



## Conceptual Review: Research Epistemologies for Business Research

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### **ABSTRACT**

This paper attempts to elaborate some aspects and specificities of different epistemologies in order to facilitate the researcher in determining which epistemology can be effectively applied for their research projects. First, this paper involves with discussing what epistemology contrary to the ontology is. Second this paper describes positivism, post-positivism, realism, critical realism and empirical realism, and interpretivism as some of the key epistemologies that are used in the research projects.

**Keywords:** *Critical Realism, Empirical Realism, Interpretivism, Positivism, Post-Positivism, Realism*

## 1. EPISTEMOLOGY

Theory of knowledge explains the nature and forms of knowledge (Cohen et al., p. 7), is defined as epistemology. Epistemology involves with the methods, validation and the possible ways of gaining knowledge of social reality (Grix, 2002) through claiming about 'how what is assumed to exist can be known' (Blaikie, 2000, p. 8). Epistemological assumptions are developed with how knowledge can be created, acquired, and communicated (Scotland, 2012, p. 9). The ways and means of how the researcher knows about the reality and assumptions about ways and means of how knowledge should be acquired and accepted is presented as the form of epistemology in the research (Pathirage, Amaratunga & Haigh, 2007, p. 5). Epistemology questions the relationships between the 'who' and 'what' in order to explain the 'knowability of social reality' (Corbetta, 2003, p. 12). In other words, the relationship between the observer and the reality observed is focused in epistemology (Ibid.). Hence, epistemological position is determined by the ontological position that is applied in the research. In short, if the social world is existed without human action, way to reach the social world and to understand it is also in a detached, objective way (Ibid.).

Ontology in research philosophy explains the nature of the reality and its characteristics (Creswell & Poth, 2018, p. 20). Ontological assumptions are formed on what constitutes reality. In other words, it questions 'what is' (Scotland, 2012, p. 9). The ontology discusses about 'what knowledge is and assumptions about reality' (Pathirage, Amaratunga & Haigh, 2007, p. 5). In short, the question of what regards the 'nature and form of social reality' (Corbetta, 2003, p. 12).

Epistemological positions are divided into two sections as positivism and interpretivism. Positivism as an epistemological position is developed through the methods of natural sciences to study social reality (Bryman, 2001, p. 12). Interpretivism as an epistemological position involves with the 'subjective meanings of social action' (Ibid., p. 13). However, according to Grix (2002) employing a methodology is depending on the selection of the interested epistemological position so that the researcher's ontological and epistemological position can lead to diverse views of the same social phenomena (P. 178).

There are different research epistemologies such as positivism, post-positivism, realism, critical realism, empirical realism and interpretivism. A thorough understanding about these different research epistemologies is essential to determine why the research choose a particular epistemology in terms of his use of ontology in the research project.

### 1.1. Positivism

Positivism is applied particularly in natural sciences, physical sciences and in social science, in which large sample researches are conducted through the focus of objectivity (Creswell, 2008). Also,

positivism as a research paradigm is primarily concerned with the quantitative methodology through experimental methods with control panels (Taylor & Medina, 2011, p. 3) in addition to survey researches and statistical analysis. However, social researches are also conducted in positivist paradigm as positivist thought was instrumental in inventing social scientific analysis through the investigation of social phenomena as a subject of scientific study (Corbetta, 2003, p. 13).

Key components of positivist research paradigm are: conceptual framework for the study of social reality, use of the observation and measurement techniques, the instruments of statistical analysis, generalisation and inference (Ibid.). However, positivist approach is used for the most material of the society, which is called the positive sciences of society (Ibid., p. 14). In 1895, Emil Durkheim has applied positivist theoretical perspective to empirical research study as a first attempt through which he tried to transform the positivist principles of thought into empirical procedures (Ibid., p. 15). In Durkheim's analysis of *Rules of Sociological Method* (1895, p. 60), he stated that 'first and most basic rule is to consider social facts as things' (as cited in Corbetta, 2003, p. 13). Consequently, Durkheim has asserted three points: social reality exists outside the individual, this social reality is objectively understandable, and this social reality can be explored through the very similar methods of natural sciences (Corbetta, 2003, p. 15).

Positivism uses inductive approaches that moving from the actual things to general things through which generalisations or universal laws are made from empirical observation (Corbetta, 2003, p. 15). Accordingly, natural sciences adopted the scientific method derived from the positivist paradigm to create the scientific knowledge as the 'only valid means of achieving true knowledge in all fields of human behaviour' (Corbetta, 2003, p. 16). However, this positivist paradigm has been challenged on four objections: As experimental control panels are given treatments, it conceptualises "treatments" as causes in much the similar way that how medical doctors do with the patients' pharmaceutical products as causes. So, it is argued that the positivist paradigm reduces human beings to mechanistic systems (1), As a result of how positivists try to describe the rich and irregular complexity of human behaviour on few isolated variables, complex human interactions are reduced to simplistic explanations (2), "Treatment" is used not for its own right, but for only its consequences in instrumental reasoning in the positivist research. This questions how they used to make their irrational evaluation (3), and positivist concern about the question of causation to be independent of the value question. This is criticised on how false separation of facts and values are created in positivist researches (Schrag, 1992, p. 5). In short, positivism views that the social world exists externally and the properties of this social world are measured through objective measurements in which the observer must be independent from what is being observed (Pathirage, Amaratunga & Haigh, 2007, p. 6).

## 1.2. Post-positivism

The fundamental assumption of the post-positivism is that ‘world exists independently of our awareness of it’ (Corbetta, 2003, p. 17) so that this makes as ontological realism. As a result of the influence of logical positivism and many other philosophical discourses positivist’s procedures of knowledge creation were branded as meaningless, whereas attention was paid to methodological problems in every science (Ibid.). Neo-positivism as a fruit of these dialogue, is much concerned on the epistemological questions as these new ideas of positivism are central to a post - positivistic movement of thought. One such explanation is that the meaning of a statement can be brought through its empirical verifiability. Therefore, this discourse produced a new way of talking about social reality that is based on the language of mathematics and statistics. For an example, Paul F. Lazarsfeld produced a particular neo-positivist empirical methodology for social research called *language of variables*, which says that social phenomena can be analysed in terms of interrelationships among variables (Ibid., p. 18). This has given a new scientific path for social research as a depersonalised work through which ‘social phenomena could be surveyed, measured, correlated, elaborated and formalized and the theories either confirmed or disproved in an objective manner without ambiguity’ (Ibid.).

In the last stage of post-positivism brought a new approach that says how empirical observation is not a method of objectivity, but it is a theory-driven production (Ibid., p. 19). In other words, simple observation (recording) of reality is brought by the researcher’s perception, frame of mind and how the researcher has been conditioned through his/her social and cultural background. As a result, this new positivism produced the ‘initial presuppositions and the objectives of social research’ (Ibid.) through how post-positivists’ researches are not conducted in ‘strict cause and effect but rather recognise that all “cause and effect” is a probability that may or may not occur. Post positivism has the elements of being reductionist, logical, empirical, cause and effect oriented, and deterministic based on a priori theories’ (Creswell & Poth, 2018, p. 23). Also, post-positivists outlook study as a ‘series of logically related steps, believe in multiple perspectives from participants rather than a single reality, and espouse rigorous methods of qualitative data collection and analysis’ (Ibid.). However, as a result of the severe criticism of logical positivism (or neo-positivism), in the mid of twentieth century, social scientists drew their concern on the realism as an emerging philosophical position (Baert, 2005).

## 1.3. Realism

Bhaskar (2011) says that realism is a philosophical position of how reality exists independently of the researcher’s mind so that there is an external reality. In other words, external reality is an abstract thing which is ‘born of people’s minds but exist independently of any one person’ (Sobh & Perry, 2006, p. 1199). Realists recognise the difference between the real world and their specific view of it, whilst the researcher tries to construct different views of the reality in terms of the relative time and place (Riege,

2003). Accordingly, by the nature, social phenomena are fragile, as a result, causal impacts are not fixed but are contingent on their environment (Sobh & Perry, 2006, p. 1200). Therefore, 'the contexts of observed phenomena are important' (Ibid.) in the realist paradigm. Also, realism says that 'entities exists independently of being perceived, or independently of our theories about them' (Phillips, 1987, p. 205). In other words, realism has a similar idea as how positivism is concerned that, 'there is a reality that exists which is separated from our description of it' (Thurston, 2017, p. 60). However, philosophical realism has been developed through two key streams: empirical realism and critical realism.

#### **1.4. Empirical realism**

Empirical realism was emerged as a result of the 'dissatisfaction with the positivist treatment of theoretical terms' (Slaney, 2001, p.132) with some of the fundamental tenets of positivism.

Empirical realism has following tenets in summary: things are there in themselves such as entities, processes, mechanisms so that these are existed independently of human kind (1), things are knowable through merely independently and successive approximations (2), knowledge of a thing is achievable equally by experience. In particular, scientific theorising through a scientific experiment or a reason (3), Factual knowledge is correctable as it is conjectural rather than clearly proven or definitively reputable (4) Knowledge of a thing in itself is indirect as a result of it is distorted and symbolic (5) (Tuomela, 1973, p. 7). Empirical realism is necessarily concerned with the ontological realism, which says that there are material objects which exists independently of human perception and cognition (Slaney, 2001, p.137). Also, empirical realism encompasses with the epistemological realism through how one can have knowledge of the existence and nature of hypothetical entities such as objects, structures, mechanism, properties, etc. so that this is done by reference to observables (Ibid.). Accordingly, empirical realism shares with positivism and deductivism (Thurston, 2017, p. 61). However, Bhaskar (1989) disputed about this philosophical position on how it is failed to identify that there are 'enduring structures and generative mechanisms underlying and producing observable phenomena and events and is therefore superficial' (p.2).

#### **1.5. Critical Realism**

Critical realism is a philosophical base for sociologists of Marxist structuralism or evolutionary theory (Baert, 2005, p. 88). Bhaskar coined transcendental realism for the philosophy of science and critical naturalism for a specific philosophy of the human sciences were combined as the critical realism by realists philosophers. Accordingly, how critical realism confirms that the causal relationship is established without a constant conjunctive relationships between events whereas empiricism and positivism locate causal relationships at the level of events (Creswell & Creswell, 2017).

Bhasker's recent contribution to the development of critical realism has been an emancipatory perspective to which he called "dialectical critical realism" (Maxwell, 2012, p. 4). This has been as a result of how realist principles provide superior explanatory tools for social scientific analysis whilst realist principles help people to free from many pressures (Baert, 2005, p. 89). Also, critical realists stress both the scientific and the critical potential of social research so that lots of social scientists apply critical realism as their epistemological position (Ibid.). At the same time, realism can be used productively as ontology for qualitative researches if it is applied seriously with systematically developed implications ((Maxwell, 2012, p. 13).

Critical realists maintain an ontological realism, which says that the real world exists independently of our perceptions, theories and contributions, whereas critical realists accept some form of epistemological constructivism and relativism, confirming that our understanding of this world is inevitably a construction from our own perspectives and standpoint (Maxwell, 2012, p. 5). Some argue epistemology of critical realism is relativist rather than realist so that they stress the impossibility of producing objective knowledge of the world and agree with the existence of multiple descriptions and interpretations (Smith & Deemer, 2000). As a result, they declared that merging ontological realism and epistemological relativism is reasonably inconsistent (Ibid.). These different forms of realism agree that there is no single correct understanding of the world (Ibid.). However, Critical realists stress that epistemological and ontological perspectives are not a set of foundational locations that position the qualitative research, but these are resources for doing qualitative researches (Maxwell & Mittapalli, 2010). At the same time, Hamersley (2014) emphasised the importance of using critical realism as an explicit rationale to bring value conclusions directly from descriptive and explanatory evidences (p. 83). In other words, critical realism has a value for exploring social phenomena through directly creating sound explanatory models (Ibid., p. 84).

### **1.6. Interpretivism**

Interpretivism involves in studying world and its phenomena through our human capacity to understand them 'from the inside-through empathy, shared experience and culture' rather than merely 'from the outside in the way that we are forced to try to explain the behaviour of physical objects' (Hammersley, 2013, p. 26). "*Verstehen*", a specific word in German language, which means "empathic understanding of human behaviour" is used in the interpretivist's literature. Accordingly, *Verstehen* provides a deeper knowledge of young men's digital intimacy than how we can receive in the physical world. *Verstehen* (interpretivism) provides 'understanding the purpose of action and grasping the intentional element in human behaviour' (Corbetta, 2003, p. 22). In other words, interpretivism make meaning on a particular event, action or situation than how positivism make an explanation through which they hope to make generalisation for other such occurrences.

Item	Positivist	Interpretivist
The researcher aims to...	Predict and explain, usually generalising from , carefully selected samples	Understand the particular, contributing to building a framework of multiple realities
The researcher uses (for example (...	Survey, experiment, Structured observation	Unstructured observation, case study, unstructured interview, participant observation
The researcher aims to be...	Independent, an outsider	An insider, interacting with participants,
The researcher looks at...	Things that can be quantified and counted	Perceptions, feelings, ideas, thoughts, actions as heard or observed
The researcher analyses...	Variables, decided on in advance of fieldwork	Emerged patterns
The design of the research is...	fixed	flexible
Other words sometimes used (often inaccurately) to sum up these approaches...	Scientific, quantitative, nomothetic	Naturalistic, qualitative, idiographic

Source (Thomas, 2009). (As cited in Thurston, 2017, p.65)

Interpretivism actively makes sense of the phenomena being explored through their culture and society in which they live as these specific cultural orientations strongly influence on their beliefs and their action (Hammersley, 2013, p. 26). According to Weberian perspective, society is built through the interpretations of individuals and this makes an interaction within the society in order to create structures. As a result, interpretative paradigm affirms autonomy and diversity of the historical and sociocultural sciences from the natural sciences whilst their superiority can be achieved through understanding ‘from the inside which is the basis of the knowledge of behaviour and of the social world’ (Corbetta, 2003, p. 25). In other words, interpretivism focuses to a ‘large extend at understanding other cultures in their own terms’ (Hammersley, 2013, p. 30).

Hermeneutics, a term, originally used to early biblical interpretation, that making sense of religious textual materials. Consequently, hermeneutics has given birth to interpretivism, which, later on, is used to involve with the general process of cultural interpretation on an epistemological philosophy for mostly qualitative research paradigm (Hughes & Sharrock, 2016, p. 97). Wilhelm Dilthey (1833-1911) worked against positivism on how large part of human phenomena is not explored in natural objects in the positivism so that he declared a room for the study of history and society through revealing how human creations are meant in their own world (Ibid.). Dilthey’s exposition has made a key foundation

to establish hermeneutics as the important method to understand human behaviour. Accordingly, these philosophies say that human actions, events and other artefacts are created through the human interaction in the human environment. These behaviours are impossible to understand in a non-human material devices or through observation only. But these human behaviours can be understood through how this researcher can live with the young men's society. In other words, socio-historical world cannot be understood through simply making a 'relationship of material things which exist in themselves' (Ibid., p. 98). In other words, understanding human behaviour and such phenomena is practical through lived experiences that helps to apprehend human thoughts and minds. Hence, Dilthey and others who said about the importance of having a human knowledge through live involvement urged that matching ideas to some external reality as how positivist is not apt for understanding human behaviour. Thus, interpretivism is used this researcher to study the phenomenon in their individuality than how social sciences aim at formulating generalisations (Corbetta, 2003, p. 22).

Heinrich Rickert (1863-1936), view that the reality is indivisible whilst disagreeing with the Dilthey's 'dichotomous view of reality that says a divide between nature and culture' (Ibid., p. 98). In other words, difference between natural sciences and socio cultural sciences remains in logical standpoint, but not in the ontological position of research. As a result, Rickert says that difference between natural sciences and socio-cultural sciences remains in methodological approach rather than ontological standpoint. However, whilst natural sciences devoted to form concepts through abstracting from concrete cases, historical analysis form 'individual concepts by focusing on the unique combination of elements that represent a culturally significant phenomenon' (Ibid., p. 99). Accordingly, sociocultural sciences involve with understanding subjectively meaningful phenomenon. (Ibid., p. 100). In other words, traditional social sciences fail to explore a phenomenon as a meaningful practice ((Packer, 2011, p. 124).

Interpretivism asserts that the researcher cannot understand why young people do, what they do, or why particular institutions exist and operate in specific ways, without grasping how people interpret and make sense of their world and act on their interpretations (Hammersley, 2013, p. 27). In brief, without understanding the typical cultural character of the subjects' (being explored) beliefs, attitudes, and practices, it is impossible to make the meaning of how these people's practices have been developed over time, and or how they currently create the social world. In order to understand this, it is necessary to use this researcher's social experiences or capacity for learning, rather than seeking to accomplish procedural objectivity. In this context, finding universal causal relationships on in some fixed human nature or form of society is unproductive and useless. As an alternative, it is essential to focus to understand these young men and their events in a specific socio-historical circumstances (Hammersley, 2013, p. 27).



In other words, interpretation (hermeneutics) provides important and central approach for an immersion in the social practices of young men's digital community through on line ethnographic field work (Packer, 2011, p. 123). According to Anthony Giddens (1987) new sociology, as a hermeneutic work, field-work or ethnography can be used in order to study 'meaningful action and explore its linkage to social institutions and to study the social world that is produced and reproduced by human subjects' (Ibid., p. 131). Also, it is important to concern how Clifford Geertz describes his interpretive anthropology as an approach to cultural anthropology in order to understand how to interpret culture. Accordingly, interpretive theory of culture, which is his new version of anthropology (Geertz, 1973) says that culture is not analogues to dissecting an organism or like deciphering a code or ordering a system in structuralism, but culture could be systematically explored as societies, like lives, contain their own interpretations. Through accessing these societies, one can read and interpret these cultural texts like penetrating a literary text (Ibid., p. 135). As an approach to understand these rural Sri Lankan young men's social practices through the technique of interpretation, it is required 'an immersion in a form of life' (Ibid., p. 138).

Even though, applying interpretivism in social sciences remains in some criticisms. The first such criticism is, that, interpretations are produced through the researcher's values and moral codes so that there is a dispute about the value-neutrality of exploring social and historical phenomena (Baert, 2005, p. 41). Controversy about the applicability of 'nomological' knowledge to the social realm is another such crisis (Ibid.). Difficulties of writing are not different from the problems of methods or fieldwork in the use of interpretivism (Clough, 1992, p. 136). Making a political, personal, and experiential process of discussion on the emergence of a value-free social science, is also presented as another criticism (Denzin, 2009, p. 87). However, interpretivism provide the research a useful epistemological position in order to understand the phenomena though making meaning on how those subjects interpret their experiences and behaviours.

## **2. CONCLUSION**

The research's ontology is the nature of the reality or the way how the researcher thinks the world is. For an example, in constructivism as one of the key ontology for research is concerned with the 'social phenomena and their meanings are continually being accomplished by social actors in a constant state of revisions' (Grix, 2002, p. 177). Also, the research's epistemology is defined as the relationship between the researcher and what he thinks can be known. For an example interpretivism as one of the key epistemology gives interpretative meaning on the data collected through interviewing method using a small number of in-depth cases (Ibid, p. 184).

As a result of the philosophical positions of ontology and epistemology that are used in the research, it is able to identify what are the methodological apparatuses that the research can be used appropriately. Thus, the methodology is defined as how knowledge of the world can be investigated.

### 3. REFERENCES

- [1] Baert, P. (2005). *Philosophy of the social sciences: Towards pragmatism*. Polity.
- [2] Bhaskar, R. (2011). Critical realism in resonance with Nordic ecophilosophy. In *Ecophilosophy in a World of Crisis* (pp. 21-36). Routledge.
- [3] Blaikie, N. (2000). *Designing Social Research*, Cambridge: Polity.
- [4] Bryman, A. (2001). *Social Research Methods*, Oxford: Oxford University Press.
- [5] Clough, P. T. (1992). *The end (s) of ethnography*. Newbury Park, CA: Sage.
- [6] Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education* (6th ed.). London: Routledge.
- [7] Corbetta, P. (2003). *Social research: Theory, methods and techniques*. Sage.
- [8] Creswell, J. (2008). *Educational research: Planning, conducting and evaluating quantitative and qualitative research* (3rd ed.). Upper Saddle River, NJ: Pearson Prentice Hall.
- [9] Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
- [10] Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches*. Sage publications.
- [11] Denzin, N. K. (2009). *Qualitative inquiry under fire: Toward a new paradigm dialogue*. California: Left Coast Press, INC.
- [12] Grix, J. (2002). *Introducing students to the generic terminology of social research*. *Politics*, 22(3), 175-186.
- [13] Hammersley, M. (2013). *What is qualitative research?*. A&C Black.
- [14] Hughes, J. A., & Sharrock, W. W. (2016). *The philosophy of social research*. Routledge.
- [15] Maxwell, J. A. (2012). *A realist approach for qualitative research*. Sage.
- [16] Maxwell, J. A., & Mittapalli, K. (2010). Realism as a stance for mixed methods research. *Handbook of mixed methods in social & behavioural research*, 145-168.
- [17] Packer, M. J. (2011). *The science of qualitative research*. Cambridge University Press.
- [18] Pathirage, C. P., Amaratunga, R. D. G., & Haigh, R. P. (2007). The role of philosophical context in the development of theory: Towards methodological pluralism. *The Built and Human Environment Review*, 1(1).

- [19] Phillips, D. C. (1987). *Philosophy, science and social inquiry: Contemporary methodological controversies in social science and related applied fields of research*. Pergamon Press.
- [20] Riege, A.M. (2003), Validity and reliability tests in case study research: a literature review with 'hands-on' applications for each research phase, *Qualitative Market Research: An International Journal*,6(2),75-86.
- [21] Slaney, K. L. (2001). On empirical realism and the defining of theoretical terms. *Journal of Theoretical and Philosophical Psychology*, 21(2), 132.
- [22] Smith, J. K., & Deemer, D. K. (2000). The problem of criteria in the age of relativism. *Handbook of qualitative research*, 2, 877-896.
- [23] Sobh, R., & Perry, C. (2006). Research design and data analysis in realism research. *European Journal of marketing*, 40(11/12), 1194-1209.
- [24] Taylor, P. C., & Medina, M. (2011). Educational research paradigms: From positivism to pluralism. *College Research Journal*, 1(1), 1-16.
- [25] Thurston, A. J. (2017). *An analysis of the implementation of Clubmark and two associated policies in boxing, swimming and rugby union*, Thurston.
- [26] Tuomela, R. (1973). Theoretical Concepts in Science. In *Theoretical Concepts*, Springer, Vienna.