important in his efforts to *invent* suitable hypotheses which will explain the process. Nevertheless, his empathetic identification with these individuals does not, by itself, constitute knowledge. (2, 484)

Professor Murray Wax has defended the use of *Verstehen* in sociology in a recent article. Wax argues that Abel's criticisms are misguided because Abel has misunderstood what *Verstehen* is. According to Wax:

Following the theoretical lead of Weber (cited above), he (Abel) places the emphasis (of *Verstehen*) upon the imputation of motive which, and here he is quite correct, he sees as a difficulty in this kind of case, but he misses the point that the true level of *Verstehen* involved here is far deeper and more primitive. (3, 326)

Not only does the "real" *Verstehen* not involve imputation of motive, but, according to Wax, it also does not involve "interpersonal

intuition". (3, 330-331) Wax goes on:

Cooley, Weber, and others in their theoretical discussions have regarded *Verstehen* as if it did represent a kind of knowing or understanding which one individual might have of another (and to be differentiated from the kind of knowing the scientist might gain of the atom). (Wax, 331)

I am not quite certain just exactly what Professor Wax would say to this "different kind of knowing". Either he holds that there is no such "different kind of knowing" or that this "different kind of knowing" can only be understood in a cultural context (whatever that means).

But *exactly* where Professor Wax stands on this point is not important for my purposes. For I want to make a *prima facie* case in this paper for the following theses. I wish to suggest that Abel is simply wrong about the scientific dispensibility of *Verstehen* as a component of our knowledge of human behavior. And I wish to suggest further that those interpretations of *Verstehen* which Professor Wax rejects as "misunderstandings" are precisely those kinds of *Verstehen* which are not dispensible in the explanations that we do give of human action.

Part I

It is worth noting at the outset that there is something very queer about the "misunderstanding" which Wax attributes to Abel. In the first place the sociologist who is most clearly associated with the doctrine of *Verstehen* (at least in my mind) is Max Weber. Nor do I think it any accident that Wax refers to Weber in his article concerning *Verstehen* more often than to any other sociologist. Yet, if one examines the introductory pages of Weber's *Wirtschaft und Gesellschaft*, one notes that Weber categorizes *Verstehen* into *aktuelles Verstehen* and *erklärendes Verstehen*. (4, 94-95) And if one notes how *aktuelles Verstehen* and *erklärendes Verstehen* are characterized, one notes that the latter sort has to do with the understanding of motives and that the former has to do with direct interpersonal understanding of ideas or emotions. And one notes further that Weber himself makes no attempt when explaining these notions to stipulate that they must be put into their cultural context.

Now, of course, Professor Wax is at least partially, not wholly aware, of all of this. Yet Professor Wax dismisses Weber's theoretical concerns, in *Wirtschaft und Gesellschaft* with the notion of *Verstehen*:

If we turn for elucidation to Weber, whose essays on the Protestant ethic constitute one of the finest examples of *verstehende* historical sociology, we find theoretical concerns which have but little relation

to the actual methodology of that aspect of this most famous of his works. . . . Little would be gained by following further in this social-psychological path or by adding further to the exegetical literature on Weber. (3, 324)

Later, Professor Wax chooses to contrast Abel's understanding of *Verstehen* and Weber's understanding of *Verstehen qua* sociological methodologist with what Wax terms "real *Verstehen*" and "the true level of *Verstehen*". (3, 326) From all of this one must judge that Professor Wax wishes to reject Weber's characterization of *Verstehen*.

But why? Surely not on the grounds that Weber has inadequately characterized *Verstehen*. One would think that Weber's position in the history of sociology and, in particular, his role in the literature on *Verstehen* is such that *Verstehen* just is whatever Weber says it is. I rather think that the basis on which Professor Wax wishes to dismiss Weber in characterization of *Verstehen* is that Professor Wax believes that the methodology which Weber advocates in *Wirtschaft und Gesellschaft* is just incorrect. Presumably Professor Wax would like to save the word '*Verstehen*' for some methodological principles which are nearer the truth.

Nevertheless, one cannot cut much methodological ice by revising the meanings of terms in the discipline of sociological methodology. Furthermore, even though the word '*Verstehen*' is often used in such a way that its meaning is obscure, to say the least, it seems to me that Weber's theoretical remarks on *Verstehen* methodology in the introductory pages of *Wirtschaft und Gesellschaft* make for some of the most penetrating points about the methodology of the explanation of human behavior that I have ever read. Accordingly, I wish to defend Weber's conception of *Verstehen* in spite of the callous treatment of that conception at the hands of both Abel and Wax.

Part II

Due to the limits of this paper such a defense must necessarily be sketchy. First, I shall address myself to the question of whether there is a kind of knowing or understanding which one individual might have of another which is different from the understanding we have of inorganic phenomena.

Weber claimed there was such a different kind of knowing and when he explained his claim, he gave two examples. We use *aktuelles Verstehen*, he says, to understand the meaning of ' $2 \times 2 = 4$ ' when we read it or see it. This Weber called 'rational understanding'. (4, 94) And Weber contrasted this with understanding an outbreak of anger. This was another species of the genus *aktuelles Verstehen*. (4, 95)

Now is this kind of understanding different from an understanding of non-organic phenomena? It seems to me it plainly is and I wish to explain why.

It seems clear that, in ordinary cases, when we say of someone else, that we know what they are thinking, we literally have the same thoughts as that other person. And less often, when we say to someone that we know what they are feeling, we actually have the same feelings. On the other hand, I do not understand the motion of Mars around the sun by literally tracing that orbit. I know very well what it is like to understand what that orbit is without tracing it. I do not know what it would be like to understand why a colleague holds a certain philosophical view without being in exactly the same state of mind in all relevant respects as my colleague when he thought of the arguments in virtue of which he holds that view. To the extent then that the study of human behavior is the study of human thought — and to a large extent then that the study of human behavior is exactly that — one epistemological situation with respect to humans is radically different from our situation with respect to atoms. The properties of atoms can never become properties of my knowing self; but the properties of other knowing and feeling selves can become properties of my knowing, feeling self. This has two consequences. On the one hand, humans have a fantastic cognitive advantage in the study of other people which they do not have when they study things unlike them. On the other hand, the thoughts of which knowledge consists are often in the case of knowledge of human actions, literally the same as what that knowledge is of. This is never the case in physics.

This point seems to me so obvious that I sometimes wonder why it is so often overlooked. I think there is one possible explanation. The history of positivism is the history of the confusion of meaning with evidence. If one projects this confusion on to the advocate of *Verstehen*, one can then represent him as advocating a *method of verification* of what other people are thinking by means of thinking the thoughts we presume to be in their minds. Now this, of course, is absurd. But Weber's *aktuelles Verstehen* is concerned with the nature of the knowledge we have of others, not with that evidence, in virtue of which we are entitled to say that we know. (4, 97-98)

Part III

Now I wish to turn to a defense of Weber's most interesting *erklärendes Verstehen*. Understanding of motivation according to Weber consists in placing human action "in an intelligible and more inclusive context of meaning". (4, 95) What is this supposed to signify? *Erklärendes Verstehen* Weber maintains, consists of placing an action into "a relation of which the actor or actors can be said to have been

aware and to which their actions have been oriented". (4, 93) And to do this is to understand actions in terms of motives. Talcott Parsons' comment on this is instructive. Parsons interprets Weber as maintaining that the "meaningful interpretation" of an action can be understood "only in terms such as those of a rational means-end schema". (4, 93) I would agree with Parsons that this is Weber's position. I would disagree with him that it is too narrow. At any rate the position I wish to defend is this. I wish to defend the claim that to fit an action into a rational means-end schema is ordinarily what understanding an action amounts to. I also happen to think that fitting an action into such a schema is the only proper way of understanding that action. But I don't propose to defend the latter claim. Defense of the former is sufficient to vindicate Weber.

Now what is involved in fitting an action into a rational means-end schema? What is involved can I think, be understood by considering a very simple example. Suppose that Jones has just walked down to the basement of Strong Hall. We ask for an explanation of that action. We get the *explanation* that Jones wanted a cup of coffee. Now there is a fairly simple-minded way in which such an explanation seems to fit into a rational means-end schema. Jones had the desire for a cup of coffee. One of the means of getting a cup of coffee if one works in Strong Hall and one does not care much about the quality of one's coffee or if one is overcome by the desire to drink coffee no matter what it tastes like, is to go down to the coffee machine in the basement and purchase a cup. Such an action is goal-oriented. And we would ordinarily treat it as rational. But the sense in which it is rational requires a close look.

Now I need a little technical vocabulary in order to make the points I wish to make. Let us call the claim 'Jones went down to the basement of Strong Hall' the *explanandum* (to borrow a term from Hempel). And let us call the claim 'Jones wanted a cup of coffee' the *explainer*. I wish to defend the claim that these two claims do in fact stand in the relation of *explainer* to *explanandum*, that the one claim, in other words, does indeed explain the other, *because* the two claims are indeed connected together in a rational means-end schema. That this is so, according to Weber, is for there to be a meaningfully adequate level of understanding of the phenomenon in question.

An adequate defense of the claim which I wish to make consists, I think, in showing that the standard alternative account of what is going on here is dispensable. The standard alternative, positivist, account is that the explainer does indeed explain the explanandum if, and only if, there is some universal law, or statistical generalization of some sort which does indeed connect the explanandum with the explainer. And the reason one requires such laws, is, according to the positivist, that the explainer and the explanandum are distinct claims: the one does not entail the other, but in order for the one to explain the other, they

must be connected in *some* way. According to the positivist, there are only two *legitimate* ways in which they can be connected. They may be causally connected. And to say that they are causally connected is to say according to the positivist that they are connected by some sort of universal law. Or they may be connected in a way such that the occurrence of the explainer event would even in conjunction with probabilistic generalizations, be such as to give a reasonable main grounds to expect the occurrence of the explanandum.

Now it does seem to me that the connection which the positivist alleges to exist between the explainer and the explanandum is quite dispensible in a case such as one simple example. I do not mean to claim that there are no laws or statistical correlations which relate to the explainer and the explanandum. There may be for all I know. What I do wish to claim is that we do not have to *know* that we have an explanation. All we have to know, I contend, is that this explanation exemplifies Weber's *erklärendes Verstehen* and that this explanation is an explanation *in virtue of* exemplifying Weber's *erklärendes Verstehen*. If so, then we have vindicated Weber.

Now let us take another look at our simple example. We may say that the claim 'Jones wanted a cup of coffee' explains the claim 'Jones went down to the basement of Strong Hall'. Now I don't think that there is anything crucial about the formal mode here. We could say as well that the event, Jones wanting a cup of coffee, explains the event, Jones going down to the basement of Strong Hall. To say that is to say that the events or claims are connected in such a way that the one explains the other. Now the move by the positivist is to search for a law or generalization which is either strictly universal or probabilistic which connects the two events. But one *possible* move by the *Verstehen* theorist ought to be evident here. He might argue that going down to the basement is a *means* of obtaining a cup of coffee. To do such a thing is a rational thing to do *if* one wants a cup of coffee.

But if the *Verstehen* theorist does give this sort of analysis of the connection obtaining here between the explainer and the explanandum, then he is playing into the positivists' hands. For the positivist will point out that the claim 'Going down to the basement is a means of getting a cup of coffee' is really a causal claim of a rather complicated sort and is true in virtue of there being certain generalizations which correlate going to the basement of Strong Hall and getting a cup of coffee.

Some philosophers might regard it as a philosophical first principle that one should never play into the hands of the positivists. But I think that there are even better reasons why the *Verstehen* theorist should not give this sort of analysis of the connection between the explainer and the explanandum. For if the *Verstehen* theorist does give this sort of analysis, then he will have difficulty explaining action in which the

connection between the explainer and the explanandum is based on a *false* belief on the part of the agent about the relation between means and ends. If Jones is doing a snake dance in order to exorcize demons from the spirits of the departed, then he is performing an action (the snake dance) for an end (exorcizing demons) and he is performing that action because (as he sees it) the action *is* a means to the end he wishes to achieve.

Now if the *Verstehen* theorist wants a theory of explanation which will handle both of the examples which we have considered, then he ought to analyze the connection between the explainer and the explanandum in a way such that he does not play into the hands of the positivist. This can be accomplished in the following manner. The *Verstehen* theorist can maintain that the connection between the explainer and the explanandum is (in the coffee case) Jones' *belief* that a way of exorcizing demons from the spirits of the departed is to do snake dances. And the claim of the form 'Jones believes P' is a *particular claim* about (roughly) Jones' state of mind at some particular time. It is not even *covertly* a general proposition. Accordingly such an analysis is quite incompatible with the positivist analysis.

If this account of the explanatory connection in these cases is correct, then it is the subjective meaning of an action for Jones (this is to say, Jones' belief about the pattern of meaning into which the action is fitted) which is *logically indispensable* for understanding the action. For we must think the same thought that Jones believes in order to understand Jones' action in either of these cases. To do this is to understand that this action was rational given Jones' desires and his beliefs. For if we do understand this, we will not think the connection between the explainer and the explanandum, and if we do not think the connection between the explainer and the explanandum, we do not think those claims *as* explainers and explananda at all. For to explain in these cases is in part to understand a connection. And to grasp that sort of connection is to grasp the subjective meaning of the action for the actor. And that is precisely what Weber is advocating.

Now it is, I suppose, logically possible at least that a positivist still might argue that we really don't understand an explanation *as* an explanation unless we understand the connection in terms of some general proposition. But it is easy to see that the positivist claim is false. For we understood the samples I gave of explanations without having any ideas of the generalizations (if any) which do indeed underlie them. We can understand why Jones is doing a snake dance without having any idea whether the belief about the relationship between doing snake dances and exorcizing demons is a belief of Jones' tribe, of his village, of his family, or a temporary idiosyncratic belief of Jones alone. Since we see that such an example of explanation *is* an example of

explanation without knowledge of the positivists' generalization, the generalizations are dispensable.

Now what I have done (I am afraid all too briefly) is this. I have offered two examples of explanation which plainly do exemplify a type of explanation of human action which is very, very common. I have argued that the positivist analysis of those examples of explanation is inadequate. This strongly suggests that the positivist analysis of any explanations of this type is inadequate. Furthermore, I have argued that the analysis of these examples of explanation is, in all important respects, just what *erklärendes Verstehen* amounts to for Weber. But I said that I wished to do more than this. I said I wished to argue that *erklärendes Verstehen* was a correct analysis of explanations of this general type.

Now Weber's analysis does have, I think, a great deal of intuitive plausibility. A defense of this analysis amounts to a defense of the objections which might be made against it. I think there are two main types of objections which might be raised.

First of all, one might argue that, say, in the case of going to get a cup of coffee, it could be the case that Jones wanted a cup of coffee, that Jones believed that a way of obtaining that cup was to go to the basement of Strong Hall and that Jones did go to the basement, but that the explanation of Jones going to the basement of Strong Hall is that he wished to see someone in the history department. And this is correct. It is indeed the case that the truth of the three propositions I have cited does not guarantee the correctness of the explanation. The reason for this is that although the truth of the three propositions do guarantee the claim that Jones wanting a cup of coffee is a *possible cause* of his going to the basement, they do not guarantee the claim that it *is* the cause. This is, of course, generally the case. If we know that someone performs action X, and we know that he believes that performance of X is a means to Y, and he does desire Y, it may still be the case that he performs action X in order to achieve Z. Accordingly, I have not given a complete account of an explanation type, so far. And this is true. For in order to state with assurance that Y was *the* cause of X, we have to be able to rule out other possible causes of X. To do this is to find out that there were no other reasons for that person to do X and that he was not forced to do X. But finding this out involves no more than checking further into that person's beliefs. The operation of *Verstehen* provides us with a way of discovering possible causes. The rest is elimination of certain possibilities or in the case of graphs, the use of statistics.

The second possible line of objection is that this *Verstehen* analysis sanctions a "subjective" rather than an "objective" treatment of the evidence for a person having certain beliefs or having certain motives and that *Verstehen* is, therefore, somehow unscientific. But nothing

could be further from the truth. The *Verstehen* analysis of the explanation of a human action is perfectly compatible with standard objective tests for what a person believes. The *Verstehen* theorist does not have to hold that the criterion of truth for the propositions which are component parts of an explanation is intuition. What he does hold is that, in standard sorts of cases, that in virtue of which a purported explanation of an action which consists of true propositions is indeed an explanation is our ability to think of that action as a rational action from the point of view of the agent whose action is being explained.

FOOTNOTES

- (1) Theodore Abel, "The Operation Called *Verstehen*" reprinted in H. Feigl and M. Brodbeck (eds.) *Readings in the Philosophy of Science* (New York, Appleton-Century-Crofts, 1953) 677-687.
- (2) Ernest Nagel, *The Structure of Science* (New York, Harcourt, Brace and World, 1961).
- (3) Murray L. Wax, "On Misunderstanding *Verstehen*: A Reply to Abel," *Sociology and Social Research* (51: 1967) 323-333.
- (4) Max Weber, *The Theory of Social and Economic Organization*, tr. A. M. Henderson and Talcott Parsons (New York, The Free Press of Glencoe, 1947).