12 Claims of the Verstehen Position taken from Chapter 11 "The Social Sciences" *Man is The Measure: A Cordial Invitation to the Central Problems of Philosophy by Reuben Abel; pgs. 109-120* © 1976 by the Free Press, a division of Macmillan Publishing Company.

I began Chapter 9 with the definition "Science seeks to discover and formulate in general terms the conditions under which events occur," and I was being deliberately provocative when I included in the branches of science political science, sociology, and anthropology. It is important to realize that despite differences of method, interest, technique, subject matter, and degree, all scientific knowledge must be confirmed or verified; all must be justified by evidence or good reasons. The criteria for a good hypothesis (that it be falsifiable, simple, beautiful, general, etc.) apply equally. So do the ideals of science (reliability, precision, objectivity, testability, comprehensiveness, etc.) and the requirement that the justification for a claim be unremittingly criticized. Not every scientific explanation satisfies all of these goals equally well, but the goals are the same for all our organized empirical knowledge.

However, not all philosophers agree with the ideal of unified science. They argue that the actions of human beings comprise a unique and ultimate category of events, and that therefore such fields as social psychology, sociology, anthropology, economics, and political science cannot be studied by the methods of the natural sciences (by which they usually mean physics). This is an issue fraught with emotion, and usually fought by polemic. In part they fear the possible results of the scientific knowledge of human behavior; in part they oppose what they regard as scientific imperialism; in part they are sensitive to Poincare's "Physicists have a subject matter, but sociologists study methods." Still, they make a substantial point, which must be considered on its merits, and that is, that there is a radical difference between the scientific understanding of why a leaf flies in the wind and why a man flies from a mob; if the scientist did not himself know fear and hate, he would miss the point of the latter event entirely. Human actions, it is argued, are charged with meanings. The behaviorist observer, who is limited to what he can see, and who ignores the "inwardness" of human actions "denudes the world of meaning"; he sees the same overt action in the kiss of a lover, the kiss of a prostitute, and the kiss of Judas. What would he report, it is asked, about what was going on, if he were a visitor from Mars who landed in New York at 11:00 A.M. on Armistice Day, and saw everyone standing around silently?

The term *Verstehen* ("to understand") denotes the position of those who claim that the social scientist can and must make use of his own inner experience. The student of human actions is part of his own subject matter. He must use the methods of *introspection* and *empathy*, which have nothing in common with the procedures of natural science. Thus, Isaiah Berlin claims "a man who lacks common intelligence can be a physicist of genius, but not even a mediocre historian." Dilthey and Windelband distinguish the "nomothetic" natural sciences (which generalize) from the "idiographic" social sciences (which try to articulate individuality). This position must be seriously examined.

(Some philosophers argue that no generalization about human behavior is ever valid, since individuals have free will. This position, I believe, is quite untenable. Reliable predictions are made regularly about the number of automobile accidents that happen over the weekend, and the number of parcels that will be lost at Grand Central, and the shift in political preference that accompanies a move by a family from the center of a city to the suburbs.)

Claims of the Verstehen Position

It will be useful to consider in detail twelve specific claims about the social sciences that might be interpreted as justifying the Verstehen position:

- 1. In the natural sciences, a hypothesis is verified by experiment, but the social sciences cannot experiment. The ability to experiment is essential to the testing of explanations in the natural sciences. However, physics need not be taken as the model for the natural sciences, and neither astronomy nor geology can experiment. Moreover, if the meaning of "experiment" is somewhat broadened to include an investigation for which there are controls, then the social sciences do experiment. Thus, a study in Canada of male hospital attendants found that those who had been shown a movie of a violent knife fight were more aggressively punitive toward their patients than a control group of attendants who were shown a "peaceful" movie. Other inquiries in the social sciences have investigated whether voters are influenced by a candidate's religion; and whether having a television set at home has any effect on how often the children go to church on Sunday.
- 2. The natural sciences can repeat experiments in order to verify their hypotheses, and can generalize their results. Any one cubic centimeter of pure water is exactly like any other; if you find out its weight, then you can predict the weight of every cubic centimeter of water. The social sciences, however, it is claimed, deal with situations that are not uniform: no two persons and no two social contexts are exactly alike. The events of the past have a specific time and place index; there is a uniqueness (or Einmaligkeit) to the French Revolution, for example, or to the rise of fascism, which makes it impossible to include it in any generalization. However, this claim for the Verstehen position cannot be upheld. It is only by an idealization that two actual cubic centimeters of water may be taken to be alike: they are never exactly alike, but the differences between them (in impurities, for example, or temperature) may be irrelevant to a particular inquiry, just as the differences between two voters or two villages may be ignored in certain investigations. Certain of the natural sciences (such as geology) deal with unique past events; and every physical event is (under certain interpretations) uniquely dated by entropy. The uniqueness of past historical events does not prevent the discernment of patterns (for example, in all revolutions) or the pragmatic grouping of individual events into classes in order to point out functional interrelations (such as between war and inflation, or between frustration and aggression). Causal laws connect kinds of events by abstracting from those singularities which are held to be irrelevant to that inquiry (e.g., whether the hospital attendants in the previously cited study were blue-eved or brown-eved).
- 3. The natural scientist, it is claimed, can isolate what his hypothesis applies to, so that his predictions are not upset by outside variables. He may close off the solar system as if it were an aquarium, so to speak; celestial mechanics requires only mass, location, and velocity for a full description of phenomena. Social phenomena, on the other hand, are endlessly ramified; there is no way to cut them off clearly. Can anyone cope with the complexity of the factors relevant to an election? or to the fluctuations of the stock market? When it was suggested to James that psychology is the study of the knee jerk and related phenomena, he replied that all phenomena are related phenomena. How many variables are relevant to intelligence, for example-health? heredity? money? eye color? brain size? climate? And in social situations, there may be consequences that are unintended: if I decide to sell my shares of stock, the price will drop. But the reply to this claim is to point out that the tacit understanding, other things being equal, applies in all investigations, physical as well as social. Galileo's laws of falling bodies seem to be the essence of simplicity, but that is because they disregard the friction and resistance of the air-if they did not do so, they would have to take into account the shape and material of the falling body and be endlessly complex. Kepler's law that a planet travels in a simple elliptical orbit abstracts from the complicated gravitational attraction exerted on each planet by every other body in the solar system. In fact I cannot move my finger without disturbing all the stars. In both the natural and social sciences, we always assume that we may disregard certain

elements as irrelevant or trivial. Some areas of physics, such as cloud formation and hydrodynamic turbulence, seem to be as complex as any phenomena the social sciences study.

- 4. The astronomer may confidently predict the next solar eclipse, so that his hypotheses may be unequivocally verified; whereas, it is claimed by the *Verstehen* position, no social scientist can predict with any assurance. This charge is true, but it is a matter of degree. No physicist would dare to predict where a flying leaf will be ten minutes hence. No sociologist would hesitate to predict that no woman will be elected Pope in 2010.
- 5. The hypotheses of the natural scientist, it is claimed, can be stated with precision and universality because he operates with certain constants that hold true throughout the universe. Among these are the speed of light (c), Planck's constant of energy levels (h), the electric charge of the electron (e), the mass of the electron (m), and the gravitational constant (G). The social scientist has nothing to compare with these unchanging aspects of the physical world. However, it would be an exaggeration to claim that there are no constants in human actions; for instance, human mortality, perhaps sexual desire, and the law of diminishing returns.
- 6. The physical scientist, it is claimed, can verify his hypotheses by observation; he can see the eclipse and the falling apple; but the social scientist can see only the smallest part of "social reality." He relies on introspection and empathy to uncover the motives of human behavior, which are unobservable and inaccessible. If the anthropologist observes a primitive society, he has no way of finding out that it is their belief in witchcraft which motivates their behavior. He may be as mystified by their ritual as they would be if they saw him drop a letter into a mailbox after licking a stamp. If the social scientist is limited to what he can observe, what will he report when, for example, he sees that you don't vote (is it because of laziness? or disgust? or rebelliousness? or a bribe?) or when you stand still on Armistice Day? When the physicist postulates unobservable entities, such as electrons, to explain phenomena, he introduces precise rules that coordinate those unobservable electrons with something that can be observed, namely, tracks in a Wilson cloud chamber; but he need not empathize with his electrons. The social scientist does not know what motive to coordinate with your not voting; he must refer to his own motives in order to formulate the conditions under which such events occur. Now, this may well be the source of explanatory hypotheses in the social sciences; introspection and empathy may be useful, perhaps even necessary; but what counts in science is not where the hypothesis comes from, but whether and how it is verified. The historian Guglielmo Ferrero writes:

I am not one of those historians who must submerge themselves in masses of documents to form an opinion. As soon as I know the facts, I enter into the psychology of the men who were important to the events.... I read their works; I study their actions; then, ... interpreting from experience, I try to form an opinion, and finally I work out an hypothesis which I verify by research. But empathy may actually mislead you. When you bomb your enemy in wartime, do you predict his submission because you empathize with the terror, or do you predict his resistance because you empathize with the challenge? Can you by *Verstehen* empathize with Lee Harvey Oswald? or with Hitler? or with believers in witchcraft? "Intuition prevents some people from imagining that anyone could possibly dislike chocolate," says Karl Popper. The poet, too, uses empathy; in the "pathetic fallacy" he imputes human feelings to inanimate objects-the "angry" storm, the "brave" early crocus, nature's "lavish ingenuity." Prediction of human actions *may* but *need not* speculate on motives or other unobservable factors. If the social scientist correctly predicts voting behavior, that is, if his hypothesis is verified by what happens, then his empathy with presumed laziness or disgust or rebelliousness or whatever, is beside the point.

7. The raw material of the natural sciences can be measured with precision, but concepts in the social sciences (e.g., "army morale," "equality of opportunity," "free enterprise," "national character") are inherently vague and qualitative (or intensive). You can measure a woman's height, but not her patriotism. You can put two people on a scale together to get a heavier weight, but you cannot add their I.Q.'s to get a genius. However, (a) some natural sciences (e.g., meteorology) are quite imprecise; and it is never possible to predict a physical occurrence with unlimited precision," as Planck

said. (b) The social sciences are increasingly relying on mathematics. Consider, for instance, anthropometry, cybernetics, theory of games and economic behavior, sampling and poll taking, elaborate statistical analysis by computers, "cliometrics," the newest branch of history. In economics, the raw data of experience are already in numerical form. Some surprising facts have emerged from the use of mathematics in the social sciences: there is an isomorphism between the spread of rumors and the spread of disease (just as sounds have the same form as water waves); in sufficiently large aggregations there is a relation between the rank and the frequency of certain elements (Zipf's "law of least effort "the second letter in order of frequency, t, appears half as often as the first, e; if the cities of a nation are ranked in order of population, then the largest city has twice the population of the next largest). (c) Although intensive qualities cannot be measured, they often can be scaled, or placed within some rank or order. The hardness of minerals, for example, is not measured, but expressed in terms of a scale from I (talc) to 10 (diamond); a new mineral might be described as being between 7 (quartz) and 8 (topaz). The pecking order of a group of barnyard fowl is also a scale. By careful analysis, it has been found possible to scale such intensive qualities as patriotism and race prejudice. (d) The "mystique of quality" is misguided; "the difference between the qualitative and the quantitative is not a difference in nature but a difference in our conceptual system-in our language," says Car-nap. When you say that it is hot, and when you say that the temperature is 86°F., you are not denoting different things, but using different sets of symbols. To call a sound high-pitched and to identify its wavelength is to refer to the same "piece of the world" in different ways. Quality and quantity are not antithetical; any quantity is a quantity of a quality.

- 8. In the natural sciences, phenomena may be studied without regard to their past (an inclined plane is just what it is), whereas human beings and societies are only what they have come to be. This is a problem for the social sciences, which may find their predictions falsified because of unobservable and unverifiable past histories. Not everyone who dips a madeleine in tea will react as did Marcel Proust. Only the burnt child dreads the fire. Living creatures have memories, dispositions, and expectations. Behavior is altered by habits and conditioning. Thus, a person's past history influences his present reactions (Russell's "mnemic phenomena"); rocks do not remember. But this constraint does not preclude the search for generalizations about behavioral phenomena (for example, one might investigate whether all burnt children dread fire equally) and in physics the influence of the past is not always irrelevant (hysteresis is the lagging or retardation effect in viscosity and internal friction). Everything is what it has come to be. If you were to take someone's place in the middle of a chess game, you could determine your best move just by examining the position on the chessboard at that time, but you could not similarly replace the bridge player in the middle of a hand without knowing the previous bids and cards played. Thus, the physicist can often make predictions on the basis of general laws and present conditions, whereas the sociologist may require, in addition, a temporal or historical perspective: knowledge of how things got to be the way they are. Sartre misses the point when he remarks that American "hyper-empiricism-which on principle neglects connections with the past-could arise only in a country whose History is relatively short." But that a social situation (or a man, or a bridge game) is what it has come to be does not prevent scientific inquiry-why should it? -any more than it does in historical geology. In evolutionary biology, every living species is what it is as the result of a long history of natural selection; but only the history which is incorporated into its present structure is of any scientific significance.
- 9. In the social sciences, explanatory hypotheses may become confused because there is an unavoidable interaction between the scientist and what he studies, between his statements and the people to whom he makes them. The astronomer's prediction of an eclipse has no effect on the eclipse; but the sociologist's predictions, when publicized, may be self-fulfilling ("there will be a run on the bank"; "prices on the stock market will go up"; "ghetto children are likely to become delinquents"; remember what happened to Macbeth when the witches predicted he would become king). The sociologist's predictions may also be self-defeating ("the commodity you manufacture will

be overproduced"; "you'll have an accident if you drive home in this weather"; "Jones is the underdog in this election and can't possibly win"). This is the Cassandra paradox: a prediction *to you about you* may motivate you to defy the prediction. Moreover, as opinion researchers will confirm, a question may often be asked in such a way as to evoke a certain response. The poll-taker may unconsciously interfere with the situation being investigated; this criticism was made of the Kinsey report. The announcement of a new disease or syndrome, genuine or imaginary, will elicit some responses of "That's just what I have!" Thus, the physician (like other investigators) may induce by his manner or remarks an otherwise nonexistent pathological condition ("iatrogenic causation"). Different physicians using the same drugs on the same patients may get different results.

Interactions between social investigators and what is being investigated do occur, and they do present a problem for social science. But this complication is again a matter of degree. In physics, too, the insertion of a thermometer into a liquid alters its temperature; and in all intra-atomic measurements, the observing device interacts with what is being observed. However, there is no reason why all these interactions cannot be examined. The impact of self-fulfilling or self defeating prophecies ("seldep") can be evaluated. There is no insurmountable difficulty in generalizing these behavior patterns.

Adolph Lowe has argued in *On Economic Knowledge* that economic theory does not unravel a tangle from outside, but is the means whereby a participant within the process consciously alters it:

That knowledge should be inseparable from action, because that which is known may first have to be

created in the image of a rationally conceived design, is probably the one characteristic that

...separates the science of Society from the science of Nature. But, as I argue throughout this book,

neither in physics nor in human affairs is there a determinate, ordered "reality" which can be known by

the passive reception of discrete sense impressions.

10. The natural scientist is indifferent to his subject matter, but the student of human affairs can scarcely be detached in investigating birth control, socialism, sexual freedom, crime, drugs, pornography, and so on. The social sciences, unlike the physical, are permeated with values. It was the hope of Auguste Comte that his newly founded "science of society" would eliminate values by distinguishing, for example, the question of whether to land a man on the moon from the question of how to do so; or whether to solve India's population problem by putting a sterilizing chemical into the water supply from how to do so. (These examples, of course, are not from Comte.)

The involvement of the social sciences with ethical or moral issues has various aspects. (a) As in the examples cited, the issues themselves may pose ethical considerations. But, obviously, issues in the natural sciences do so as well. Whether to develop new pesticides, or a new nerve gas; what kinds of experiments to perform on animals, fetuses, and prisoners, all involve moral questions. (b) The judgment of the social scientist may be affected by his interests: think of conservative and liberal analysts of unemployment and inflation, of Mao and Khrushchev on the inevitability of war, of labor and capitalist determinations as to whether wages or profits rose faster. But such bias occurs in the natural sciences as well: think of the Soviet advocacy of Lysenkoism, of Nazi opposition to relativity physics, of Oppenheimer versus Teller on the hydrogen bomb, of arguments about evolution and the age of the earth. Scientists may be biased; but this applies to the natural sciences and the social sciences equally. Theoretically, bias may be made explicit and compensated for; scientific procedures are self-corrective. (c) Some of the applications of social theories have been suspect: functionalism in anthropology has been denounced as a device for the imperialist management of primitive societies; but physical theories have of course also been used for ulterior purposes. (d) The social scientist may select his problems because he believes the results of his research will be socially valuable (e.g., to raise real wages); but so does the physicist. Both are human beings. (e) It is claimed that fact and value are in principle impossible to separate in the social sciences: can you describe a concentration camp factually without using the word "cruel"? But, as Ernest Nagel has shown, there is a sharp difference

between *characterizing* and *appraising that* is, between defining or clarifying a condition, and approving or condemning it. You might say that absinthe is the best way to drink yourself to death. An atheist is no less competent than a devout believer in distinguishing a truly religious person from one who is only going through the motions. A pro- or anti- attitude need not obfuscate a statement of the relation of means to ends. (fl Since no hypothesis is ever completely proven, there is often in the physical as well in the social sciences some problem that requires rational decision; for example, how high should we build a dam to prevent floods? what safety factor should we use for a bridge? when is a certain new drug safe to market? what percentage of toxic side effects may we ignore? when ought a new discovery be published? These decisions involve values; they must be made in both the natural and the social sciences.

11. In the natural sciences, it is claimed that the facts dealt with can be unambiguously isolated; whereas the social sciences face problems in establishing their hypotheses not only because the concepts used are qualitative and vague (which is claim #7), but also because social facts are *contextual* and holistic. They involve human actions, which are never without a setting. Thus, a "voter in the primary" is more than just a "person moving a lever"; a "banker

certifying a check" is more than just a "person pushing a pen"; a piece of green paper is money only if the people handling it believe it to be so; a man wearing a uniform is an army officer only if he is so regarded. Social data are never "brute facts." They require interpretation by concepts. These concepts, it is claimed, are unavoidably normative and can be properly understood only by the participants themselves "from the inside." No outsider can break into this interlocking set of meanings and values (the "hermeneutic circle"). But this argument for the *Verstehen* position transforms a practical difficulty into a theoretical impasse, and confuses experience with knowledge.

No special intuition or empathetic understanding is required to predict and describe what people do. If social facts are indeed contextual, and institutions are constituted by systems of rules, or "forms of life," they can be investigated just like any other phenomena, even if they are networks which are more than the individuals involved. An army, or a football team, or a square dance, or a revival meeting, or a philosophy class consists of persons who have mutual interactions and expectations. "One chimpanzee is no chimpanzee," said Yerkes, perceptively.

The thesis of *holism* takes the beehive as the model for human society: laws stating the properties of wholes or collectives are required in order to explain and predict social events; personality variables are irrelevant; individuals are the actors who just happen to play roles in a social scene. Tolstoy wondered in *War and Peace* how the army could want war when each soldier wanted peace; but, whether in a lynch mob, or a political convention, or a social club, or a Dutch tulip craze, persons will do in groups what they will not do acting alone. Every culture assumes some notion of order or hierarchy without which no description of social facts is complete. Marxist holism claims that what each of us thinks and how each of us acts are to be explained by how our class is related to the modes of production.

Three considerations, however, may be adduced to modulate the view that social science is distinctively holistic. (a) Natural science must also often take account of context (e.g., the critical level necessary for an atomic reaction; or in magnetism or ecology). (b) The astronomer can study the stars in the Big Dipper as a single constellation; the sociologist can study the behavior of a mob as a unity. Thus, microeconomics studies the observable actions of single individuals; macroeconomics deals with such abstractions as "balance of trade" and "Gross National Product." The "aggregation problem" in economics of inferring the total demand for consumer goods from the number of shirts that Bert buys presents no greater theoretical difficulties than the physicist faces in dealing with temperature as the property of a thermodynamic system rather than of a single molecule. (c) Most important, the thesis of *methodological individualism*, which is opposed to holism, argues that all social or collective terms can be analyzed exhaustively into the behavior and dispositions of individual persons. Accordingly, Adam Smith and Mill base social theories on individual propensities; Pareto claims that "psychology is at the base of all the social sciences"; and Erich Fromm uses the categories of psychoanalysis to explain politics and economics. John Maynard Keynes built his *General Theory* of

economic activity on three psychological factors: a propensity to consume, an attitude to liquidity, and an expectation of future yield from capital assets. Lewis Namier contributed to historiography by his study of the eighteenth-century British political parties, in which he maintained that party decisions were motivated by the self-interest of individual party members. This sort of reduction of the social sciences to depth psychology, I believe, often teeters on the edge of the reductive fallacy. I doubt that the jury system in England can be accounted for by some Anglo-Saxon psychological trait or that it was the "authoritarian personality" that produced Nazism. I am not persuaded by Geoffrey Gorer's contention that the success of Bolshevism may be attributed to the Russian addiction to swaddling clothes. However, there are sufficient grounds to dispute the claim of holism that contextual social facts must be theoretically distinguished from physical facts.

12.Max Weber contends that no objective analysis of "social reality" can be made because "life, with its irrational reality and its store of possible meanings, is inexhaustible." We must select, then, he says, what we consider to be the essential features of an event, and use meaningful categories to construct an "ideal type" which we then impute to the event. "Capitalist" is an example of such an accented construct; no living person actually spends all his time maximizing his profit. However, *all* the concepts of science (not only those of "social reality") are idealized; *all* descriptions are selective. The concept of "capitalism" is useful; so are the concepts of "frictionless engine" and "ideal gas," which are likewise arrived at by giving certain variables extreme values.

These twelve diverse and overlapping arguments for the Ve*rstehen* view do not impair the naturalist ideal of the unity of science. In different areas of inquiry, there are differences in subject matter, technique, and complexity, but any claim to knowledge must be validated, verified by evidence, and justified by reasons. There is no basis for excluding the investigation of human actions from the maximal organization of knowledge. Empathy is neither necessary nor sufficient for scientific explanation.

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