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Two Paradigms in Management Epistemology

1. Introduction

Paper present dualistic vision of management epistemology. First perspective is based can be identified as “objective”, second one is “relativist”. The axis of epistemological division within management as well as within other social sciences can be the antagonism: “hard” orientation (neo-positivistic, systemic, and functional) versus “soft” orientation (humanistic, interpretative and hermeneutic). At the first glance it may seem that this categorisation is very simplified, stereotypical and inadequate in relation to the development of contemporary management. We think, however, that contrary to this reservation, this elementary division is a basic cognitive category accepted by specialists in management.

So far the development of management sciences has not given us any hope for epistemological monism. That is why the consequence of the deepening of contrasts and incoherence between the two antagonistic approaches can be the disintegration of the subject of management, leading to the perception of this science as a conglomerate of schools, which has no opportunity to create theoretical and methodological synthesis [Przybyła 2002, pp. 135–136].

2. Functional – systemic perspective

The first perspective is called “neo-positivistic”, “functional”, systemic” or “quantitative”. Its epistemological model is natural sciences. It is a combination of influence of neo-positivistic philosophy, systemic trend with functionalism in sociology and cultural anthropology. The heritage of the Vienna Circle includes the following assumptions: verification, knowledge cumulating, search for scientific method, division into dependent and independent variables, search for mathematical modelling and quantificational methodology. Verification

allows for constant assessment of epistemological value of given statements through empirical research of the subject matter. It gives the opportunity to obtain a unanimous answer what an organisation is and what corporate qualities are and how to manage successfully. Knowledge cumulating means the belief that organisation research creates lasting knowledge which consequently develops and continually makes progress. Scientists look for a relatively reliable “scientific method”, enabling to discover and evaluate valuable knowledge. The set of independent and dependent variables enables to build cause and effect relationships and feedback derived from physical sciences, perceived according to the Newtonian paradigm. Due to the necessity of creation of precise generalisations, methodology of quantified research is better valued i.e. rather quantitative than qualitative methods. In management there appeared attempts of modelling and mathematical generalisation, which are to lead to a coherent image of organisational sciences, expressed in a universal language of nature – mathematics (e.g. operational research, forecasting and simulations). A neo-positivistic image of management remains a kind of common sense vision of this discipline [Sułkowski 2004].

The other source of orientation is a functional approach in sociology and cultural anthropology. It is based on the assumption that the social whole maintains balance in the process of exchange among the elements of social order. Majority of organisation members serves to maintain this higher order of the social system. A “function” is the input of a partial activity into the activities of the whole. Functionalism in management leads to the separation of the set of complementary organisation functions, supporting the activity of this whole (e.g. planning, organisation, motivation, monitoring). The social system in a state of functional unity means harmonious, conflict-free co-operation of sub-systems [Radcliff-Brown 1952, pp. 192–193]. Functionalism leads to deterministic methodology, congruent with the neo-positivistic spirit, allowing understanding of patterning and repetitiveness of social process in an organisation [Merton 1982]. A good analogy is systemic approach which is used in many other sciences [Bertalanffy 1960].

Hence the third area of inspiration of the trend is a systemic conception which places an organisation on the complex level of social systems [Boulding 1956]. This interdisciplinary approach assumes structural integration of sub-systems within the greater whole and the emergence of system specific qualities on further levels of complexity¹. In this sense an organisation is a complex system undergoing limited steering which maintains balance in the processes of material and information flows with the environment. What connects systemic

¹ Similar approach within praxeological organisation theory: J. Zieleniewski, 1969. *Organizacja i Zarządzanie*. Warszawa: PWN.

conception with neo-positivism is the drive to science unity and the belief that one can build a unified scientific method based on general system theory. Then, the relation to functionalism concerns such ideas as systemic integration (functional) and homeostasis.

Functionalistic – systemic epistemology combining neo-positivism, functionalism and systemic school is oriented on the creation of integrated systems, verification of truth with the help of objective quantitative methods. The analytic approach is essential and assumes the possibility of generalisation and mathematical modelling of research results.

The trends directly related to economics are most deeply rooted in this perspective and they are connected with the beginning of management sciences [see: Martan 2002]. The connections to the economics are manifested most strongly in the attempts of directing management development on the path of “enterprise sciences” [Lichtarski (ed.) 1997, p. 10]. The main subject of interest of management would be an enterprise which is active on the market. It would be analysed in terms of economics, with the additional opportunity to use the methodology derived from other sciences [Gruszecki 2002, pp. 42–43]. Systemic and functional vision of an organisation is accompanied by the image of an resourceful man, close to the categories of *homo oeconomicus*. Quantitative methodology has a significant place in such sub-disciplines of management as managerial accounting, logistics management or information management.

Critics of the functional – systemic orientation in management point out that this vision is based on the natural sciences epistemology, derived from a mechanical paradigm which was exchanged by the theory of relativity paradigm or quantum mechanics [Wheatley 1999, pp. 10–11]. Functionalism is attacked because of the static organisation image and the lack of autonomy on the part of a social subject. In the enterprise sciences this is a vision of man deemed for hyper-rationality. However, in a real organisation conflicts, disintegration processes and activity in the imbalance conditions are more frequent than homeostatic harmony. The total vision of organisational order can omit elements of sense constitution happening on the level of behaviours and interactions. We can lose the interpretation of such processes as establishing and exercising authority and ownership, communication of individuals and groups, creating culture elements or giving meaning to the organisational reality.

2. Symbolic-interpretative perspective

A competitive cognitive approach in relation to the functional-systemic one can be described as “interpretative”, “symbolic” or “qualitative”. The main sources of inspiration are social and humanistic sciences, such as sociology, psychology, political sciences and cultural anthropology. Many ideas related to corporate culture, management, human resources management, management processes or managing changes are based on epistemological assumptions of

the symbolic – interpretative approach. We can quote the following examples: “establishment” theory by Weick, corporate culture conception by Smircich or “authority net” by Pfeffer and Salancik [Weick 1979; Smircich 1983, pp. 55–65; Pfeffer, Salancik 1978]. The basis of interpretative epistemology is the assumption about a constructional and conventional character of the social and organisational reality [Hatch 2002, p. 24, 56]. Organisational order does not exist objectively but is being continuously maintained, reconstructed and modified by individuals and groups acting in and around an organisation. An organisation and management processes are created by groups in institutional, legalisation and internalisation processes and they are contractual – they are a collective consensus [Berger, Luckmann 1966]. Economic interests act just as political, social and psychological influences. A man within an organisation searches for the sense, is value oriented and involved in a research situation. A cognitive act is entangled in a language and culturally relative, it is a symbolic activity. Research results are not objective, but can only be inter-subjectively communicated. One can observe focus on every-day categories covering a kind of hermeneutic circle in the shape of: perception, interpretation, definition, making and verifying hypotheses and finally acting (epistemology of ordinary day) [Suk-Young Chwe 2001, pp. 79–82; Deschamps 1996, pp. 220–221].

3. Comparison of two cognitive perspectives

The perspectives presented here create separate basic notions and ways of organisation and management research. An organisation can be seen as an authoritatively created system – an emanation of broader economic processes (globalisation, economics, sector) or as an upwards network of meanings and interactions (communication processes, conflicts and authority), Man in an organisation can be seen as an independent individual led only by rational, conscious motivation or as a social actor acting under the influence of different, rational and irrational factors. Effects of economic activity can be considered as a desire to maintain balance or capturing control by interest groups. Within those two perspectives preferred objectives and research methods are also different (Table 1).

Table 1. Comparison of two cognitive perspectives

Criteria	Functional-systemic perspective	Symbolic-interpretative perspective
Organisation constitution	A system is created by the market sector and economy.	The net of meanings created by communication, interaction and sense making processes in groups.
Man in organisation	<i>Homo oeconomicus</i> , individual interest, functional dependencies.	Organisation members enter into complex social inter-dependencies.
Nature of organisation	Economic, objectively given, can be known	Socially created, intra-subjective perception, known in a limited degree
Effect of economic activity	Tendency to maintain balance	Tendency to gain control, tensions caused by fight between conflicting interests
Research objectives	Generalisation, verifying, analysis, predicting and change programming.	Understanding, description, synthesis, changes stimulation.
Scientist's approach to researched reality	Objective, external perspective (outsider)	Participant in the researched phenomena and processes (insider)
Researcher's attitude to values	Search for objective knowledge, free of values	Consciousness entangled in values (axiological approach)
Preferred methodology	Predicates based on abstract notion systems	Descriptive and explanatory or understanding (hermeneutic)
Preferred method	Standardised methods, quantitative, structured	Non-standardised methods, qualitative, not structured

Source: author's own research with the help of R. Swedberg, 1990. *Economics and Sociology: Redefining their Boundaries: Conversations with Economists and Sociologists*. Princeton: Princeton University Press; W. Morawski, 2001. *Socjologia ekonomiczna. Problemy, teoria, empiria*. Warszawa: PWN, p. 33.

Adopting a dichotomic perspective, we can see that in the management sciences on the epistemology level there is a process of grouping of different schools which are situated in one of the ends of the described continuum. Thus for example in relation to the school strategy: planning, positional and resource-oriented one is based rather on the functional-systemic bases, while the evolutionary school is situated rather on the symbolic – interpretative end. The

concept of the research on the influence of the national culture on management is rooted in functionalism, and the understanding of the corporate culture as a net of meanings has an interpretative character. Similar divisions can be found in the area of exercising authority, conflict, corporate communication theories. Hidden and usually unconscious assumptions concerning the epistemological foundation of management affect the ideas and theories in this area. Manicheism in the cognitive field results in an epistemological split in the whole management theory.

4. Other cognitive approaches

We think that the dichotomy of the functional approach versus the imperative one is the cognitive core of management. However, many theoreticians perceive other lines of epistemological division.

The most obvious epistemological suggestion is the division based on the subject criterion. The differentiation of management processes resulted in the concentration on different areas of management processes, which demonstrate certain differences in the cognitive field. There appeared many management schools and trends leading to the “jungle” in the organisation [Koontz 1961] theory. The chronological approach assumes the criterion of continuity of management schools development. Bielski distinguishes 14 directions within three trends (classical, neo-classical, psycho – sociological and systemic) [Bielski 1996, p. 42]. The systemic approach is based on the distinguishing of organisational models leading to the subsystems differentiation, which may require a different epistemological perspective. For example an organisational model by Leavitt includes people, structure, tasks and technology management [Leavitt 1965, p. 160]. Looking at this from the pragmatic perspective, we can take into account differentiated methods of organisational research and change. In methodology we can distinguish several cognitive areas of an organisation (e.g. strategy, marketing, human resources, financial resources, information technologies) [Armstrong 1995]. Each criterion which we present here does differentiate a cognitive approach to an organisation. We believe, however, that they can be subjected to a more general epistemological scheme. Both the schools and the methods can be classified according to the key: either functional – systemic ones or symbolic – interpretative ones.

One of the most common approaches, suggested by Burrell and Morgan, determines four basic paradigms dominant not only in the management but generally in social sciences. The distinguishing criteria of those paradigms would be: social orientation (regulation and change) and cognitive assumptions (objective and subjective). Combining those dimensions, we can create four disproportional paradigms: functional, radical, structuralism, interpretative and radical humanism [Burrell, Morgan 1979] (Table 2).

Table 2. Paradigms in management according to Burrell and Morgan

Social orientation			Assumptions concerning science
Regulation	Radical change		
Functionalism	Radical structuralism	Objectivity	
Interpretative paradigm	Radical humanism	Subjectivity	

Sources: G. Burrell, G. Morgan, 1979. *Sociological paradigms and organisational analysis*, London: Heinemann.

This kind of division is clear on the grounds of sociology and anthropology, however its application in management sciences is very limited. One of the reasons for the tension between the functional approach and the interpretative one is the fact that management is interdisciplinary. However, it is very difficult to see in management an important role of radical structuralism or radical humanism. They only play a critical role in relation to the issues of inequality, domination and ideology within an organisation, but they do not create any alternative theories or epistemological perspectives. The examples of this type of approach are represented by psychoanalytical concepts by Copley, “organisational imperialism” by Chomsky, “symbolic violence” by Bourdieu, ideological visions of labour process by Braverman [Copley 1980; Chomsky 1999; Bourdieu 1998, pp. 52–59; Braverman 1974]. I think that a critical understanding of a radical change can be placed on the grounds of an interpretative perspective, thus maintaining epistemological dichotomy in management.

Morgan in his book *Organisational Images* presents a different approach to the management epistemology. The basis for the management understanding is adopting a certain organisational metaphor, which directs the activity of a participant or organisation member [Morgan 1997]. Eight metaphorical organisational images can be the basis for the pluralistic and manicheism - free management vision.

Bolman and Deal suggest four “cognitive frameworks” enabling multifaceted interpretation of organisational management processes. It covers the following approaches: structural, human resources management, political and symbolic [Bolman, Deal 2003]. The cognitive frameworks, similarly to organisational metaphors, are the approaches open to the creation of totally new interpretations.

It seems that both the metaphors proposed by Morgan and cognitive frameworks by Bolman and Deal can be placed within the dichotomy functionalism – interpretation, which is being analysed. Mechanistic and organic

metaphors by Morgan and a structural framework by Bolman and Deal can be placed on the grounds of the functionalistic perspective. Other approaches can be rather associated with an interpretative trend. Of course there is some degree of discrepancy between those three approaches.

Another proposition is the creation of a post-modernist perspective. The formation of the third cognitive perspective in the shape of a post-modern one raises many doubts [Hatch 2002, p. 14]. Hatch, perceiving incongruity of this trend, defines it once as a separated cognitive perspective, and then just as a critical thought, which questions both post-modern and interpretative approaches [Hatch, Schultz 1996]. Management theoreticians refer to radical cognitive relativism by Lyotard, Derrida or Rotry [Lyotard 1983; Bauman 1995; Kołakowski 1996] but at least so far it has not led to the development of a congruent epistemological perspective [see: Engholm 2001; Boje, Gephart Jr., Thatchenkery 1996; Welge, Holtbrugge 1999, pp. 305–322; Burrell, Cooper 1998, pp. 91–112]. Of course, we must recognise critical approaches to organisational theory, which refer to key motifs of some post-modernists, however we lack constructive offers for the theory development.

5. Conclusions

Functional – systemic approach dominates in contemporary management, however a symbolic – interpretative perspective gains more and more significance. So far it is hard to see the possibility of covering the gap between those two epistemological approaches. Other basic definitions concerning the nature of an organisation, environment, strategy, structure and corporate culture enforce those conflicts or at least the discrepancy between the analysed perspectives.

Pareto, and then Swedberg stressed that the field of economics is based on the assumption of the rationality of man and social groups, while the sociological dispute is based on the assumptions that people undertake many activities which are not motivated rationally [Swedberg 1990, p. 11]. Separation of those rational and irrational parts is a significant simplification, but in a great degree it overlaps with a suggested division of cognitive perspectives in management. The problem is that management sciences deal both with rationally and irrationally motivated managerial and organisational actions. People in organisations evaluate the usefulness of their actions, but they also strive for self-realisation, create social bonds and give meaning to their existence. Epistemological manicheism which may lead to the negation of the value of antagonistic perspective or it creates a kind of epistemological pluralism allowing the co-existence of the two ways of cognition. Pluralism enables to use the theory and methodology of varied disciplines. This pluralism often changes into methodological eclecticism, because the methods borrowed from different cognitive bring incomparable research results.

The dichotomy presented in this article is not the only possible way of ordering epistemology. However this approach is deeply rooted in the awareness of specialists from the area of management. Some perceive the scientist's role as that of a researcher for tangible, quantitative, "hard" results, while the others stay in the circle of qualitative results, interpretative and "soft" ones. The opportunity to exceed the manicheism of such perspective on management is the negation of apparent obviousness of their own vision of the organisational world, leading to the formation and interpretation of other cognitive positions. On this stage sciences of management need epistemological reflection which will lead to the development of the researchers' self-awareness.

Abstract

The dichotomy presented in this article is not the only possible way of ordering epistemology. However this approach is deeply rooted in the awareness of specialists from the area of management. Some perceive the scientist's role as that of a researcher for tangible, quantitative, "hard" results, while the others stay in the circle of qualitative results, interpretative and "soft" ones. The opportunity to exceed the manicheism of such perspective on management is the negation of apparent obviousness of their own vision of the organisational world, leading to the formation and interpretation of other cognitive positions. On this stage sciences of management need epistemological reflection which will lead to the development of the researchers' self-awareness.

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