
Epistemological perspectives in business research: an analytical review

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Abstract: Philosophically, positivism adheres to the realistic knowledge acquired through observation, empirical evidences and measurement. In positivism studies the role of the researcher confined to data collection, analysis, and interpretation that are observable and quantifiable within the set objectives. Statistical techniques and mathematical modelling are central to positivist research, which adheres to structured research techniques and pre-determined research designs. Positivist researchers tend to make generalisations with limited observations and data evidences, which have emerged as one of the fundamental weaknesses of the positivist philosophy. They believe positivism is deductive research process in management, which eliminates the possibility of conceptualisation against the evidence based research. This paper aims at critically examining the positivism in management research stemming out of the epistemological growth in management research and contributes to the existing literature by interpreting the convergence of classical school of thoughts with the contemporary ideology on management research.

Keywords: positivism; conventionalism; postmodernity; epistemology; research philosophy; management research.

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1 Introduction

Management is an art and science. Analysing a given situation cognitively and discovering the underlying perspectives of management is considered to be an art, while transforming the acquired knowledge into the operational paradigms methodically is a scientific discipline in management. Management research bridges the two sides of

knowledge lying as an art and science in management of things¹ (MoT) and converges the basic knowledge with the refined decision support systems. The epistemological growth of management thinking sprouts over several theories of knowledge in reference to the rationale of basis of thinking, methodical evolution of thought process, validity, and its scope for applications. Epistemology may be considered as the growth of knowledge, refinement of its application, and sustainability over the varied situation that distinguishes the belief from opinion, and appropriation from methodical analysis. Etymologically, episteme refers to knowledge in Latin and logos signify systematic evolution or theory. Management research today is emerging from analytics to create business value not only through the data management or complex modelling skills but also evolving through shared visions. The epistemological passage has widened with systems thinking approach in making business decisions by using increasingly sophisticated analytical methods (Ransbotham et al., 2015).

2 Epistemological growth in management research

It has been argued in the past that epistemologically management research should be based on the relevant questions, acquire information, validate data, and analyse the results to derive right decisions. There are various methodical ways to conduct the management research by conceiving the systematic approaches developing the right theses, critically examining anti-theses, setting the testable hypotheses analysing the validated information, and to reach at the most appropriate syntheses. Researchers may conceive a thesis as a relevant subject to be researched upon, and review the arguments emerged in the past on the theses within a reasonable spatial and temporal spread that are leaning for or against the thesis selected. As the anti-theses woven around the theses is critically examined, it provides scope for developing the research questions, statements, and propositions to be tested, validated, and analysed with the relevant information (data). The results that emerge out of the analysis in support of the thesis and the predetermined research questions would emerge as synthesis of the management research epistemologically (Johnson and Duberly, 2000).

Despite a streamlined management research methodology, the organisation of management research, writing styles, language, canvassing the discussion, presenting arguments, and focusing the core features of syntheses varies widely according to the schools of thoughts. For example, there is enormous literature to review in order to understand the debate on management research perspectives among classical, neo-classical, modern and liberal schools of thoughts. This reading provides researchers a platform to map the major breakthroughs in management research in view of various schools of thoughts, and lay the epistemological base that is appropriate for management research and organisation. It is necessary to conduct self-appraisal by the researchers interrogating 4Ws - what is visible, where to employ research, when is the right time to conduct research, and why to do so, for conceiving the management research methodologically. This signifies that the epistemology is a part of everyday life and management research embodies human instincts and not just the quantitative dimensions. The methodological and theoretical beginning provides the base for scientific knowledge and develops normative standards that enable the knowledge to grow manifold with analytical vigour. Such process of building knowledge would often get jeopardised by setting dilemma between 'beliefs' and 'scientific' rationale of conceiving the knowledge

that is appropriate to support the management research. However, it has been argued that the redundancy on knowledge would create misperceptions and should abandon any philosophical questions by segmenting them to experimental psychology, which analyses cognitive dimensions through empirical research (Kelly, 2014). However, there has been prolonged debate on the experimental psychology, which is largely based on assumptions rather than consistent knowledge. Cognition and the dynamics of human mind is not a static object from the perspectives of either clinical or management research. Such intricacies create circularity in epistemology because knowledge continuously changes as situation warrant amidst the plethora of assumptions. This has been the foundation of scientific knowledge in 17th century, which cannot be ruled out even today though the individuals, society, state, and organisations have become more complex entities. Hence, epistemology for management has become reflexive. It should be considered as perennial process and adjudged according to its external and internal fit. This involves the researchers to be more self-comprehensive to ponder over the 4Ws and identify the best fit of epistemological maxims suitable for the management research, which may also push the researcher to the edge of critically examining own perceptions, understanding, and knowledge spread.

A set of epistemological constructs would allow a researcher to legitimately claim their propositions in the management research. The facts speak for research on one hand while the theoretical base founded on the thesis justifies the propositions or hypotheses of the management research. Therefore, it is necessary to analyse the epistemological reserves to develop some right perspectives to work on research theses in management and organisations. The epistemological commitments provide tacit responses to the origin of theories, scientific growth, and applications in the management research and organisations. The epistemological assumptions are directly proportional to the advances in scientific knowledge, which grows continuously. The theoretical assumptions of classical economists such as Adam Smith (welfare economics), David Ricardo (theory of rent), and J.M. Keynes (monetary economics) have been altered largely as the global trade and economy has turned to a different direction from the period they contributed theories. The ethos of science from the United Kingdom, German social sciences, and Russian communistic philosophy described by Karl Marx have laid the foundations of theories that are used in various disciplines even today to build comparative management research theses. The epistemological thinking is thus based on spatial and temporal dynamics that transforms the knowledge of classical theories into the modern times considering many variables affecting the theses, applications, and validity. The major challenge in such transformation is overruling the beliefs and myths from the epistemological growth and build new knowledge on critically examining the realities, facts, and visible outcomes (Meyerson, 2001).

3 Positivism in management research

Research in management leads to learning into the various situations and learning is stimulated in any organisation at two ends-learning from success and learning from failure. In order to guide the management research, both learning ends are meaningful as learning from success leads to develop a positive model while learning from failures builds corrective models in management research. The logical positivism management

research epistemology is based on the principle of testing the management maxims in reference to the cause and effect analysis and synthesising the epistemological process followed in constructing the theories. Positivism in epistemological growth in management research is embedded in the western culture. However, no streamlined development of epistemology in management research has emerged over the past century. The taxonomy of theories can be found spread across the subjects related to behaviour, organisation, business, and entrepreneurship that establish convergence with the classical, neo-classical, and modern management thinkers. The positivists or the genre of management theorists have grown across the spatial and temporal criticism on the core thinking like welfare economics management from ex-Soviet communistic origin to the capitalistic management principles of the west. The positivists who had built their arguments steering the realistic social, economic, and political situations advocated bottom-up management philosophy that upholds the voice of stakeholders in a society or in an organisation. The positivism in management research in the post-twentieth century entails attention to the happenings around us including society and organisation instead of analysing the theses and antitheses of historical epistemology. Mindfulness is the essence of positivism, which enables people to recognise and take advantage of opportunities when they arise and to avert risk (Langer and Beard, 2014).

However, epistemological alternatives to positivism are delineated in the rationalism, empiricism, and enlightenment in thinking. Empiricism has emerged from the experimental sciences in management, wherein this theory explains that all knowledge is derived from sense-experience and converge mind, management, and action. Enlightenment of thought process drives complex and contemplating minds to the new challenges and induces radicalism in the epistemological development in management research over the conventional schools of thought. The combination of empiricism and enlightenment concepts have been highly criticised by the classical epistemologists who built their thoughts around assumptions. They argued that enlightenment of thoughts in accordance with the sensory experience might be deceptive and difficult to test and build conceptual frameworks. It has been observed, debated, and of late, established by the thinkers of classical school that reasoning process emerges from empirical experience and inferences drawn are generalised to build a theory through repeated observations. Hence, at the epistemological base knowledge, rationale, empiricism, and enlightenment are the intertwined elements that lead to deliver a generalised concept leading to theory upon testing variedly.

The methodological rigor in management research is achieved through the rationalism and enlightenment on the subject. It is necessary to grow knowledge in a network paradigm linking the subjects, objects, rationales, and sensory observations. The natural sciences are based on the above mind maps and canvas of the epistemological development. The experience-led epistemological growth in the modern management research is opposite of the conventional knowledge blocks. The concepts supporting the management research today increasingly comes from the objective learning, empiricism, rationalisation, and evidence-based knowledge pool which is hard-to-throw away. The knowledge management systems in management research today seek out the tacit rationale emerging out of experience (Geisler, 1999). Management research should approach the gathering and sharing of experience by using the techniques of debriefing and mentoring, which can be retrieved from the genesis of positive epistemology over the past.

Positivism in management research can be witnessed in the synthesis and logical expressions in investigation, unveiled by the judgmental values. The positivism today is beyond the philosophical notions that supported the management research based on the assumptions and critical learning. The leaning of management researchers towards positivism cannot be overlooked today, just because they are trekking off the philosophical knowledge and theoretical boundaries. In fact, the positivism in the management research has diversified to take a cursory or careful look on phenomena or issues of organisational needs, interest, and growth. These phenomena have driven the positivism in management research and led through the diversities of knowledge over the past streamlined and rhythmic course of philosophical thinking (Ogbo and Kifordu, 2015). The positivism is continued as a philosophical legacy and just because researchers are not identifying them as positivists, the trend of positivism in management research should be ruled out today. It has been reformed as futuristic and judgmental thinking sprouted from the philosophical foundations of management research in the past. Over the past the positivism in social sciences has grown from ‘methodological natural sciences²’ to management science, which is founded on operational realism observed within the society and business (Kolakowski, 1972; Keat, 1979).

The management practice today is an outgrowth of management research within the strategy and analytical streams. Stemming out of management knowledge from the methodical synthesis of research leads to eclectic and pragmatic practices in management. As more and more researchers in management are streamlining their maxims based on the standardised positivism such as organisational behaviour, consumerism, static and dynamic cognitivism, social values, political and economic orders, technology growth, and innovation, has narrowed down the ideological fragmentation to a large extent. The positivism today, despite growing on contemporary insights holds central tenets like core objectives of research, research approach encompassing internal and external validity, and reliability. In the positivist management research, it is advocated to carry out research avoiding biased and subjective interventions of thoughts in order to honour the depth of positivistic feel in management research. The positivism has rationality and utility perspective as underlying drivers in analysing the management research. The positivism in the management research has turned into constructivism over the twentieth century by focusing the research paradigms on continuous improvement on the rationale, application, utilitarianism, and growth. Such development in management research is growing faster with futuristic contentions (McAdam et al. 1996).

The contemporary positivism was laid on the foundations of Logical positivism and logical empiricism developed in the early 20th century. Its goal is to grow management as a unified science using methodical and logical analysis to unmask traditional philosophical problems of generalising empirical analysis. The new era of positivism in management research began with factual knowledge resulted from experience (empiricist), which rests on the determinant or decisive statements (positivist). The casual relationship with organisations and management research drives the constructivism to various measurable decision platforms by pushing the ideological values in research to determinism (Keuth, 2015). This not far from the principles of empirical research in the management and from this perspective the empirical researches are of high prominence today. The deterministic research requires comparative analytics and validation of multi-variety and multi-factorial cognitive indicators to arrive at appropriate decisions in

managerial research. However, it is necessary to ensure in positive management research that no relevance of the variants in research is not neglected. In other words, the positivism in management research should be built around the relevant variables and any close biases need to be avoided. The casual positivism, while generating theoretical contributions identifies sometime the discrete relations among the variables that enable possibilities of developing prediction and control rationales in management research. However, results emerging from such management research cannot be generalised (Hogan and Sinclair, 1996).

4 Conventionalist vs. positivist epistemology

The research in management science has been dynamic since the early 20th century as the nature of complexity in management research moved from absolute theoretical stream of knowledge to the applied science. Such shift in the knowledge stream has driven the research concepts in management towards socialisation engaging all role players in MoT as discussed in the previous sections. The positivism in management research with evidential and data based research has appeared to be an effective way to carry out the applied research and socialise the results than just replying on the observability and inductive research through the qualitative dimensions. However, during the same temporal span, 'conventionalism' has developed as a theory of neutral language with subjective interpretation as an alternative to positivism though this stream of knowledge could not replace the positivist approach. Conventionalism could not grow as epistemological mainstream in management research due to weak base to hold scientific statements, less valid criteria to set objective standards, and relying heavily on observations without empirical and statistical evidences (Keat and Urry, 1975). Conventionalists over the years dismissed the voyage of positivist management thinkers towards overreaching the set of standards in knowledge assimilation and diffusion in shaping the research objectively.

The arguments on positivism over the conventionalism drag discussion in contemporary management research from the point of tangibility in acquiring, analysing, and disseminating the knowledge. The management research today supports positivist thinking on how tacit knowledge can continue to be tapped and utilised in management research despite discrete criticism and disrupting the socialisation of knowledge. The positivism in management research on the contemporary platform explains how to structure the knowledge flow optimally between knowledge seekers and knowledge providers to maximise the impact of knowledge based on the evidence based research. Progress in these concepts have been significantly contributing to develop the relationship between knowledge, society, and scientific reality (Holtshouse, 1998). Carrying out further the point of view of a century old positivist thinkers in management research, it may be stated that the positivist philosophy embeds the fact that in whichever manner the knowledge is acquired, the results of research are delivered methodically with empirical evidences unlike the pedagogy built by the conventionalists. Nurturing management research today from the genesis of the research problem to the hierarchical evolution of causes and effects, and synthesising the results of research engaging the social and peer participation have added value to the positivist thinkers against the conventionalists (Khin et al., 2011). Such socialisation process of management research

has driven further a new concept of 'systems thinking' adopted from physical and engineering science faculties.

Among various disagreements, management thinkers with conventionalism had raised obvious concerns over the knowledge exhibited by the positivists as piece of aesthetics using exhibitionistic language, coherence, and presentation of contents over the dissemination of facts of research (Duhem, 1954; Poincaré, 2001). However, the counterarguments by the positivist researchers to the above criticism overruled the notions of management research conventionalist, reinforcing the need of socialisation of management science and turning it attractive to deliver the knowledge and results without misconstruing the facts. Indirectly supporting the positivists claim on language in management research, some conventionalist thinkers believed that taxonomy of language, categories of knowledge, concepts, and meanings are naturally derived within the cognitive structures and should not be considered as they are artificially injected in the knowledge ingenuousness slaying the facts. Immanuel Kant in the 18th century raised such perspectives and seeded 'phenomenalism' as a cognitive science interpreting the dynamics of human mind and sensory touches in the knowledge generation and dissemination (Henry, 1982). This development in the management research supported the conventionalist philosophy and thinkers adopted the concepts of rationale reflections or reflexivity given by Kant. In fact, the reflexivity in research has outgrown the theory of phenomenalism and has laid substance for initialising the thought process for positive research in management over the conventionalism. The cognitive structures in management research can be judged qualitatively (observability) as well as quantitatively (positivist theory) that lead to rationale reflections, sensitivity, and phenomenalism. Broadly reviewing the ideological moves, epistemological developments, and the purpose of management research, culminates at the stance of knowledge that is supported by the evidences and observations.

5 Postmodernist and relativist epochs

Epistemological evolution in management research has grown over centuries by redefining its focus from positivism to liberal thinking. Positivist thinkers in management research have driven their ideologies out of the criticism of empiricism, rationalisation, and evidence-based research methodologies. The casual designs of management research have emerged since the mid-twentieth century that were not woven around a single philosophy but adapted to relativist thinking based on the comparative dynamics of thesis, hypotheses, synthesis, and their interpretations in the management research. Such thinking in management research has been outgrown from conventionalist theories as postmodern epistemology. The post-modernism identity of management research philosophy has been shadowed from the common social development canvas, where the shifts in arts, culture, and literature have been mapped. Pre-modernist theories largely focused on truth and eternal philosophies with a bent of religion, culture, and social power structure while the modernist epistemological ethos moved away from the conventional structures and followed situational paradigms to explain management research. Philosophy of postmodernism today applies to social science in general and management and organisation theory in particular (John, 1999).

Concept of modernity is associated with dramatic changes in the society, and enlightenment in sharing the knowledge. The epoch of modernist management research philosophy is largely based on the positivist ideology though most modernist thinkers have articulated the management theories to fit the various research propositions. As positivism escaped from pre-modernist viewpoint and transformed into modernist doctrines, it has pulled out the religions associations and God based truths or beliefs from the core of management research epistemology. Modernist epistemologists laid foundations of narrative analytical structures and redefined theoretical truth as pragmatic utility to support research in management (Hansen, 2006). Hence, postmodernism has created space for researchers to understand and analyse the needed radical thinking in management research over the epistemological evolution in the past.

Since 1990s, the need for shifts in the philosophy of management research has been clutched between positivism and postmodernism. While many have insisted to stay with the positivism view points, and others have argued that it is time to move beyond it. Modernist philosophy took a radical position today by establishing the meta-narrative epistemological debate to support the management research. Such philosophical boom in modernist philosophy has influenced significantly the empirical research in management. However, whether one holds a positivist or a postmodernist epistemology, it has little practical effect upon one's empirical findings. This argument suggests that the emphasis on philosophical underpinnings of postmodernist thinking is not binding on the methodologies central to what management scholars actually do (Houghton, 2008). Modernist thinkers also built their maxims to use neutral observational language though they took it as initial challenge against fundamental positivists. Such adjustment in research epistemologies is known as 'linguistic turn' that suggests as language is never acquitted as it holds etymological sense and builds social bond in management research (Lyotard, 1984).

Postmodernist management philosophy has grown over the relativist epistemology. Epistemological relativism may be defined that knowledge, which embeds truth or justification, is relative to time, place, society, culture, chronological shifts in knowledge, and research concepts. Relativity in management research depends upon the value of one or more of these variables. According to the relativist theory, knowledge is relative and convergent to the above variables because different cultures, societies, research requirements accept different sets of background principles, criteria, and standards of evaluation for knowledge-claims. So the relativist's basic thesis is that knowledge and knowledge claims, which are justifiable, are relative to the standards used in evaluating such claims encompassing research standards. The key analytical approach associated with relativism and postmodernist philosophy in management research is 'deconstruction' of knowledge (Johnson and Duberley, 2000). Hence, postmodernist management research moves bidirectional with 'inductive' and 'deductive' research. The inductive research is based on the relativist aphorisms in reference to society, human behaviour, and culture, which aims at deriving new theories or epistemologies out of the research and proving the predetermined theories (deductive research).

The epistemological growth in management research depended heavily upon community, knowledge, and language for developing a scientific theory. This dependence suggests that individual beliefs in scientific theory are justified because the community believes it to be justified. This is a relativist move embedded in the positivism leading to postmodernist philosophy of management research. The idea of linking relativism to postmodernist thinking in the management research is a new

epistemological order, which delineates that research is evidence based, heterogeneous, and carried on fragmented theses to share the knowledge within the society. Ultimately, knowledge and justified belief are simply social statuses and the foundations of management research. When conjoined with the lemma that communities can differ on the shared knowledge, epistemological postmodernity entails epistemological relativism (Faulkner, 2004).

6 Critical theory and management research

The epistemological journey in management research advanced from the postmodernist rationale towards examining critical evaluation of knowledge. Postmodernists have been disparaged for containing the partial knowledge and developing value driven theories by managing the facts through linguistic manipulations. These attributes of postmodernist philosophy in management research has led to the epoch of critical theory, which establishes innate connections between values and knowledge available in the society that channels scientific knowledge required for management research. Besides, the general management subjects, the critical theory is applied to investigate the asymmetric and discrete databases and information spools. Critical theory combines social theory, philosophy, cultural concerns, and socio-political inputs and carry sharp critiques of modernist thinking. Traditional theory, whether deductive, inductive, or analytical, has constantly focused on coherency and establishing distinction between theory and praxis that refers to philosophy and religion, and organisations and business. Countering the traditional arguments of theorists, critical postulators focus on objectivity and liberalised thinking (Couzen and McCarthy, 1994).

Objectivism stands for politically neutral observation and enlightenment beliefs stay crucial for knowledge and freedom as intrinsic constituents of critical theory. As the propagators of Critical theory at Frankfurt School were leading their arguments on social diagnosis and reformatory research for a liberal hub to nurture mankind, political, society, and knowledge, Habermas attempted to streamline the thinking to positivism. Habermas argued that social and cultural factors influence sensory experience constituting the human cognition to analyse reality through priori cognitive principles. Accordingly, correspondence theory embedded in positivism connects the truth and objectivity with the linguistic interpretation of the subject. In fact, there is a relationship between knowledge and interest, and all epistemological evolutions beginning from positivism to critical theory endorse theoretical convergence with the research ideologies (Habermas, 1974). Habermas has identified two knowledge domains-empirical analytical science and historical-hermeneutic science. The former domain emphasises the human interest in our creative interplay over the natural environment, while the latter knowledge domain accentuates the 'practical interest' that arises out of interpersonal communication like interviews, brainstorming, and peer discussions. Interests so emerged would lead to social diagnosis and critical appraisal of the historical, present, and anticipated (futuristic) socio-political situations. The critical theory has paved path through these knowledge domains and established its maxims in social and business management research over the postmodernists epistemologies. Critical theory also endorses emancipatory interest, where self-knowledge and understanding generated through self-reflection dominates to drive the socio-political liberty created through power of communication. If this domain

is unprotected, would lead to distortion of interaction and communication and might liberate the rational capabilities-for or against the social objectives (Habermas, 1972).

The empirical-analytical domain of knowledge, which is largely inculcated in the natural sciences research is knitted around technical interests, and objectively oriented in the social domain with the purpose of reaching out on predictions and controls over the existing processes. The historical-hermeneutic domain of knowledge largely serves the cultural sciences grown in the society and emphasises on practical interests with the linguistic and cultural platforms. The hermeneutic knowledge sphere diagnoses the socio-political subjects from the perspective of documenting the consensus and understanding the inter-personal dynamics on the issues. The critical theory led scientific knowledge is an amalgamation of the above two knowledge domains that culminate in philosophy explaining the emancipatory interests on social-political subjects dominated with power or authority. Such socio-cultural situations can be witnessed in the Marxian literature, which explain social inequality and political authoritarianism. Hence, the critical theorists focused their research objectives encircled to the enlightenment with a view to reinforce critically appraised knowledge to reform social and cultural settings. Critical theorists focused on re-generating knowledge on social autopoieses, which refers to a social system capable of driving continuous growth (reproducing) and maintaining its new orders (Mingers, 1992). Most epistemological philosophies have common attributes as exhibited in the Table 1, which would reveal the path of epistemological evolution from traditional to modernist and later towards critical theory.

Table 1 Epistemological growth and attributes of embedded philosophies

<i>Epistemological evolution</i>	<i>Conventionalism</i>	<i>Postmodernism</i>	<i>Critical theory</i>
Attributes	<ul style="list-style-type: none"> • Social paradigms • Knowledge as phenomenon • Constructing research theories • Religion and truth 	<ul style="list-style-type: none"> • Evidence-based research • Linguistic concerns • Relativism • Deconstruction of subject • Goal oriented research 	<ul style="list-style-type: none"> • Political, socio-cultural, and value oriented • Predictions and control • Emancipation
Synthesis	<ul style="list-style-type: none"> • Consensus on Truth • Observability 	<ul style="list-style-type: none"> • Linguistic importance • Subjectivity 	<ul style="list-style-type: none"> • Empirical knowledge • Social research

Source: Author – contents developed based on various explanations to epistemological evolution in management research that are reviewed and submitted in previous assignments.

Critical theory has made a docile stance in management research while its philosophy got well established in the social research and literature studies. Formalism, which stemmed out of the critical theory, examines the relationships between a texted ideas and its form, between what a text says and the way it says it. However, critical theory aimed at diagnosing the problems modern society and prescribing necessary social changes towards reducing the socio-economic inequality. Philosophically, critical theory supports communism as evidenced in the Marxism and classical socialist principles (Layder,

1994). Critical theory is founded upon a social theory oriented toward critiquing and changing society and focuses upon the inherent connection between politics, values and knowledge to instigate a deeper consideration that constitutes legitimate scientific knowledge linking to emancipatory social theory (Alvesson and Willmott, 1988). The approaches to develop a critical theory can be explained in reference to an ideology critique derived from Marxist principles focused on the exploitation of workers by managers. The main focus of a traditional ideology critique approach towards critical theory is based upon four progressions- naturalisation, universalisation of management interests, the pre-eminence of instrumental reasoning, and the innate notion of supremacy (hegemony). The Critical theory is also founded on the argument that individuals might attempt to reform institutions through an ethically driven discourse seeded in an idealistic condition (Alvesson and Deetz, 1996). The key issue in critical theory is the 'ideal speech situation' that brings reflexive awareness and which is best achieved in the society through discussions on open forums, undistorted communication, and evidential investigation that tends to offer liberal knowledge and socio-cultural development.

7 Conclusions

In summary, in any discipline where new knowledge claims are made, epistemological evidences are needed to support the prerogatives. It follows every management strategy, policy, and organisational interventions. Hence, in management research proceeding with the systematical approach following the path-theses, anti-theses, hypotheses, and syntheses, the epistemology drives the researchers toward critical interrogation to overcome the redundancy of assumptions and chose the right theoretical framework. The dominance of the empirical research with quantitative rigor in the twentieth century has strengthened the base of the determinism in management research. The modern notion of management research is an integration of epistemological sequences of theories and applications that direct towards reaching a synthesis by meticulously identifying the thesis, reviewing the antithesis, and collecting evidences (data) to test the hypotheses. Research studies published in the various journals of repute like Administrative Sciences Quarterly and Journal of Academy of Management have indicated that the positivism in the management research has grown out of the philosophical journey in the past and has set a new trend. Critically reviewing the postmodernist and relativist philosophies in management research, there emerges many arguments raised metaphilosophically whether there is more than one way of describing these ideologies in management research. Responses to this question might appear in the inductive and deductive research approaches that knitted around relativism and positivism (Elis, 2001).

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Notes

- 1 The Management of Things (MoT) terms has sprouted colloquially among the corporate managers across the regions in the world to uphold the significance of management approach in every walk of human civilization, which observed from societal management to business and stretching beyond planet to discuss about management of space workstations. MoT has an embedded stake in the development of knowledge in science, technology, business, governance, community development, and many more areas.
- 2 This group of philosophical thinkers were of the view that social sciences should serve higher scientific knowledge provided they are brought with the gamut of the principles of natural sciences like physics and chemistry.