



Positivism in Understanding the Contemporary Social World: A Critical Discussion

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Abstract. This theoretical paper aims to critically discuss the extent of positivism in order for us to understand the contemporary social world. The discussion concentrates on philosophical positivism from a social science standpoint, firstly, its origin and development during the eighteenth century, then secondly, the development of the Vienna Circle, and lastly, the influence of the late nineteenth century's postmodernism has on positivism. Rather than focusing on the distinct recurrent anticipations of positivism of ancient ideologies of philosophy, the paper describes the theoretical understandings of positivism in sociological perspective. Then it highlights the tenets of positivism developed by different sociologists and philosophers. Lastly, by probing into those tenets and methodological implications of different positivist approaches it critically analyses the extent to which this ideology aids our understanding of the concurrent social world.

Key words: Positivism; Philosophy; Natural Sciences; Social Sciences; Society

1. Positivism and Science

“Positivism, a short lived philosophy of social science that held facts could be rigidly separated from values and that analysis could be value free. The last positivist not in captivity died in 1970 from internal injuries incurred after discovering that holding facts in high regards meant that facts had value and thus could never be separated from values.” (Meier, 2005).

This statement gives a clear indication that positivism is subjected to scrutiny from the advocates of interpretivism. Positivism was in target of criticism since the last century. It came under strong condemnation when many social science researchers started to gather under the banners of structuralism, hermeneutics and phenomenology (Alvesson and Sköldbberg, 2009). Critics expressed concern that the idea of doing research by following a scientific model can lead to the dismissal of research as valuable tool in understanding the rich complexity of the social world. For them, the scientific approach which positivism espouses was inadequate when it comes to learning about how people understand the world and interact with its elements (Antonesca et al., 2006). Arguably, this crucial judgement is just one of the many which reflects the metamorphose nature of positivism. Positivism, being a philosophy of science had undergone a variety of inspection lenses by philosophers and sociologists since the eighteenth century. Though the root of positivism can be traced back among the ancient philosophers, the modern day positivism was developed by Comte in the eighteenth century (Bryant, 2013; Cohen, 2007; McIntosh, 1997). Comte is regarded as the first philosopher of modern science for his pioneering classification of science and thus the concept of classical positivism is also mostly associated with him (SEP, 2013). However, the study of the social world consisting of social

phenomena was considered too complex by sociologists and philosophers, and positivism went under scrutiny throughout the twentieth century. Its ideology differed among researchers from a variety of standpoints. During the 1930s, the scientific study of society was confined to a collection of information about phenomena that can be objectively observed and classified — a positivist philosophy provided by the Vienna Circle or logical positivism (Bryant, 2013; Hunt, 1991). Vienna Circle claimed that philosophy is a logical analysis of language and it rejected all metaphysical and poetic ways of explaining reality, which includes social reality in favour of scientific method (Harrison and Atherton, 2001; Cohen, 2007). It drove the idea that knowledge of the world can be justified only by experience and so individuals are never entitled to assert the existence of anything beyond all possible experiences (Delanty, 2005; McIntosh, 1997; Hollis, 1994; Giddens, 1974). Afterward, a significant volume of debate can also be found in appropriating philosophical foundations for social research among the postmodernist researchers. Many writers attacked the classical positivism and Vienna Circle for studying the contemporary social world and offered alternative “ways of knowing” (Hunt, 1991). Naturalistic inquiry (Belk et al., 1989), humanistic inquiry (Hirschman, 1986), ethnographic methods (Sherry, 1983), relativism and constructionism (Peter and Jerry, 1983), critical relativism (Anderson 1986), and critical realism (Edwards et al., 2014) were some of those suggested alternatives.

Auguste Comte, the nineteenth-century French philosopher is generally considered as the mastermind of positivism. He considered that accounts of human cognitive and social life were languishing in the pre-scientific, metaphysical stage, when astronomy, physics, chemistry, and biology, all he argued, arrived at the scientific stage. So he thought the social sciences should also concentrate on scientific laws rather than assumption (Hasan, 2014; Benton & Craib, 2001). He further stressed that science consisted of precise and cer-

tain method, basing theoretical laws on sound empirical observation. For him, social sciences were kin to natural sciences, sharing the same epistemological forms (Hughes and Sharrock, 1997, Acton, 1951). Comte's positivism was based on some key features, such as reality consists in what is available to senses; philosophy, while a distinct discipline, is parasitic on the findings of science; the natural and human sciences share common logical and methodological principles; and there is a basic difference between fact and value, science deal with the fact and the value belongs to an entirely different order of discourse, which is beyond the remit of science (Hasan, 2014; Hughes and Sharrock, 1997).

Since the 1950s, a variety of different standpoints put positivism in question in the study of natural and social sciences. For example, Delanty (2005) recognised positivism as a philosophy that argues for the application of the methods of the natural sciences to the social sciences and thereby presupposes the unity of the sciences. Raadschelders (2005) and Spicer (2005) commented that in the hierarchy of sciences the natural sciences are greater than the social sciences, and thus, social sciences should seek to emulate the natural sciences. But, this belief is completely opposed by Meier (2005). He argued that in the spectrum of mathematics, natural, and social, these three types of sciences, the purpose of empirical research is the principle distinguishable factor. In the discussion of the latter two, the natural sciences have empirical components but no design element, that is, they seek to know 'what is', but the question 'what ought to be' is not considered relevant (Meier, 2005). On the other hand, social sciences are empirical and have a design component. So, turning social science into natural science is considered by Meier (2005) as "...equivalent of using a hammer to fix a computer software". So, Meier's hierarchy of science has social sciences at the top and natural sciences below with the fact that social sciences are more interesting, more complex, and require a greater range of skills to be researched (Meier, 2005).

2. Features of Positivism

Sociologists and philosopher argued about defining positivism differently and attempted to explain it in various broad terms. However, Delanty (2005), Elster (2007), McIntosh (1997), Hollis (1994) tried out summarising the main features of positivism as follows: Positivism believes in the unity of the scientific methods, and natural sciences are generally taken to be the model for all the sciences. Alongside, positivists naturalism entails reductionism, a correspondence theory between truths of science and the nature of reality, and phenomenalism (Delanty, 2005). Positivistic science also follows empiricism — where progress is made from observation to verification by means of the experimental method. This notion of empirical facts are quantified and correlated in an attempt to generate universal statements or laws about the world (Edwards et al. 2014). In addition, positivists researchers classify the social world in an objective, and value-free way (Delanty, 2005; Ritzer, 1996). Truth is a verifiable and explanatory statement about an objectively existing reality. Therefore, positivists insist on a dualism of facts and values. Although, a basic understanding of positivism can be denoted from these features, providing a clear and concise definition of positivism is a hard work, since the ideology had been and continues to be used in a varied ways by philosophers and social science researchers.

Scientific knowledge is different from all other kinds of human knowledge since it can be verified and so can be termed to be universally true (Turner et al., 2012). Giddens (1995), Kolakowski (1972) described positivism as a philosophy which is concerned with the positive application of knowledge to assist human progress. This stands in contrast to speculative knowledge claims that lack any scientific or empirical import. Commonly, post-modernist positivists are noted for their rejection of metaphysics, and support for positive

data of experience as the basis of all knowledge. Dominance of using quantitative methods and statistical data to classify the social world in an objective way can be found in positivist researchers (Elster, 2007; Giddens, 1995, Hollis, 1994).

3. Society as a 'Thing'

"There is no such thing as society" (Thatcher, 1987)

Though this statement was made neither by any philosopher or social scientist nor from any philosophical standpoint, it gives an indication of people's belief that society does not exist as a separate entity. In other words, it signifies that there are things and entities in the society which are observable and verifiable and cannot be studied separately without their context, that means, society including its elements, people and their interpretation is a singular entity as a whole.

"What makes something that thing and not something else?" (O'Mahony, 2012)

Throughout the twentieth century the ideology of grasping society as a thing had been under the scrutiny of academics. Different philosophical school of thoughts inspected society in different ways. Comte retained a firm belief that the discovery of the laws governing the operation of human societies should be used to reconstruct society (Turner et al. 2012). He later defined society into two categories: statics and dynamics, with the aim of creating a naturalistic science of society (Turner et al. 2012). Edwards et al. (2014) similarly acknowledged that the societal entities which ultimately interact to cause the events people observe cannot be studied or understood in isolation from their environment. Society contains complex and unpredictable feedback loops that prevent history being conceived as determined or predictable (Thompson, 2003). Societal entities are things

which can be material or immaterial and are organised hierarchically in that they exist at different levels. So, a greater explanatory power is to be found in understanding how these different entities relate as part of a greater thing — which is ‘a society’ (Edwards et al. 2014; Bhaskar and Hartwig, 2010). Similarly, Sayer (2011) commented that entities are necessarily related and because of this they generate physical or social structures. This is an important proposition because it leads the argument to consider the ways in which different social entities are related to each other and how in social science the social world is actually constituted (Edwards et al. 2014).

A prominent viewpoint in support of treating society as a thing is found in Durkheim’s ideology. After Comte, Durkheim clearly shared some important features of positivism in common with other concurrent positivists. He argued that, social facts are things because they are outside us, they are not product or creation of the present generation, they are given pre-existing condition for human agency and they cannot be known by introspection or reflection (Durkheim, 1982; Thompson, 1982). This thought to treat social facts as things classified the social world in an objective way (Hollis, 1994; Bryant, 1985). Durkheim (1982) believed that laws of human behaviour can be discovered by the collection of objective facts about the social world in a statistical form and so humans have little or no choice about how they behave. Using this classification, Durkheim further made it possible to count sets of observable social facts to produce statistical data in his study of the suicide rate and the membership of different religions. In this study he found an apparent correlation between a particular religion and a high suicide rate (Durkheim, 1970). This positive methodology entails looking for correlations between different social facts. Similarly, in search for causal connections, for example, many sociologists noted a correlation between social and parenting factors affecting criminal offence rates (Stroud, 2008; Turner, 2007; Kiriakidis, 2006; Kolvin et al., 1988). These researchers established causal connections between two or more variables by multivariate analysis, and examined their

findings in a variety of social world contexts and thus attained a law of human behaviour. Similarly, Harrison and Atherton (2001) found the rarity of researchers who would defend the idea that social reality is stable, irreversible and biologically determined and claimed that majority researchers would recognise that many entities and factors in the social world including power and status, are socially constructed and not the result of impersonal environmental forces. It is noteworthy that, after Comte, Durkheim was a prominent sociologist who shared most of Comte's ideologies about positivism, but carefully rejected as bordering on metaphysical many of Comte's pronouncements about the laws of the historical progress of knowledge. In that respect, Hughes and Sharrock (1997) highlights that Durkheim's work builds a bridge between the nineteenth-century and the twentieth.

4. Positivism and the Methodology of the Social World Study

In the social and natural world dichotomy, a significant aspect of the social world is its contextualisation by people to understand how or why something happens. The social world is made up of human agents who consciously and unconsciously reflect and react to information, intervention, or circumstances in different ways. Here, people contextualise in order to learn anything or to draw conclusions (Parkhurst, 2013; Delanty, 2005; McIntosh, 1997). Whereas, a natural world is comprised with cause and effect relationship. People judge how to react based on past experiences, current demands, and other contextual factors. Here people typically control for context to understand mechanisms of effect (Parkhurst, 2013; Halfpenny, 1982).

As a result of this, to study the social world, many positivists argued that sociologists should not be concerned with the internal meanings, motives, feelings and emotions of

individuals. To explain social reality, a researcher must use empirically verifiable statements. This view is established by Cohen (2007), Elster (2007), Delanty (2005), Bryant (1985), who limited the world to empirical facts claiming that all things are observable and there can be no truth without observation. Hollis (1994) added that positivism according to

Weber's naturalism lurked behind a methodology which signified the individual's subjective meaning, and Weber had an empiricist scepticism about social structures as real entities with causal powers. Marx's positivism contemplated a dialectical process in history working through class struggles (Hollis, 1994). In contrast, Durkheim believed that laws of human behaviour can be discovered by the collection of objective facts about the social world in a statistical form with the condition of careful analysis of these facts and by repeated checking of findings in a series of contexts (Bryant, 2013). Since the mental states exist only in the individual's consciousness, they cannot be observed and so they cannot be measured in any objective way (Durkheim, 1982). Society for Durkheim was a reality in itself and sociology was a realist and inductive science of social facts (Delanty, 2005; Lukes, 1973). It may be argued that this idea of society is not the perfect one, but his ideology clearly becomes a milestone in the history of modern social sciences because of his attempt to legitimate a conception of the social science consistent with the prevailing image of the natural science. Even though Durkheim's perception faced criticism, his emphasis on laws and casual explanation, objectivity, and rigorous method not only gives authority to his own substantive investigation but also serves as a foundation for many social research (Hasan, 2014; Hughes and Sharrock, 1997).

On the other hand, Meier (2005) opposed the idea that positivism agrees with a realist commitment to an objective world that exists independently of researchers. Likewise

Meier (2005), the perception of non-existence of reality if things are not observable and quantifiable is rejected by a large number of social science researchers. These researchers claimed that social world phenomena can be accepted as criterion variables against which theories may be tested without denying the reality of individual interpretation and social construction (Harrison and Atherton, 2001; Henrickson and McKelvey, 2001; Jackson and Jeffers, 1989). A particular methodology consisting of a scientific model or philosophical approach may have very good capacity of identifying a specific problem and its solution. This does not mean that, that specific methodology will have the same inclination to interpret the knowledge to different dimensions of the contemporary social world. Franklin and Ebdon (2005) clearly illustrated the different methodology and skill sets in the wheel of science versus the wheel of practice. Based on the ideology of Meier (2005), a researcher can accept the idea that research of the social world must be relevant to real world problems and still reject the idea that the research methodology should in any way determine the content of the empirical positivist philosophical agenda. For example, Smith's (2003) framework showed that quantitative studies have rarely been able to link high test scores to high figure income, or low level of crime, or law abiding citizenship, or any other benefit that education bestows. However, Levitt and Dubner (2005) pointed out that creative use of quantitative analysis can get beyond biases to reveal interesting information.

Interestingly, Dilthey and some other scholars proposed that, there can be no science of the social world (Rudolph, 2011; Reid, 2001; Oman, 1979; Tapper, 1925). Dilthey's idea of *Geisteswissenschaft*, for instance, is explicitly directed against positivism and maintains the difference between natural philosophy and moral philosophy (Rudolph, 2011; Reid 2001). In the contrary, according to Comte, this distinction is abolished by the existence of sociology and his 'Law of Thee Stages', and the unity of all sciences through the resto-

ration of metaphysics (Turner et al. 2012). Mill also agreed to Comte and while recognising differences between natural and social sciences, he stood for the unity of the scientific method. For Mill, all explanations had the same logical structure and society can be explained by the laws governing nature (Delanty, 2005). Another interesting point of view about the methodology of the social science study can be found in Popper's work. Supporting the realm of metaphysics he refuted one of the beliefs of logical positivism. He explained that scientific theories can begin as metaphysical hunches because these theories cannot be logically reduced to elementary statements of experience, and these theories are not fully justifiable or verifiable, they are nevertheless testable (Popper, 2002). He proposed that scientific theories can be tested, by reasoning deductively from theories to observation statements, which he termed as 'intersubjectively tested' (Popper, 2002). In fact, without abandoning all aspects of positivism, Popper proposed the principle of falsification or 'trial and error' theory and suggested that instead of induction, science should progress deductively through attempts to falsify the results of previous theories (Delanty, 2005). Kuhn, on the other hand, suggested a profound alternative of Popper's theory. Kuhn, though accepted the unity of the scientific method of deduction, argued that there is no one methodology to interpret the social world. Science proceeds neither inductively nor by falsification, rather physical sciences would only have a paradigm change ever several centuries or so, but the social sciences constantly shift from one paradigm to another (Kuhn, 2012).

So, in this era of postmodernism, several positivist ideologies can be found to study the contemporary social world. In fact, there are many valid reasons for positivists to follow the natural sciences as a role model for research works in social sciences. Hasan (2014) eloquently discusses this and highlights that, positivism provides an enormous cultural

authority to social scientists, which were previously possessed only by the scientific experts who used to provide regular advice to government on difficult matters of technical policy-making, from food safety to building standards and so on. Positivist approaches enable social scientists to present their disciplines as sufficiently and rigorously as the scientific experts, which provide them the platform to make strong claims about the reliability, objectivity, and usefulness of the knowledge they have to offer (Benton and Craib, 2001). In concurrent time, policy-makers consider social research as an important source of knowledge and in most countries official statistics are collected on virtually all aspects of social and economic life – on patterns of ill-health, diseases, epidemics and death, on marriage, separation and divorce, on unemployment, income differentials, attitudes and values, consumer consumption patterns and so on. Social scientists are employed to analyse and interpret these vast amounts of information as well as to give advice on policy implications (Fischer, 2005; Benton & Craib 2001).

On a different note, some positivists are concerned with the positive application of knowledge to assist progress and rejects rationalism while remaining naturalistic (Giddens, 1995; Kolakowski, 1972). In contrast, another group of positivists also stresses on observation and they neither entirely rule social facts out nor do they flatly disallow the psychological observation of mental states. Furthermore, positivism embraces any approach which applies scientific method to human affairs conceived as belonging to a natural order open to objective enquiry (Hollis, 1994). However, considering all these different positivist approaches, the strictest methodology to study the social world is to reject all psychological data and the qualitative method of research and to rely solely on objectively existing facts and observation of those facts. Nonetheless, in a broader approach, positivism goes with an empiricism about scientific knowledge which rests on observation as the moment of truth when hypotheses are tested against the facts of the world

(Hollis, 1994).

5. Conclusion

This paper has attempted to explain the extent of positivism to aid our understanding of the contemporary social world. Although the history of positivism in social science research is complicated and it is hard to discuss all arguments that support or oppose this approach in understanding the modern social world, the immense contribution of positivist researchers to study the social world cannot be denied by any means. Philosophers and sociologists have attempted to support or scrutinise positivism throughout the nineteenth and twentieth century with their own ideologies and logic, for example, starting with Comte, Durkheim, and Spencer as the prime advocates of positivism, then followed by Weber, Popper and Kuhn - as the critics of earlier positivism, and then in modern times Gadamer with this support for hermeneutics and Bhaskar for his critical realism, and by many others. Many of their ontological views are isomorphic, yet, a considerable level of ontological differences can also be found among the researchers, which resulted in an epistemological and methodological difference in the scientific research arena. Therefore, positivism has been dominated by critical realists, social constructionist, interpretivist, and other postmodernist philosophies in recent decades. Which philosophical approach is the best to study the social world? To answer this Hunt's prognosis can be offered here. Hunt (1991) predicted that a rapprochement between positivism and postmodernism will be possible, as positivists could effect a rapprochement between communities as diverse as science and philosophy at the beginning of the nineteenth century. Cannot that be repeated at the century's close? The following two statements may give the thinkers a new line of argument to be carried out:

“Sociology had its birth in the great philosophical doctrines, it has retained the habit of relying on some philosophical system and thus had been continuously overburden with it. It has been successively positivistic, evolutionary, idealistic, when it could be simply sociology!” (McIntosh, 1997: 208-209)

“If truth tellers in the 1980s could destroy political walls so tall and thick, that many believed would never fall, cannot truth seekers breach puny interdisciplinary walls?” (Hunt, 1991).

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