

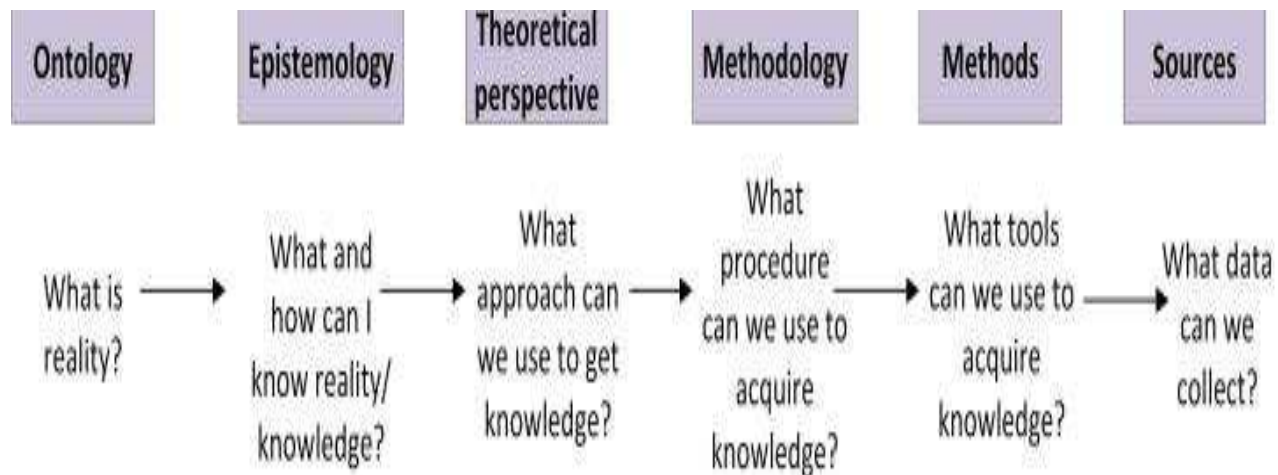
Epistemology

- Epistemology deals with the nature of knowledge, its possibility, scope and general basis (how we know, what we know).
- Epistemology as a branch of philosophy deals with the sources of knowledge. Specifically, epistemology is concerned with possibilities, nature, sources and limitations of knowledge in the field of study. Alternatively, epistemology can be branded as the study of the criteria by which the researcher classifies what does and does not constitute the knowledge.

What is a research paradigm?

- A research paradigm is “the set of common beliefs and agreements shared between scientists about how problems should be understood and addressed” (Kuhn, 1962)
- Research paradigms can be characterized through their:
- **ontology – What is reality?**
- **epistemology – How do you know something?**
- **methodology – How do you go about finding it out?**

Research paradigms



Adapted from How (2002) pp. 58 and Pinto (1998)

- EPISTEMOLOGY



- THEORETICAL PERSPECTIVE



- METHODOLOGY



- METHODS

Three most common paradigms are

- **Positivists** believe that there is a single reality, which can be measured and known, and therefore they are more likely to use quantitative methods to measure this reality.
- **Constructivists** believe that there is no single reality or truth, and therefore reality needs to be interpreted, and therefore they are more likely to use qualitative methods to get those multiple realities.
- **Pragmatists** believe that reality is constantly renegotiated, debated, interpreted, and therefore the best method to use is the one that solves the problem

Positivism-post positivism

- Referred to as the ‘scientific method’, ‘quantitative research’, or ‘empirical science’
- Positivism was at the basis of classical sociology, in order to enhance its scientific status
- Emphasis on relation between causes and effects, experimental research or objectively ‘controlled’ forms
- Knowledge generated by careful observations and measurement of objective reality
- Researcher checks theory with reality

Constructivism

- Became a contender view of sociology in the early 20th century
- Individuals are seen as developing subjective meanings of their experiences (rather than being directly stimulated by external reality)
- Researcher looks for complexity of meanings, rather than narrowing down meanings in few categories
- Strong reliance on participants' views, and interactive construction of meaning
- Researcher constructs theory from observations of meaning-constructions by social actors

Pragmatism

- The approach is grounded in the pragmatist philosophical tradition (Dewey, Pierce, Mead, James).
- Knowledge claims arise out of actions, situations, and consequences rather than being a priori defined.
- The emphasis in social research is on “what works” and on solutions to problems.
- Pragmatist research is thus neither confined to objectivity or to meaning-construction, but refers to both, when appropriate in dealing with the research questions

POSITIVISM

- Positivism holds that meaning and therefore meaningful reality, exists as such apart from the operation of any consciousness.
- The coining of the word «positivism» is often attributed to Auguste Comte (1798-1857) (Cours de philosophie positive, 1830).
- Emile Durkheim (1858-1917)
- Neo-positivism (The Vienna Circle and Logical Positivism) (1920)

Durkheim: the sociological method

- **Social facts:** they consist of manners of acting, thinking and feeling external to the individual, which are invested with a coercive power by virtue of which they exercise control over him.
- **Society** is not merely a group of individuals living in one particular geographical location. Society is an ensemble of ideas, beliefs and sentiments of all sorts that are realized through individuals.

Positivism: *five* principles

- The logic of inquiry is identical across all branches of science
- The goal of inquiry is to explain, predict and discover
- Research should be observed empirically with human senses
- Science is not the same of common sense
- Science should be judged by logic and remain free of values

The logic of explanation

Deductive-nomological explanation (k. Hempel)

Logical conditions of adequacy:

1. The explanandum must be a logical consequence of the explanans
2. The explanans must contain general laws and these must actually be required for the derivation of the explanandum
3. The explanans must have empirical content (must be testable)

Statistical-inductive explanation

Post-positivism (Logical positivism-Vienna Circle)

- Unify science by taking physics as the model
- Language of physics should become the universal language of science
- All scientific statements can be expressed in one language with one method
- Role of science is to establish facts
- Metaphysical viewpoints, ethical values, aesthetic judgments and religious beliefs are unverifiable in the empirical manner demanded by logical positivism.

Popper's principle of falsification

Science as hypothetic-deductive

Scientific method is like this:

- a) scientific theories are proposed hypothetically
- b) propositions are deduced from these theories
- c) the propositions are then tested
- d) theory or hypothesis not open to refutation by observation and experiment cannot be regarded as scientific.