

Objectivity, values and the possibility of a social science

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Objectivity

Objectivity means judgment based on observable phenomena and uninfluenced by emotions or personal prejudices.

Objectivity is the willingness and ability to examine evidence dispassionately

Objectivity of truth means that the phenomenon would be a reality independent of beliefs, hopes or fears of any individual, all of which we find out not by intuition and speculation but by actual observations

Objectivity means that the conclusions arrived at as the result of inquiry and investigation are independent of the race, color, creed, occupation, nationality, religion, moral preference, and political predisposition of the investigator. If his/her research is truly objective, it is independent of any subjective elements; any personal desires that he/she may have. Objectivity thus, means that the conclusions arrived at as the result of inquiry and investigations are independent

Objectivity in Natural Sciences

In natural sciences, objectivity has two broad meanings. First, it means that observers agree about what they have observed. For example, a group of scientists observing the behavior of objects when they are dropped would agree that they saw the objects “fall” to the ground. For this observation to be objective:

1. there must be an agreed-on method for producing it (dropping an object);
2. it must be replicable (more than one object is released, and they all “fall”);
3. the same result must occur regardless of who performs the operation and where it is performed (object must behave the same way for all observers anywhere in the world).

Objectivity in Social Sciences

The goal of scientific investigation, sociological or otherwise, is often said to be objective knowledge, free of bias or prejudice. There is a difference of opinion here, some holding that objectivity in sociology is possible, others not. Five different kinds of arguments are advanced for sociology not being objective:

1. Sociological judgments are subjective, being colored by actor's own experiences.
2. All propositions are limited to their meaning to particular language contexts.
3. All sociological theories are produced by, and limited to, particular social groups. Such a doctrine is often taken to be an outcome of the sociology of knowledge which treats all knowledge as a function of social location.
4. All observations are necessarily theory-laden.
5. In that all members of society have different values, sociologists will unconsciously, but necessarily, have their arguments influenced by their values.

Objectivity in Social Sciences

More particularly, the main principles of objectivity (or value neutrality) are these:

- Social science is value free, that is, its goal is to study what is and not what ought to be. For this reason, the structure of theory and research should adhere to the inherent principle of value neutrality, and try to achieve the highest possible degree of objectivity.
- Social scientists should be value free, that is, they should rule out value judgments, and should exclude subjective views, personal bias and personal convictions when working as academics.
- Value judgments should be reserved for politicians, who are more familiar with the whole social process of social life, and not for social scientists.

Objectivity and Subjectivity

Coser (1977) argues choice is always influenced by values (value-relevance) but once research choices have been made value-neutrality involves the researcher-acknowledging their values and not imposing them on the research process –an important dimension of objectivity and subjectivity- ideas illustrated by four related types of knowledge.

1. Ethical

Whatever their personal involvement or beliefs a researcher must maintain a critical and objective detachment –a form of objectivity to which all sociologists subscribe.

Objectivity and Subjectivity

2. Personal

This reflects a researcher's beliefs about how is possible and desirable to study behaviour.

For positivists, the researcher doesn't become "personally involved" by participating in the behavior being researched. The social distance between researcher and respondent is maintained using research methods, such as questionnaires, to ensure the researcher doesn't interact with their respondents to influence their behaviour.

Interpretivists, the researcher should get as close as possible those being researched (while maintaining ethical objectivity). This generally involves using "subjective" research methods, such as unstructured interviews or participant observation.

Objectivity and Subjectivity

3. Ideational

This involves beliefs about the nature of knowledge (whether, for example, it's possible to get at the truth about something). In terms of the methods used in the research process.

Positivists argue it is possible to generate objective knowledge, which means the task of the sociologist is to test hypotheses using objective research methods.

Interpretivists argue all knowledge is necessarily subjective and the task of the sociologist is to reveal different forms of truth by describing social behavior.

Objectivity and Subjectivity

4. Social

This refers to core beliefs about the nature of the social world and how it can be studied.

For some approaches-particularly positivism and realism –the social world has an objective existence.

For interpretivism the social world exists subjectively and societies can't be validly studied independently of the people who create them. The aim of research is to reveal how people make sense of their world.

Objectivism

Positivists and realists argue we can study objective features of the social world (institutions such as families and educational systems) because they have both permanence and solidity.

Objectivism, therefore involves the idea social structures are real, exist independently of the observer and can be experienced directly or indirectly. Sociological research, therefore, involves discovery - progressively uncovering the principles on which the social world is based - and should be value-neutral; the researcher should not allow values to influence what they see and they study the social world as a detached observer. As Firestone (1987) puts it, this approach argues “There are social facts with an objective reality apart from the beliefs of individuals”.

Objectivism

These social facts - embodied in the idea of social structures that influence and constrain individual behaviour - can be studied in much the same way a physicist studies natural phenomena.

Objectivism, therefore, argues human behaviour is always the result of external stimulation - social structures pushing people to behave in particular ways, such as playing particular roles and conforming to specific norms. Just as in the natural world where the behaviour of things is determined by the operation of physical forces, such as gravity, human behaviour is theorized as the result of social forces:

Objectivism

If a natural scientist wants to understand why apples always fall to the ground, they don't ask the apple; they study the forces that propel apples to behave as they do.

Similarly, to understand social behaviour we need to understand the social forces that compel people to behave in particular ways - and if individual action is a product of external social stimuli, it follows these can be identified, researched and explained in an objective, scientific, way.

Objectivism

Empathy (what Weber calls *verstehen* or understanding) involves the ability to see events from the viewpoint of others and is not something to avoid. Rather, sociologists should take advantage of the fact they have something in common with the people they study.

Murphy (1988), for example, argues the researcher should recognise how we see something is always based on our values and can't be separated from how we interpret what we see.

Objectivism

Value-freedom - rather than giving sociologists access to "the truth" - actually distorts data because it's (unattainable) pursuit stops the researcher questioning how and why their values are part of the research process. Sociologists should, therefore, "strive to understand the value base of data, rather than searching for ways to purge values from research".

Subjectivism

Where objectivism sees a single reality that can be discovered through systematic research, subjectivism argues there are many realities, expressed through the various ways different people see and understand the social world.

The social world is not something out there waiting to be discovered; rather, it exists only as 'interpretations waiting to be made' - how people understand both their own behaviour and that of others. From this position the aim of social research is the production of "subjective understanding

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Interpretivist and feminist approaches, for example, see the researcher as a channel through which individuals can "tell their story". The objective is to uncover how and why people see the social world - and their role within that world - in particular ways.

Subjectivism

This doesn't mean the researcher should be personally subjective. Williams (2005), for example, argues, researchers should strive for personal objectivity in their work.

Williams also argues we should see objectivity and subjectivity as part of a continuum – a line with 'pure objectivity' at one end and 'pure subjectivity' at the other. Although sociological research is more value-laden than natural scientific research, this doesn't automatically render it unreliable and invalid, for two reasons:

Subjectivism

1. Pure objectivity is an ideal that can never be attained because all research involves some degree of value commitment.
2. If sociologists recognize how values impact on their work (by identifying the assumptions under which they are working), this research is less value-laden, more reliable and valid than the opinion of the non-sociologist.

Normativism

The opposite view constitutes the theoretical position of normativism. This position entails a number of principles, the most important of which are listed below:

1. Objectivity or value neutrality is unattainable, unnecessary and undesirable. For some theorists, objectivity is used as an excuse for an uncritical acceptance of the established status quo. One cannot consider intrinsic evaluation, feeling, belief and standard as insignificant or not influential.

Normativism

2. Social scientists ought to have a standpoint on social issues and they must produce value judgments if they wish to solve social problems.
3. Our general orientation is based on and is constructed with values; these values direct our thinking and action and cannot be isolated or ignored.
4. Disclosing the inevitable bias or personal belief is less dangerous than pretending to be value free.
5. Social sciences are normative. Apart from studying what is, they should be concerned with what ought to be.

Causal Correlation in Social Science

In the social sphere, cause and effect cannot be separated and treated in impersonal terms. This shows that to a very great extent, it is our decision or choice that enters into treating separate phenomena as cause and effect and it is determined by our interest and attitude. In short, interest and attitude of the observer decide what items should be treated as cause or effect. Even at the stage of making the so called casual correlation values do enter to it

Social science and theories

Theories about society are not empirical. In short, they are neither confirmed nor rejected in the light of facts; rather, facts have to conform to them. Seen in this light, theories about society turn out to be preference laden.

It is our preference or interest that decides the issue in favor of one rather than another. If this is accepted, then study of society which draws its sustenance from any one of such theories cannot be treated as value-free.

The ideal of value-free science

What is meant by value-free science?

1. What kinds of values should science be free from?
2. What in science should be free from these values?

Value-Freedom

The term «value-freedom» is a little misleading since it suggests human behavior can be «free from the influence of values».

An alternative concept, therefore, is value neutrality-the idea a researcher recognized how their values influence the research process and adjusts their research strategy accordingly.

Dentler (2002) suggests debates about value-neutrality generally fall into two main camps:

1. Positivists, who argue sociological research should be value-neutral;
2. Those who argue it should be value-committed. Feminist approaches, for example, argue research should be directed towards promoting social change in the status of women.

Constitutive versus contextual values

Constitutive

Values are values generated from an understanding of the goals of scientific inquiry. Theoretical virtues are desirable features of scientific theories, communal values are desirable features of scientific communities; intellectual virtues are desirable features of individual scientists.

Contextual

Values are values generated from other goals (e.g., value judgments that concern a desirable social order). Contextual values are allowed to influence what topics are considered important in science (the context of discovery) and what practical goals research is expected to serve (the context of application). Contextual values are allowed to influence what hypotheses and theories should be accepted (the context of justification).

What are constitutive values?

- Theoretical virtues are desirable features of scientific theories
- Communal values are desirable features of scientific communities
- Intellectual virtues are desirable features of individual scientists

Theoretical virtues

T. Kuhn

Accuracy

Simplicity

Internal and external consistency

Breadth of scope

Fruitfulness

Communal values

R. Merton (1942) “The Normative structure of Science” in Merton R.K. *The Sociology of Science: theoretical and empirical investigation*, Chicago: University of Chicago Press.

“The ethos of science is that affectively toned complex of values and norms which is held to be binding on the man of science”.

CUDOS is an acronym used to denote principles that should guide good scientific research. Merton described four set of institutional imperatives the ethos of modern science (universalism, communism, disinterestedness and organized skepticism).

In contemporary academic debate the modified definition outlined below is the widely used:

Communalism, Universalism, Disinterestedness, Originality and Skepticism.

CUDOS

Communalism

All scientists should have equal access to scientific goods (intellectual property) and there should be a sense of common ownership in order to promote collective collaboration, secrecy is the opposite of this norm.

Universalism

All scientists can contribute to science regardless of race, nationality, culture, or gender.

Disinterestedness

According to which scientists are supposed to act for the benefit of a common scientific enterprise, rather than for personal gain.

Originality

Requires that scientific claims contribute something new, whether a new problem, a new approach, new data, a new theory or a new explanation.

CUDOS

Skepticism (Organized Skepticism)

Means that scientific claims must be exposed to critical scrutiny before being accepted.

Counter norms

Particularism

Is the assertion that whilst in theory there are no boundaries to people contributing to the body of knowledge, in practice this is a real issue, particularly when you consider the ratio of researchers in rich countries compared with those in poor countries, but this can be extended to other forms of diversity. In addition, scientists do judge contributions to science by their personal knowledge of the researcher.

Counter norms

Solitariness

Is often used to keep findings secret in order to be able to claim patent rights, and in order to ensure primacy when published.

Interestedness

Arise because scientists have genuine interests at stake in the reception of their research. Well received papers can have good prospects for their careers, whereas as conversely, being discredited can undermine the reception of future publications.

Counter norms

Dogmatism

Because careers are built upon a particular premise (theory) being which creates a paradox when it comes to asserting scientific explanation.

Intellectual virtues

Honesty

Competence

Conscientiousness

Capability of epistemic self-assessment

(Hardwig, John, 1991. The role of trust in knowledge, Journal of Philosophy 88 (12), 693-708.

How values intrude into the research process can be considered in two ways:

Practical

Doing research involves making choices about what to study/how to study it.

- Some choices reflect direct personal values
- Others reflect indirect values. How and by whom research is funded may influence not only what is studied but also how it is studied.

How values intrude into the research process can be considered in two ways:

Theoretical

These choices reflect beliefs about the nature of the social world and how it's possible to study social behavior. This relate to the researcher's beliefs about what exists, the kind of proof they are willing to accept and ideas about what constitutes reliable and valid data.

At a fundamental level sociologists have to confront their beliefs about their subject matter and how it influences research design and conduct-whether people are.

Direct/Indirect roles

A direct role is not acceptable because it would undermine the value of science itself, its basic integrity and authority.

An indirect role is acceptable because scientists are morally responsible for the potential harm caused by their making overly strong knowledge claims and downplaying the risk of error. Scientists should make value judgments concerning the acceptable level of uncertainty, and these judgments require social and moral values. Value judgments should be made as explicit as possible because the public has a right to understand the social and moral values behind scientists' assessment of the acceptable level of uncertainty.

Conclusion

The traditional ideal of value-free science: social and moral values are not allowed to play any role in the reasoning and decision-making that scientists are engaged in when they decide to accept something as scientific knowledge, either individually or collectively.

Whereas many philosophers of science seem to be unanimous about the need to replace the traditional ideal, their views diverge on the question of what the successor to the traditional ideal should be.