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A Coherent Epistemological Theory in Management Philosophy Research

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Abstract: This article examines the coherent theory of management philosophy research. Drawing a conclusion for epistemology and ontology is an ambitious pursuit. The many schools of thought of epistemology and ontology are very well established, and they have strong and valid justifications for each. At the same time, these schools of thought also suffer from some inherent weaknesses to render them as falsehoods as well. Nevertheless, the importance of the deployment of epistemology and ontology in management research is undeniable. Researchers would be more reflexive if they could understand and comprehend the philosophical grounds before embarking on their journey to discover new knowledge. This paper provides an effective summary for novice researchers to acquire philosophical knowledge to be integrated in their studies or projects.

Key words:

INTRODUCTION

It is neither a usual nor an easy task to draw a conclusion on the topic of epistemology and ontology. After reviewing the philosophical grounds articulated by various schools of thought, it is clear to us that there is no one-size-fits-all theory which could answer all the questions of management, let alone those of humanity. However, it is adequately beneficial for a researcher to understand and comprehend the philosophical developments and their contents in order to enhance their study. A researcher must not only undertake a research which has philosophical grounds, but also contribute to the body of knowledge.

Epistemology is important in the pursuit of knowledge because it is the discipline that enables the judgment of all other disciplines (Rorty, 1979). Epistemology provides the foundation which one might build, a boundary that has seemingly flexible limits, an object which imposes and one that can be examined and reviewed, and a set of current representation which currently cannot be denied. Hence epistemology is central to the sciences as proper scientific theorizing cannot exist before the development of an epistemology sound theory. This article attempts to show how we can develop an epistemological theory which in turns enables a proliferation of knowledge.

A fundamental barrier in developing a coherent epistemological theory is problem of circularity, or arguing in circles. Figure 1 shows that the development of an epistemological theory presupposes knowledge of the conditions in which knowledge occurs. In effect, the circularity problem prevents any grounding of epistemology in what supposed to be scientific knowledge – psychological or otherwise – because one cannot use science to ground the legitimacy of science. For example, a researcher cannot assume that the law of gravity is true because gravity exists. This assumption reveals the source of the problem of circularity.

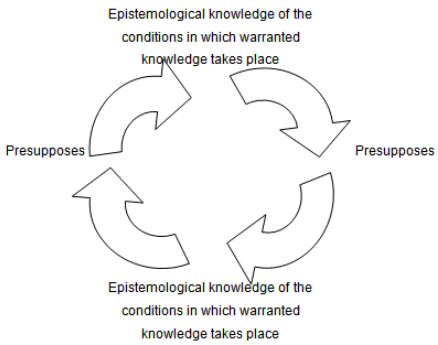

Fig. 1: The circularity of epistemology (Source: Johnson & Duberley, 2000: 4).

However, according to Neurath (1944), due to the problem of circularity in the development of epistemology, one cannot abandon the existing body of knowledge to build knowledge. We need to embrace the established knowledge before we are able to construct our chosen field of knowledge. For example, scientists must apply the accepted procedures and protocols in conducting an experiment. In essence, epistemology is the field which provides us with criteria for distinguishing between reliable and unreliable knowledge.

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The author has effectively grouped the major schools of philosophical thought based on the main assumptions subscribed by each of them. The big topic of epistemology and ontology is classified under two broad categories: objectivist and subjectivist. The combination between any two assumptions is the philosophical ground for the nourishment of knowledge (except for the combination between subjective-ontology and objective epistemology because this combination is assumed to be incoherent). Zolo (1990) has provided a useful insight by saying that scientists, in order to understand themselves as scientists, first have to become anthropologists, sociologists, psychologists and historians of themselves. It is as true a statement for social scientists as for natural scientists, as this insight raises the importance of reflexivity in the production of knowledge through research.

This paper starts by discussing on the combination between objectivist-ontology and objectivist-epistemology followed by the combination between subjectivist-ontology and finally the combination between subjectivist-epistemology and next the objectivist-ontology and subjectivist-epistemology. The last section contains this work's conclusions.

Objectivist-Ontology and Objectivist-Epistemology:

The main schools of thought which fall under this combination are positivism and neo-positivism. Researchers under these schools believe that the truth has an independent external reality and it is accessible through the passive registration of the facts by the researchers. The existence of a theory-neutral language makes it possible for the researchers to record their observations objectively and hence truths can be uncovered and disseminated in an unbiased manner. From this explanation, it seems to us that the reflexivity deployed by these schools of thought are focused, or restricted, to that of methodological reflexivity. The researchers have only a passive role and do not affect the findings of a particular study. Truths are evaluated through the ways they are being uncovered. The technical aspects of the methodology must be critically examined to determine the validity of the findings. According to Gold (1958), organizational ethnographers may consider the variable impact upon the research setting of various field roles they might adopt during data collection.

The consideration suggested by Gold (1958) is important to ensure a necessary balance between outsider and insider (Horowitz, 1986), between distance and inclusion (Pollner and Emerson, 1983) and between detachment and involvement (Shalin, 1986), so as to facilitate access to original organizational backstages (Goffman, 1969). Hammersley and Harper (1981) stress that while this consideration is important, researchers must also avoid 'over rapport' by retaining social and intellectual distance and analytical space.

The fundamentals of positivism are rationalism and empiricism. These two concepts are considered the pillar of the positivist's epistemology, as the rise of rationalism and empiricism is generally traced back to the period of Enlightenment. Immanuel Kant has given as a motto to the period of Enlightenment, as 'dare to know'. It can be argued that knowledge arises from two sources namely thinking or observing. The former relates to rationalism and the latter refers to empiricism. Descartes believed that rational knowledge depended upon our ideas of resembling objects in the external world.

The term positivism is attributed to Auguste Comte. The three chronological stages in the development of knowledge as identified by Comte (1853) are depicted in Figure 2. The first stage explains phenomena as the product of the acts of supernatural agencies. The second stage attributes phenomena to a single abstract force, invisible power or underlying entity. The third stage is characterized by the examination of the positively given. At this stage, Comte claims that human mind rejected all religion and metaphysics as a distraction from sense data and phenomena is only able to be explained by proper and thorough investigations.

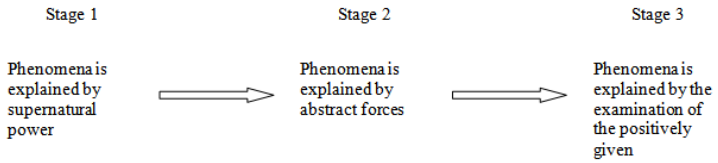

Fig. 2: Comte's three stages of knowledge development (Source: Johnson & Duberley, 2000: 4).

John Stuart Mill urged the social scientists to adopt the methods that have been proven to be so successful in the natural sciences. Mill (1874) developed a set of inductive methods used to uncover causal relationships which in turn became generalizable into scientific laws. The underlying principle in Mill's inductive methods is experimental logic, as Mill believed that the nature is uniform. Meanwhile, logical positivism draws substantial supports from the works of Mill. The Vienna Circle was made up of a group of socialists and liberal intellectuals that supported the fundamentals of logical positivism. Logical positivism has gained wide acceptance in the social arena in the early and mid 20th century.

In the late 20th century, an outstanding philosopher by the name of Karl Popper emerged into the scene of epistemology and Popper successfully proved that logical positivism is full of flaws and internal incoherent.

Popper (1959) has replaced the logical positivism's inductive and verificationist principles with those of deduction and falsification which is now widely known as the hypothetico-deductive method. According to Popper (1959), all warranted knowledge must be falsifiable. In essence, scientific knowledge advances through the detection and eliminations of error (Popper, 1967). Figure 3 illustrates Popper's epistemological Darwinism.

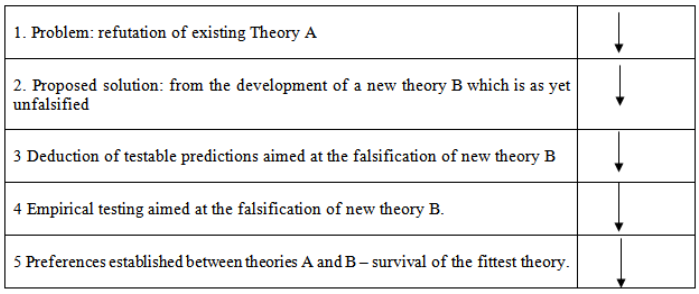

Fig. 3: Popper's epistemological Darwinism (Source: Johnson & Duberley, 2000: 4).

Popper's positivism has dominated management research ever since, and most studies related to management somehow subscribed to the notion of falsification and the concept of hypothetico-deductive method. As we are aware, the most important objectives of management research is to identify the relationships which govern the ways in which organisations operate. According to the positivistic perspective, the focus is on the observable and the approach to the analysis of organizations presumes that the reality is objectively given, functionally necessary and politically neutral (Willmott, 1992; 1997). The positivists are preoccupied with several characteristics namely causality or internal validity, reliability and replication, generalizability and the defining of concepts in terms of practicalities or operationalism. These preoccupations are illustrated in Figure 4.

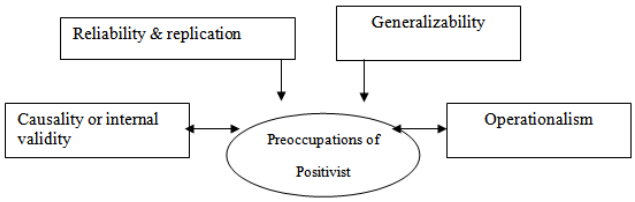

Fig. 4: Preoccupations of positivist.

In opposition, Habermas (1972) has accused positivist epistemology of serving to immunize positivism from epistemological self-reflection since one outcome of positivism's commitment to a theory-neutral observational language is to protect its adherents from epistemic reflexivity.

Subjectivist-Ontology And Subjectivist-Epistemology:

Conventionalism and positivism are two of the main philosophical approaches which reside within this combination or quadrant. Conventionalism oscillates between subjectivist-ontology and subjectivist-epistemology quadrant and objectivist-ontology and subjectivist-epistemology quadrant because relativistism remains an important element to conventionalism. Immanuel Kant has criticised the simplistic assumptions adopted by empiricists (part of the positivists) and as a result, created conventionalism as a distinct field in philosophy. Kant believes we cannot have direct knowledge of the reality which by definition unperceivable and therefore unknowable. Kant says human experience is always shaped by our mental structures and therefore we can only know this external world through those cognitive structures.

Thomas Kuhn has provided an elaboration of the conventionalism through his work entitled The Structure of Scientific Revolutions (Kuhn, 1970). He has categorized the development of scientific knowledge into a cycle which consists of four stages. The first stage is called pre-science which we see multiple schools of thought which attempt to explain reality. At this stage, the knowledge is neither verified nor falsified. They are just borne out of rational thinking and supported by some weak empirical evidence. Once a school of thought or theory emerges as a dominant and irrefutable, it becomes pre-science. The second stage is called the normal science. It is at this stage that scientific works flourished. It provided a paradigm to researchers and scientists to solve contemporary puzzles. This paradigm is the foundation for the existing knowledge to expand, and most researchers accept this paradigm and take it for granted. We can see that most PhD candidates conduct their research by adopting an established paradigm and attempt to add incremental value to a set of knowledge.

Whenever the empirical data could not fit the theory, it is said that a puzzle has emerged, however, the theory is hardly rejected just because a few studies show contradictory results. Some conventionalists attribute the failure of the data to fit the theoretical model as the fault of the researcher.

After much puzzling evidence not explained by the theory tested, we begin to see some strong emerging theories taking the challenger role. This third stage is termed as the crisis period which is characterized by the paradigmatic break-up. Many emerging young scholars and some ambitious PhD candidates would take up the challenge to provide inputs to these new paradigms. Finally, the scientific revolution stage comes about with the emergence of many competing schools of thought, with each of them is trying to claim a dominant role in explaining these anomalies. Some researchers attempt to combine a few theories and rebrand this as a new theory and to claim authority as being able to provide the best solution or explanation. At this stage, we will see many young and talented scientists taking up one or two school of thoughts and build on them as their life-long mission. After one school of thought triumphs as the best new paradigm, the scientific development reverts to normal science again. The cycle repeats when substantial anomalies emerge and the search for a new paradigm begins. Kuhn's view of scientific development is illustrated in Figure 5.

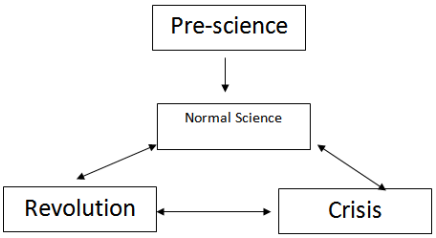

Fig. 5: Kuhn's view of scientific development (Source: Johnson & Duberley, 2000: 4).

According to Holland (1999), conventionalists will either have an emphasis upon comparing incommensurable paradigms with each other so as to reflexively highlight their contradictions and conflicts, or they will have an emphasis upon commensurable view of paradigms. For example, Burrell and Morgan's (1979) brand of conventionalism supports an epistemic reflexivity driven by incommensurability whereas a commensurability emphasis is more evident in some of Morgan's later work on metaphors (e.g. 1986).

For postmodernism, on another hand, the subjectivist themes of conventionalist incommensurability are repeated. The postmodernist's epistemological and ontological subjectivism is based upon the rejection of the possibility of a theory-neutral observational language. Therefore any warranted knowledge is deemed as a language game. An important contribution of postmodernism to management research is the focus on multiple versions of truths which implies that researchers have to be humble about any claims they make to represent ultimate truth. This position has increased the necessity of greater reflexivity on the part of the researchers.

The main role of postmodernists is to deploy their linguistic skills to unsettle and deconstruct the epistemic hegemony and undermines traditions and orthodoxies (Wong 2003, 2004). Postmodernists intend to create a new domain of intelligibility in order to provide a space for truths which were previously suppressed and allow them to at least find a place and maybe to prevail. From this perspective, we would see that the focus of postmodernists is to highlight the fragmented and decentralized parts of an established pool of knowledge. Postmodernists attempt to bring to the forefront the truths which are generally not obvious, are left-out and then forgotten in a text, and then examine what is unsaid, overlooked, understated and never explicitly recognised.

Firstly, postmodernism does not believe in incremental contributions of knowledge in management through the modernist-positivist approach. The empirical evidence used by the positivists to substantiate their claims are indeed tainted by existing beliefs and therefore the evidence is no longer objective. The postmodernist approach to management is to deconstruct and question the orthodoxies of positivistic management.

Secondly, postmodernism shifts the focus of an established knowledge to its limits and includes the fragmented parts as well. Researchers are often constrained by historical and sociological discourses and as a result, they are at least subconsciously denied to discuss or interpret their findings freely. This is an example of determinism in postmodernism, and management knowledge is treated as a particular historical and social mode of engagement that restricts a true rationalism. From years of training, managers and researchers have learned, through the modernist-positivist approach, about management science and in turn their experiences and understanding of the environment are constrained by this framework.

Thirdly, postmodernists relate knowledge to power as they believe that theories are articulated by those with and in power. Therefore knowledge as the ultimate truth is undermined as some of those in power propagate self-interested knowledge instead of truths. People in power are described as those who possess a strong command of language as well as the skills to manipulate the minds of those who have less power. The

disempowered are also responsible for the spread of untrue knowledge by accepting blindly the authority and points presented by the speakers or renowned researchers. Therefore in the view of postmodernists, scientific truths obtained through the positivistic approach are artificial truths which resulted from a power-knowledge relationship and they claimed that this knowledge suppressed the emergence of other possible truths.

The epistemological postmodernists are sceptical about the research methodology adopted by the positivists. The methodology adopted is often tainted by the prior beliefs of other positivists. The various methodologies introduced are means to justify their existing results and not geared towards the discovery of truths. Postmodernist approaches to research are mainly to deconstruct these methodologies and expose them for the inherent weaknesses. However, the postmodernist's approach is being criticised as being destructive to scientific management knowledge because they do not offer any alternative approach but merely seek to destroy for the sake of destroying. Moreover, the deconstruction of the modernist-positivistic approach to management research is usually done through the adoption of the modernist positivistic approach, and this is a form of a self-contradictory approach. It is impossible for postmodernism to totally reject the positivistic approach in this situation. The main point here, which has the ability to be proven by the postmodernist's approach to management research methodology, is the existence of various techniques to a research problem.

Because of this argument, postmodernism's epistemological and ontological position creates a problem called hyper-reflexivity. This problem is described as the lack of an end to any exercise of reflexivity if postmodernism is true. For example, Ashmore (1989) and Woolgar (1988) describe the use of what they call hyper-reflexivity, the deconstruction of deconstruction and the development of new literary forms.

Objectivist-Ontology And Subjectivist-Epistemology:

The schools of thought within this combination regard epistemic reflexivity as emancipatory by both sanctioning and enabling the investigation and problematization of all so-called realities which are purely projections of the human mind. These realities are social constructions which have been heavily influenced by varying practices, interests and motives which constitute different communities' sense-making. Critical theory and pragmatic-critical realism are developed based on this combination.

Habermas' works of critical theory are the popular references in this field. The objectivist illusion of positivism and neo-positivism is dismissed by Habermas through the lens of socio-cultural factors which could affect sensory experience. Habermas argues that all management theories are there to serve particular sectional interests and hence all claims to neutrality or common sense are as a mask that hides partiality. However, the main weakness of this argument is the consequence of relativism. The solution to this weakness, as suggested by Habermas, is the 'ideal speech situation' in which conversationally produced socio-rational consensus is induced when that consensus derives from argument and analysis without the influence of a power or dominant relationship.

It is almost impossible to have the 'ideal speech situation' in our everyday social interaction due to the asymmetrical operation of power and domination which systematically distorts communication. Consequently, one important aspect of epistemic reflexivity would be consideration of the extent of the social constructions that are in use and how they have been democratically reached. On the other hand, pragmatic-critical realists acknowledge that a correspondence theory of truth is ultimately unattainable because of the projective role of the epistemic subject.

The emphasis of pragmatic-critical realist is on the practical adequacy of a particular knowledge, as Zolo (1990) suggests that our ability to undertake practical actions that are successful and our ability to reflect upon and correct actions that seem unsuccessful, imply that there exists a feedback relationship with an independent reality which constrains and enables practices that would otherwise be inconceivable. In brief, critical theorists will emphasize the role of epistemic reflexivity in enabling both the construction of new interpretations and the achievement of consensus. Meanwhile, pragmatic-critical realists will emphasize epistemic reflexivity's role in engendering new forms of practice located in new versions of reality.

Conclusion:

Epistemology and ontology are the foundations of philosophical knowledge. All warranted knowledge must be able to be justified in terms of an epistemological and ontological framework. Both the assumptions of epistemology and ontology can be classified into two general categories: objectivity and subjectivity (Wong 2003,2004). The main assumption of objectivist epistemology is the existence of a theory-neutral language. With this assumption, researchers are able to present their findings and the corresponding interpretations in an objective and impartial manner. Objectivist epistemology enables the researchers to differentiate between true and false as a matter of fact because there is a set of objective evaluative criteria to assess the validity of certain knowledge-claims.

In contrast to objectivist epistemology, subjectivist epistemology asserts that there is no theory-neutral language. In subjectivist epistemology, all the knowledge-claims are tainted by the researcher's biases. It is not possible for researchers to proclaim their findings as the ultimate truth because there is no standard set of criteria

which enables such assessment. Researchers who subscribe to the subjectivist epistemology must be humble with their findings and allow for dissident's opinions.

Meanwhile, for objectivist ontology, the main assumption is the existence of an independent external reality. This independent external reality could either be accessible or not accessible to human beings. However, they are there no matters whether or not we could identify or understand them. In contrast, subjectivist ontology assumes that there is no independent external reality, as all knowledge-claims are purely the output of the human cognitive processes. The so-called truths for subjectivist ontology are merely the projections of a human mind which could be derived from past experiences or even a cultural background.

The epistemological and ontological assumptions could be combined to create three distinct schools of thought. Mathematically, the combinations of epistemological-ontological assumptions (i.e. objectivist-subjectivist) should result in four sets of combinations. But the combination of objectivist-epistemology and subjectivist-ontology would result into something which is incoherent. It is neither logical nor rational to assume a theory-neutral language exists in the absence of an independent external reality. When all the truths are assumed to be merely projections of the human mind, as in subjectivist ontology, there could not be any theory-neutral language which could be used to describe these truths that do not really exist in the real world. Therefore this combination is deemed irrelevant. Consequently, we have a result of only three sets of coherent combinations which are: i) objectivist-epistemology and objectivist-ontology, ii) subjectivist-epistemology and objectivist-ontology and iii) subjectivist-epistemology and subjectivist-ontology.

The popular schools of thoughts which have been described thus far in this article can be categorised into either one of these combinations. Positivism and neo-positivism are utilising the assumptions of objectivist-epistemology and objectivist-ontology, critical theory and pragmatic-critical theory falls under the combination of subjectivist-epistemology and objectivist-ontology while conventionalism falls between the combinations of subjectivist-epistemology and objectivist-ontology and subjectivist-epistemology and subjectivist-ontology. Postmodernism, meanwhile, is classified as subjectivist-epistemology and subjectivist-ontology quadrant.

Essentially, the classifications of these schools of thought into the respective combinations of epistemological-ontological assumptions help to provide growth to philosophical and scientific knowledge. This exercise also increases the level of reflexivity among management researchers. It is now important for a researcher to undertake a study which is coherent and contains strong philosophical and scientific ground. In order to achieve this goal, management researchers have to actively engage with self-reflection of the underlying philosophical schools which have strong influence on their works. The constant reflexivity by the management researchers would be able to bring up the quality of the study and the corresponding findings would be more useful to humanity. In conclusion, it is imperative for management researchers to adopt these philosophical grounds in producing high quality studies and subsequently contribute to the body of knowledge.

REFERENCES

Ashmore, M., 1989. The Reflexive Thesis: Wrighting the Sociology of Scientific Knowledge. Chicago: University of Chicago Press.

Burrell, G. and G. Morgan, 1979. Sociological Paradigms and Organizational Analysis. London: Heinemann.

Goffman, E., 1969. The Presentation of Self in Everyday Life. Harmondsworth: Penguin.

Gold, R.L., 1958. `Roles in sociological fieldwork', *Social Forces*, 36(3): 217-23.

Habermas, J., 1972. Knowledge and Human Interest. London: Heinemann Educational Books.

Holland, R., 1999. `Reflexivity', Human Relations, 52(4): 463-83.

Horowitz, R., 1986. `Remaining an outsider: membership as a threat to research rapport', Urban Life, 14: 409-30.

Kuhn, T., 1970a. The Structure of Scienti®c Revolutions (2nd edn). Chicago: Chicago University Press.

Mill, J.S., 1874. A System of Logic. London: Longman Green.

Morgan, G., 1986. Images of Organization. London: Sage.

Neurath, O., 1944. Foundations of the Social Sciences. Chicago: University of Chicago Press.

Popper, K., 1959. The Logic of Scientific Discovery. London: Hutchinson.

Popper, K., 1967. Conjectures and Refutations. London: Routledge and Kegan Paul.

Pollner, M. and R.M. Emerson, 1983. `The dynamics of inclusion and distance in fieldwork relations', in R.M. Emerson (ed.), Contemporary Field Research. Boston: Little, Brown.

Rorty, R., 1979. Philosophy and the Mirror of Nature. Princeton, NJ: Princeton University Press.

Shalin, D.N., 1986. `Pragmatism and social interaction', American Sociological Review, 51(1): 9-29.

Willmott, H., 1992. `Beyond paradigmatic closure in organisational enquiry', in J. Hassard and D. Pym, The Theory and Philosophy of Organisations. London: Routledge.

Willmott, H., 1997 `Rethinking management and managerial work: capitalism, control and subjectivity', Human Relations, 50(11).

Wong, E.S., 2003. Action Research Philosophy: The Fountain of Living Research. Perth. Centre of Professional Practitioner Resources Publication, ISBN: 1-74052111-2.

Wong, E.S., 2004. Action Research: The Living Thesis. Perth: Centre of Professional Practitioner Resources Publication. ISBN: 1-74052109-9.

Woolgar, S., (ed.) 1988. Knowledge and Reflexivity: New Frontiers in the Sociology of Knowledge. London: Sage.

Zolo, D., 1990. `Reflexive epistemology and social complexity: the philosophical legacy of Otto Neurath', Philosophy of the Social Sciences, 20(2): 149-69.