

Key definitions

Action Relates to the “doings” of purposive agents. A key preoccupation of philosophy of social science is the explanation of human action either through antecedent causes or reasons. Accounts of social behaviour that privilege agency over structure explain the existence of the social as resulting from the actions of individuals.

***Ad hominem* argument** A fallacious argument whereby the character of a person is cited as a reason to reject their argument or the value of what they say.

Analytic An analytic statement is one where the truth of the conclusion is contained within the premisses, e.g. “All men are mortal, Socrates is a man, therefore Socrates is mortal.” Compare with Synthetic.

A priori Literally “from what comes before”. In philosophy it is used to refer to conclusions reached on the basis of reasoning from self-evident propositions.

Axiom A self-evident, or wholly accurate statement. Principally used in mathematics. In social science there are few, or no, statements that are considered as axiomatic, though some have claimed that statements such as “individuals seek to maximize pleasure and minimize pain” are of this type.

Bayes’s theorem A method of evaluating the conditional probability of an event. Bayesians argue that many methodological puzzles stem from a

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fixation upon all or nothing beliefs and that these may be resolved by applying “degrees of belief to a hypothesis.

Conventionalism The view that the adoption of one scientific theory over another is simply a matter of convention.

Critical theory Originally a diverse strand of Marxism, but with origins in Hegelian philosophy. It has since drawn on a number of other influences including systems theory and psychoanalysis. A characteristic of humanity is rational thought that allows us the potential to create or transform our environment. Moreover, our capacity for rational thought provides us with standards by which we can criticize existing societies. A term originally associated with the Frankfurt School and more recently with the modifications of this tradition in the work of Habermas.

Deduction An argument is said to be deductive if the conclusion can be deduced from the premiss. Compare with Induction.

Dependent/independent variable In research, changes in the “dependent variable” are explained by reference to the influence of the “independent variable”. For example, educational achievement (dependent variable) may be linked to social class, location, etc. Which variables are treated as dependent or independent will depend on the theoretical framework of the research.

Determinism/deterministic A doctrine that claims all events are determined by prior events and the operation of natural laws. Thus, it is held that if such causes can be uncovered then it is possible to predict the future with accuracy. In its extreme form it has had few adherents in social science and with the advent of quantum physics and non-linear mathematics, deterministic models of the physical world are taken less seriously.

Dualism A theory which holds that phenomena are either physical or mental and cannot be reduced to each other. Descartes was possibly its most famous exponent (I think, therefore I am) in his separation of the thinking thing from that which is being thought. Compare with Monism.

Ecological fallacy An error of reasoning where conclusions about

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individuals are wrongly derived from premisses about groups. For example, aggregate data about factors associated with poverty cannot be used to draw conclusions about the cause of poverty in individuals.

Empiricism The doctrine that all knowledge about the world is derived from sense experience. In some very influential forms, especially in the work of Hume, it takes a “psychologistic” form whereby that which we describe as experience is really a description of the contents of our mind. Although usually contrasted with idealism, in this form it might be regarded as collapsing into idealism.

Epistemology A branch of philosophy concerned with how we know what we know and our justification for claims to knowledge.

Ethnomethodology A form of sociology “invented” by Harold Garfinkel. Its influences are principally those of phenomenology, the ideas of the American sociologist Talcott Parsons and ordinary language philosophy. It is an attempt to empirically explain how agents (“members”) produce meanings in social practices. It is held that all knowledge, including ethnomethodology itself, is a social creation.

Falsification To show something to be false. Popper argued that although theories can be conclusively falsified they can never be conclusively verified. For him, falsification was the criterion of distinction between science and non-science. Compare with Verification.

Fallacy (e.g. genetic, ecological, gambler’s) In everyday life, fallacy is equated with error, but in its logical form it is an argument that involves invalid reasoning. There are many kinds of fallacy and they have important consequences in social science. For example, see Gambler’s fallacy, Ecological fallacy.

Functionalism Functional explanations have a long history in social science and are said by some to be unavoidable when explaining the actions of groups. Its origins were in biology where a particular organ is explained by its function. In sociology, functional explanation involves explaining the role of individuals, or smaller groups, through the function they perform in maintaining larger groups or society as a whole. It is a controversial doctrine criticized on a number of fronts. A particular

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philosophical criticism is that it is “teleological” in that it explains a process by its end state, thus reversing cause and effect.

Gambler’s fallacy Makes the mistake of treating independent events as though they were dependent. For example, if when tossing a coin you reason that the more times it comes up heads, the more you increase the chances of it coming up tails next time, this is to commit the Gambler’s fallacy.

Hermeneutics A term imported from theology mainly through the work of Dilthey. It is concerned with the investigation and particularly the interpretation of human action as essentially intentional. It is particularly concerned with the content as well as the form of what is being interpreted.

Heuristic device An artificial construct that is used to assist in understanding. Weber’s “ideal types” can be seen as a heuristic device in sociology-

Historicism Used principally and pejoratively by Karl Popper and his followers to describe an approach to social investigation that sees historical prediction as its goal. Popper claims human history is, in principal, unpredictable for human actions constitute “open systems”. New knowledge cannot be predicted, because to predict it one would already have to possess it. Social science concerned with grand historical prediction, however, is no longer fashionable and Popper’s critique of historicism may be regarded as something of a “straw person”.

Hypothetico-deductive model Though there are variations, the hypothetico-deductive model in science is one where hypotheses are derived from a theory. These are then tested via observation.

Hypothesis An untested statement of the relationship between concepts within a particular theory. In some accounts, they are logically equivalent to a theory in that a theory itself is, in principle, never completely proven. A hypothesis is then simply that part of the theory subject to empirical test.

Idealism A doctrine that takes many forms, but has a common theme whereby what we call the external world is a creation of mind. This does

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not mean that idealists claim that there is no “real” world, but that we can never directly perceive the “real” world. Contrast with Realism.

Ideal type A heuristic device associated with Max Weber. It is neither an average type, nor a description of the most common features of a social phenomenon. It is, instead, a conceptual type that can be used as a category, or concept, to guide research.

Ideology A system of ideas or norms that direct social or political action. Often associated with Marxism where the “dominant ideology” of a society is seen to derive from the material dominance of one class over another.

Induction Induction begins from observations of particular phenomena from which generalizations about wider phenomena are then made. Although, unlike deduction, the truth of the conclusion is not entailed by the premisses, it is said that sufficient evidence from observations constitute good reasons for accepting something as true. Thus, that the sun has risen every morning is reason enough to conclude it will rise tomorrow. The difficulty arises in deciding what constitutes sufficient evidence to reach such conclusions.

Instrumentalism A view in the philosophy of science that holds that theories are simply instruments, calculating devices or tools used for deriving predictions from data. An alternative meaning in social philosophy, which derives from William James, is that ideas or practices only have value in that they help us achieve a desired end state.

Interpretivism Approaches to social sciences that prioritize the meanings and actions of agents are collectively described as interpretivist.

Isomorphic Having a structure or form equivalent to something else. It is sometimes said that prediction and explanation are isomorphic because one logically entails the other.

Metaphysics The branch of philosophy concerned with matters that go beyond our existing knowledge, such as questions about the existence of god, the nature of “reality” or the origins of the universe. Although criticized by many empiricists as simply speculation, it remains that, at a

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mundane level, such speculations, or assumptions about the world, are the basis of theories that should be testable.

Methodological individualism/holism Methodological individualism and methodological holism are opposites. The former doctrine holds that all social explanation is, in principle, reducible to statements about individuals, whereas the latter argues that social “wholes” such as classes, ethnic groups, etc., have a factual existence that is not reducible to the characteristics of individual agents.

Naturalism In the philosophy of the social sciences, this is the doctrine that human beings should be considered as part of nature. Thus, the subject matter of the social sciences is continuous with that of the physical sciences and that with appropriate adaptation, the methodological approach of the latter is appropriate to the study of the former. This should not be conflated into positivism. Confusingly, “naturalism” is also used to describe an approach in interpretivist sociology that aims to study social phenomena in their natural setting.

Necessary/Sufficient condition In causal analysis, a necessary condition is where a variable, or event, must be present for another variable, or event, to occur. A necessary condition may not be sufficient to bring about that event. Conversely, a sufficient condition is where a variable, or event, is enough on its own to bring something about.

Normative A normative statement is one about what is right or what is wrong, desirable or undesirable, in a society. Therefore, it is a value judgement made from a particular political or moral perspective.

Occam’s razor A philosophical view which holds that theories or explanations should be as streamlined as possible. In research it takes the form of the most parsimonious model, theory or equation.

Ontology The branch of philosophy concerned with existence and the nature of those things that exist. Compare with epistemology.

Paradox of enquiry The paradox of enquiry is summed up by Socrates when he asks how can we seek something if we don’t know what it looks like and if we already know why would we seek it?

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Phenomenology A philosophical method of enquiry involving the systematic investigation of the objects of consciousness. Principally associated with Brentano and Husserl and in social science, with Alfred Schutz.

Premiss In logic, this is one of the statements from which another statement (the conclusion) can be deduced. In a deductive argument, the conclusion should follow from the premiss, but that is no guarantee that the premiss is itself true.

Probability The likelihood that a particular relationship or event will occur. Values for a statistical probability range from 1.0 (always or certain) to 0 (never). Though probability is a complex and controversial topic, it is sometimes said that the absence or paucity of laws in the social world gives social science a “probabilistic” character. In other words, though we are much less certain of an event occurring in the social world than the physical world we can, nevertheless, often assign a probability value to its occurrence.

Rationalism Post Enlightenment philosophy has been dominated by two major “schools” of thought—those of empiricism and rationalism. Rationalism begins by asserting that it is possible to obtain by reason alone a knowledge of the nature of what exists and that everything is, in principle, explicable. Thus, unlike empiricism, knowledge is not linked wholly to sense data. Some forms of rationalism emphasize the deductive character of knowledge, whereas “critical rationalism” combines this with the empiricist assertion that sense data are the final court of appeal.

Realism Realism takes many forms, though each shares the view that physical objects exist independently of our perception of them. In social science, the question for realists is what is the ontological status of social phenomena? Some, like Marx and Bhaskar, argue that they have a “*real*” existence whereas others are prepared to allow that the physical world has a real existence, but the social world depends for its existence on its being perceived. Anthony Giddens has tried to bridge this gap by accrediting social phenomena with having what he calls a “virtual reality”.

Reductionism In general, a reductive strategy is one that attempts to

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explain the complex to the simple. In social science, it is usually an attempt to reduce sociology to psychology and the latter to biology. In some respects, reductionism is a valid strategy in the elaboration of a concept, but often its advocates miss the point. It is as pointless to reduce sociology to psychology and the latter to biology as it is to reduce engineering to quantum description!

Refutation To refute something is to do more than deny it. Instead, a refutation requires that sufficient reason is provided for believing that what is denied is actually false. To refute a research finding is not to disagree with it, but to show it to be wrong.

Relativism It is possible to be a relativist about knowledge, cognition or value. The relativist emphasizes the importance of the environment in determining what is, or what ought to be the case. Secondly, the diversity of social environments is emphasized. It is summed up in Pascal's comment that what is truth on one side of the Pyrenees may be error on the other. Different kinds of relativism produce different arguments, but one difficulty besets all types of relativism. If it is asserted that there are no objective values, or objective knowledge, then such an assertion must have the same status as those things it pronounces upon!

Solipsism A solipsist holds that they alone exist and that what is called the outside world exists only in the conscious mind. It has been of interest to philosophers mainly because it is a view very hard to refute! Nevertheless, we work on the metaphysical assumption that it is wrong and the description "solipsistic" is nowadays often reserved for extreme forms of idealism where the possibilities of intersubjectivity are denied or minimized.

Significance Though often used as a synonym of importance, in social science it is usually taken to refer to statistical significance: that is, whether a value is larger, or smaller, than would be expected by chance alone. However, though something may be statistically significant, it does not mean that it will be of substantive or practical significance.

Structuralism In a general sense, this refers to social scientific approaches that regard social structure as more important than social action. However, more recently it has come to be used to describe a diverse movement in sociology motivated by the idea that underneath the changing and

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unstable appearance of social reality underlying structures located in rules and/or language can be discerned. Associated with Saussure, Lévi Strauss and Althusser.

Theory A statement, or group of statements, purporting to describe how a part, or parts of the world, work. A theory will go beyond that which is apparent to the senses, but it is usually held that a theory should be testable to be of research value. Compare with hypothesis.

Theory laden Any concept or word that can only be understood within the context of a particular theory. For example, the concept of the “superego” can only be understood within the context of Freudian psychology. Many recent philosophers of science have influentially argued that all descriptive terms must be understood in the context of a theory—all terms in science are theory laden.

Validity In logic, an argument is valid if there is agreement between the premisses and the conclusion. However, in research a measure or test is considered to be valid if it measures the property it claims to measure.

Value freedom Traditionally science, and social science, were claimed to be free of personal or normative values. However, value freedom, even if it could be obtained, would be simply the substitution of the values of science for other values. Few would disagree nowadays that all disciplines begin from a set of values, though this need not prevent investigators from being objective.

Verification A procedure carried out to determine whether or not a statement (usually a hypothesis) is true or false. Thus, a hypothesis that could be shown to be true is verifiable. The verification principle was at the heart of logical positivism, but repudiated by Popper who attempted to replace it with falsification. Compare with falsification.

Verstehen A German word used by Dilthey, but especially Weber, broadly meaning “understanding”. *Verstehen* is a method of interpreting social action by placing oneself in the position of the person whose actions one wishes to interpret.

Voluntarism Emphasis is placed on the individual action. Often used to

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denote theories that place too much emphasis on the freedom and the ability of individual agents to shape the social world.

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