Scientific Knowledge in Management and its Praxeology

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ABSTRACT

Objective – The praxeology recognized by some theorists as the relevance of the results of the research process for managerial and academic practice, is evidenced by others as absent. The purpose of this paper is to propose an evaluation of the results of the research process in management, particularly in the "doctoral theses" in management in Colombia over the last 9 years, from a reflexive approach as the epistemology of human sciences and critical performativity that allows us to answer the question: What is the level of knowledge praxeology generated in doctoral theses in management in Colombia?

Methodology/Technique –The work proposes to start with an exploratory sequential approach to identify the categories of praxeological focus in the literature and theses. Then, a strategy of quantitative evaluation of the observable aspects in the theses is designed. Finally, the strategy is applied to the theses and the results are documented.

Findings & Novelty – The current scope of this proposal is limited to the information that will be collected in the observation of doctoral theses. The results should be interpreted considering this restriction. This proposal presents an approach to interpret the praxeological focus from the functionalist explanation to the comprehensive in doctoral research in management where the traditional scheme has been positivism.

Type of Paper: Review.

Keywords: Epistemology; Praxeology; Evidence-based Management; Critical Performativity; Critical Management Studies.

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1. Introduction

The praxeology recognized by some theorists (Avenier & Gavard-Perret, 2012; Hatchuel, 2017) as the relevance of the results of the research process for managerial and academic practice, is evidenced by others as absent (Hodgkinson & Rousseau, 2009; Van Aken & Romme, 2012).

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The idea of this study is to propose an evaluation of the results given by research processes in management considering the critical performativity (Spicer, Alvesson, & Kärreman, 2009) and the social injustice of the economic systems that managers serve and reproduce (Adler, Forbes, & Willmott, 2007; Walsh, Weber, & Margolis, 2003) going beyond instrumentalism, in the "doctoral theses", from a reflective approach that answers the question: What is the level of knowledge praxeology generated in doctoral theses in management in Colombia? This approach lends legitimacy to management as a practical social science and is relevant to address this problem since, according to Hatchuel (2017), research in management should minimize the spaces of doubt that exist between practice and academia (Rynes & Bartunek, 2017) so it can concentrate on offering valid management knowledge with proper transfer to practitioners from critical performativity.

In the first part of this paper, the literature review is presented on the theoretical framework that supports the analysis scheme for the generation of knowledge in management, its praxeology, the man, its collective action in the organization and the critical performativity in order to focus the analysis beyond instrumentalism or the functionalist, efficient technical tradition. Then, the proposed methodology that covers the pragmatic constructivist epistemological approach, the type of reasoning to be used empirical/deductive, the unit of analysis, the scope of application, and the methodological process that is proposed to be used as a method of sequential exploratory approach or mixed of four phases. Subsequently, the preliminary results associated with the first phase of the methodological process are explained and for this reason the last part of the document, which corresponds to discussion and conclusions, revolves around the preliminary results.

2. Literature Review

The absence of a praxeological approach based on an epistemology in the human sciences (Avenier & Gavard-Perret, 2012; Hodgkinson & Rousseau, 2009) is related to excessive and almost exclusive use of the methods and tools from the Natural Sciences in management research (Alvesson & Sandberg, 2013), generated by the influence of the American-dominated school that privileges the use of such model and its methods (Chanlat, 2002) and leads to confusion among the epistemology of the human sciences with the epistemology of natural sciences at the moment of generating knowledge in management, ignoring the characteristics of the object of study (Bourdieu, Chamboredon, & Passeron, 1978). This does not allow the transfer of knowledge to organizations nor does it facilitate their managers to configure their action.

It is stated that the crisis of legitimacy of management is constituted by the lack of impact (Pettigrew, 2011), relevance or relevance-gap in some researches (Hodgkinson & Rousseau, 2009; Kieser & Leiner, 2009; Starkey & Madan, 2001), gap between academia and practice (Anderson, Ellwood, & Coleman, 2017; Nenonen, Brodie, Storbacka, & Peters, 2017; Wren, Buckley, & Michaelsen, 1994), lack of new ways of thinking (Aguinis, Boyd, Pierce, & Short, 2011; Alvesson & Sandberg, 2013; Bartunek & Rynes, 2014), economic crises which have led academy to reflect on management education (Birkinshaw, Lecuona, & Barwise, 2016; Romme et. al., 2015; Starkey, Hatchuel, & Tempest, 2009) and the social injustice of the social and economic systems to which managers and companies serve and reproduce (Adler et al., 2007; Walsh et. al., 2003). Other theorists propose evidence-based management as a solution to the relevance gap in management research (Rynes, Colbert, & O'Boyle, 2018).

The relevant theories that serve as lenses for the analysis of the problem presented in this paper are based on the proposed approach of the critical performativity (Spicer et. al., 2009) embedded in critical management studies (Adler et. al., 2007; Alvesson, Bridgman, & Willmott, 2011) particularly the contributions of critical theory (Scherer, 2011), the praxeology contemplated in the philosophical foundations of the administration (Bédard, 1995) and evidence-based management (Rynes et. al., 2018; Tranfield, Denyer, & Smart, 2003) by having the best available evidence from different sources to make action decisions. The approach taken is the analysis beyond instrumentalism, from the epistemology of human sciences in radical humanism, where the events are particular, historical and subjective considering the organizations where humans develop their teleological activity (Dilthey, 1949), denominate critical performativity (Spicer et. al., 2009) that considers that research should result in management having an

impact on administrative practices, but not necessarily in terms of a reduced rationality in a positivist way, as was stated by Habermas (Adorno et. al., 1973), neither in terms of efficiency, but in reflexive and critical terms (Alvesson, 1985) about the prevailing forms of domination in organizations, understanding the complexity of the organizational reality, revealing hidden undesirable situations in a way that can transform and generate happiness to human beings and society (Spicer et. al., 2009), in accordance with the goal of radical humanism.

Critical performativity is given by knowledge in management that is the result and motivation of human action with an object (Audet, 1986) and the legitimacy of knowledge in management is given by its scientific rigor, social relevance and the use that is given to an organization if it finds practical utility (Hatchuel, 2017; Whitley, 1984), or by a researcher if there is a possibility to expand their discipline (Ghosh, Troutt, Thornton, & Felix Offodile, 2010; Macintosh et. al., 2017). Bédard (1995) explains praxeology as what surrounds human practices and highlights epistemology as the criteria of validity to guide, axiology as social and cultural values that circumscribe choice and preferences, and ontology as founding principles forming what was called the philosophical rhombus.

But what is the praxeological approach to management? A conceptual tracing is elaborated in order to identify currents in which the evolution of the concept is located, without being purist when classifying since each author is not isolated from other currents of thought. The tracking, called cartography, is framed by elements of Chanlat and Seguin (1983) and Churchman (1971) considering knowledge production systems (SPC), as global operational modes of science and constitute the frontiers of cartography shown in Figure 1.

Figure 1. Cartography of Praxeology

Figure 1 shows the different "isms", currents or epistemological reference framing the phenomena, their meanings to interpret or conceive them: Positivism, Empiricism, Rationalism, Historicism and Constructivism. Each "ism" presented brings a new mesh to the theory of knowledge, thus separating one from the other and sometimes it is difficult to distinguish the schools, currents and movements that the novelty in some of them could be considered as a regrouping of old ideas according (Glaserfeld, 1984).

Figure 1 also shows the evolution of the notions of the different praxeological approaches and the definitions of praxeology framed in the different systems of knowledge production and their respective epistemological positions (paradigms, currents or frames of reference) in relation to the Sciences of Management (Chanlat & Seguin, 1983; Churchman, 1971). The colors of the circles are confluences of philosophical syncretism where the authors are located in some current according to their definitions but contain elements of another. For example, Espinas and Kotarbiński's praxeology is inductive/historical whilst Mises' is a priori/deductive (Martinet & Pesqueux, 2013). The arrows are influences, indicating how an author influences others to continue their position or discuss it (Glaserfeld, 1984). For example, Hume influences Kant (1855) to debate it and Husserl takes Kant back to construct his phenomenological method as a path between Rationalism and Glaserfeld Constructivism (1984).

According to Figure 1, the praxeological approach is where the phenomena is perceived by the subjects to design a logic for the action. The perceptions are supported by concepts so that the action is useful and can be used to generate good for all in the context in which it is developed. The meaning of a thought is understandable in its relationship to practice. If it does not have it, it lacks a sense of *phronesis* what is good for man, a practical evaluative rationality (Antonacopoulou, 2010).

If the result of motivation of human action with the object is the knowledge in management, then the epistemological basis is the human sciences (Dilthey, 1949) that is configured to understand social phenomena, as a "set of propositions, determined concepts, of constant and universal validity. We designate with the expression science, the spiritual facts with the indicated characteristics and that usually carries such a name" (p. 13). They are constituted in the sciences that have as its object, according to Dilthey, spiritual facts, the human being, society and its history with a fundamental basis in the natural sciences to help in its study since it is in the environment where it develops its teleological activity and a great part of it is shaped by nature. These facts are to be understood using procedures with historical-critical criteria, of a comprehensive nature, without excluding tools and explanatory methods of the epistemology of the natural sciences (1949).

3. Research Methodology

The epistemological reference framework (Lincoln, Lynham, & Guba, 2018), with which the phenomenon will be observed, is part of the "constructivism" that has a wide variety of schools with some shared beliefs (Avenier, 2010; Glaserfeld, 1984; Le Moigne, 1995). Avenier (2010) presents two constructivist paradigms, that of Lincoln et. al. (2018) and that of Glaserfeld (1984) that Le Moigne (1995) labeled as teleological constructivism. Avenier (2010) would call it pragmatic constructivist epistemological paradigm (PCEP) which starts from a knowledge hypothesis phenomenological where human experience is knowable and knowledge is seen as an intentional process of human actions. The PCEP in Avenier (2010) enables the generation of knowledge derived from a process of conceptual generalization (Avenier, 2010) based on an empirical review of the theses using a mixed method, sequential exploratory approach (Creswell, 2014). We will review, describe, compare and evaluate the praxeological approach of the theses, their categories, their components and their relationships, structuring a strategy that allows us to interpret the existing elements and evaluate the praxeological approach according to Bédard (1995) to establish guiding categories when comparing the phenomenon studied in a later documentary review to identify similarities or differences.

The categories can be composed of related items (observable in the theses); the items will be generated by the researcher or emerge during the observation process. Then, we will generate two rubrics of evaluation: one to evaluate praxeology in the academic field and another to evaluate it in the organizational field. The two instruments are made up of items that allow scaling what is characterized as observable categories. Then, we can identify the relationships between the categories through inductive reasoning (Avenier & Cajaiba, 2012). These categories are taken to be quantifiable variables in order to evaluate the praxeological approach in academic documents (Ghosh et. al. 2010). This does not imply a change in the approach proposed, since the instruments will be validated through expert review and focus groups to avoid the researcher's bias. The

work will be limited to doctoral theses in administration in Colombia over the last 9 years, considering that the first doctor in administration graduated in 2009.

4. Results

This is an ongoing investigation as part of the observation tool designed with the preliminary categories of analysis in Table 1 as guiding categories and research axes that will serve as a guide for the revision of theses is preliminarily counted, built according to the philosophical rhombus of Bédard (1995) and the observable aspects thereof in the theses.

Table 1. Guidance Categories and Preliminary Research Axes

Orienting categories	Observable aspects in theses
Praxeology	Title of the thesis
	Results of the investigation
	Conclusions
Epistemology	Methodological approach or epistemological paradigm
	Methodological tools
Axiology	Justification
Ontology	Objective of the investigation
	Object of study
	Work object
	Research question
	Problematic of the investigation and problem in concrete

It is revealed in the primary analysis of the theses that there is an important use of epistemology of Natural Sciences in the research. The current scope of the document is limited to the information that will be collected in the observation of the doctoral theses, so the results should be interpreted considering this restriction.

5. Discussion

Since this is an ongoing research, the discussion is presented in terms of the input that other studies have used; some have focused on measuring the gap considering only the academic environment (Aguinis, Shapiro, Antonacopoulou, & Cummings, 2014; Walsh et. al., 2003) whilst others consider the non-academic environment as important (Aguinis, Suárez-González, Lannelongue, & Joo, 2012; Ghosh et. al., 2010) with results that imply developments for the theory of what it is and how to measure the gap. These results lie on the empirical basis of number of citations, co-occurrence and correlation of topics for academics and practitioners. In the case of this proposal, the measurement according to Bédard (1995) will be made considering the ontological, epistemological, axiological and praxeological issues in the units of analysis (doctoral theses) as presented in a preliminary form in Table 1.

It is relevant to address this problem because, according to Hatchuel (2012) in the context of management research, when approaching its object of study, which is collective action in the organization, one must minimize the spaces of doubt that exist between practice and academia (Hodgkinson & Rousseau, 2009) and attempt to offer valid knowledge with appropriate technology transfer to practitioners. In the process of generating scientific knowledge in management, it is worth identifying to what extent what is proposed from the research, whether doctoral theses in administration, are generating useful practical results in organizations.

6. Conclusion

This proposal presents an approach to interpret the praxeological focus from the functionalist explanatory to the comprehensive with radical humanism considering the critical performativity in doctoral research in management where the traditional predominant scheme has been positivism. The development of knowledge should not forget its epistemological foundations; the world consists of a great variety of systems (physical, social, conceptual) and each of them has ontological characteristics that involve different epistemological pathways (Mingers, 2015). This study provides young researchers, through this research, a frame of reference that serves as a practical guide for conducting their research in such a way that they do not forget the relationship between ontology, epistemology, axiology and praxeology (Bédard, 1995) for each of the systems that Mingers expresses (2015) will allow us to take a critical position in order to avoid the confusion in which they are feeling between two forces: positioning positivist and reductive or constructivist where it is theorized excessively (Avenier & Gavard-Perret, 2012). It will also enable researchers to develop their research coherently, articulating the object of study with the methodology used and to generate scientific knowledge in management whilst maintaining the praxeological approach intertwined with the experiential and theoretical approaches.

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