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## PLURALISM IN STRUCTURING THE MANAGEMENT PROBLEM SITUATIONS \*

### Abstract

An increasing variety of methodologies, methods, techniques, and models can be considered as a methodological response to an increasing complexity, heterogeneity and turbulence of problem situations that managers must tackle in contemporary circumstances. Based on critical systems thinking, pluralism in systems thinking and practice tries to support creative dealing with the management problem situations from multiple perspectives of the key stakeholders and to facilitate the use of different methodologies in combination. In structuring the management problem situations in organizations, pluralism: a) must encourage flexibility in the use of the widest variety of methods, techniques, and models in any intervention; b) should encourage the combined use of different methodologies based upon alternative paradigms in the same intervention; c) must accept and manage a degree of paradigm incompatibility.

**Key words:** Management Problem Situations, Structuring the Problem Situations in Organizations, Pluralism of the Stakeholders' Viewpoints, Theoretical and Methodological Pluralism, Critical Systems Thinking and Practice

### INTRODUCTION

In the broadest sense, pluralism can be understood as a respect for different perceptions and interpretations of the management problems in organizations, as well as an appropriate combined employment of various methodologies, methods, techniques, and models in problem situation structuring and problem solving. Preliminarily defined in this way, plu-

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ralism indisputably represents a distinct problem domain, relevant in a theoretical, methodological, and practical sense.

The crucial reasons for a wide, well-founded way of dealing with pluralism in contemporary *Systems Science* and *Management Science* (MS) are numerous and various (Jackson 2000, 377-378). First of all, the old, orthodox approaches to systems thinking, organizational theory, classical operational research, etc have come under strong criticism, while - in a paradigmatic sense - the new perspectives are being opened. Opposing the totalizing discourses - they assert that only they get to the truths - and creating the conditions for an adequate relativism represent a particularly important support for the pluralism research as well. In addition to this, from the practitioners' points of view, it seems that pluralism is needed in contemporary organizations.

In systems thinking and systems practice, a significant breakthrough in dealing with pluralism has been made. First, the *Systems Movement* strengthened through the confrontations between different systems conceptualizations of the relevant problem areas (Rosenhead 2006, 759-765). At the same time, systems thinking showed an exceptional potential for informed and useful linkage between theory and practice. By employing the contributions of social sciences, the systems thinking strives to support a *variety of viewpoints* on a management problem situation under investigation which is to be understood and in which it is to be intervened. Furthermore, the systems thinking tries to creatively lead the interventions in organizations by the *combined use of methodologies* for problem situation structuring. Systems research makes efforts to foster pluralistic practice through careful thinking about the implications of pluralism on the theoretical level.

The provision of a flexibility in the employment of methods, techniques, models, the reassessment of the key dimensions of a paradigm diversity, and the consideration of theoretical, methodological and practical difficulties relating to the paradigm incommensurability are of a paramount importance in attempts to clarify the nature of pluralism and to specify the benefits that pluralism offers in practical use.

Since the issue of paradigm incommensurability takes the central position in pluralist management of problem situations, the future of pluralism in systems thinking and systems practice is directly determined by the way(s) in which theoretical pluralism can, i.e. should be validly handled. With reference to this, the following developments of pluralism are to be considered - pluralism as a meta-paradigm, pluralism as a new paradigm, pluralism as postmodernism, discordant pluralism, and pluralism as critical systems practice. Each of these proposals for pluralism formulating and operationalizing ought to be evaluated from the standpoint of the extent to which a particular proposal enables pluralism to achieve its full potential in structuring the management problem situations.

### THE NATURE OF PLURALISM

Taking account of the essential features of pluralism as the relevant strategy for the MS development,<sup>1</sup> as well as the key aspects of the interactive relationship between pluralism and critical systems thinking,<sup>2</sup> it is possible to develop the corresponding argumentation about the nature of pluralism. The subject under consideration refers to a further clarification of the meaning of pluralism, and, which is especially important from the practitioners' viewpoints, a further specification of benefits that pluralism can provide in practice (Jackson 1997, 366-369).

Determining the core of pluralism in the systems thinking and systems practice implies dealing with the following important questions:

- *what* may pluralism logically *tend to*,
- *what* should pluralism *avoid*,
- in which *way* is pluralism to *be formulated* and *operationalized* so that its full potential could be achieved?

Pluralism in the systems thinking and systems practice has to:

- a) allow the research into management problem situations in organizations *from multiple perspectives* and
- b) facilitate the use of diverse *methodologies in combination*.

In the contemporary circumstances, the management problems represent, as a rule, complex resultants of simultaneous actions of many different economic, organizational, technical, technological, sociological, psychological, cultural, political determinants. Therefore, management problems are characterized by great complexity, dynamics, interactivity, and multiple meanings. Creative tackling of these complex, changeable, interconnected, and multidimensional problem situations in organizations requires the employment of suitable methodological tools for their appropriate understanding and structuring (Petrović 2010, 275-280).

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<sup>1</sup> The *pluralist* vision implies a continual existence of a certain variety of flows within MS. The theoretical-methodological and practical developments will be mutually shaped. It is accepted that various approaches point out different relevant aspects of the complex and multi-meaning management problem under investigation. The strengths and weaknesses of the MS flows will be more completely realized, and the domain of the effective employment of each approach has to be determined particularly. The diversity of theories and methodologies available in MS is understood not as an announcement of a crisis in MS as a scientific discipline, but as a testimony of the increased competence and effectiveness in the variety of management problem situations (Schwaninger 2004, 411-431).

<sup>2</sup> The development of pluralism in systems thinking and systems practice is inseparable from the development of *critical* systems thinking. Hence an explanation of the nature of pluralism and a specification of the reasons for the usefulness of pluralism imply an understanding of the key commitments of critical systems thinking to *critical awareness*, *improvement* and *pluralism*, as well as the relationships between them (Jackson 2003, 302-305).

A *methodological response* to the extreme complexity, turbulence and heterogeneity of problem situations that managers (in the broadest sense) cope with today is a *multiplicity* of methodologies, methods, techniques, and models (Petrović 2009a, 47-57; Petrović 2009b, 145).

In the given context, an important question is raised (Petrović 2008, 77): How to – in problem situation structuring (and problem solving) – employ diverse methodologies, methods, techniques, models *in combination*, and yet to provide that their employment in this way is theoretically informed and practically useful? The answer to this – for the systems thinking and systems practice development – crucial question is coherent, critical pluralism, developed as a valid response to the multiplicity of methodologies, methods, techniques, models devised in *Systems Science* and *Management Science*. Thus, in pluralist thinking, supported by critical systems thinking, the focus is on enabling the best possible use of methodologies, methods, techniques, models. Their use in the way that increases the capability of researchers/managers to creatively handle the complex and diverse problem situations in organizations should result in a continual *improvement of the interventions* in the problem situations.

Pluralism in the systems thinking and systems practice is faced with the following *three* relevant interconnected *requirements* (Jackson 2000, 382-384):

- a) pluralism must encourage flexibility in the, theoretically informed, use of the widest variety of methods, techniques, models, tools in any intervention;
- b) methodologies pertaining to diverse paradigms should be employed in the same intervention;
- c) pluralism must accept and manage some degree of paradigm incompatibility.

#### *Flexibility in the use of methods, techniques, models*

First of all, pluralism is requested to *support flexibility* in the use of the widest variety of methods, techniques, models, and tools in any intervention. Systems practitioners are to be allowed the greatest possible freedom to tailor, within pluralism, their own use of methods and tools in accordance with:

- the complexities of the management problem situation under consideration, in which they try to intervene, and
- the crucial requirements of the situation as it changes throughout the intervention.

Therefore, pluralism implies a researcher who recognizes that methodologies can be decomposed, and that the connection between a traditionally basic methodology (i.e. the paradigm on which it is grounded) and the methods, techniques, tools usually attached to it does not have necessarily to be close. For example, a model of Systems Dy-

namics, usually associated with the *functionalist* systems approach to management, may be employed as a detailed cognitive map for the purposes of enhancing a debate within an *interpretive* systems conceptual framework (Mingers and Brocklesby 1997, 489-509).

However, in the use of a variety of methods, techniques, models in any intervention, it is vital to prevent the falling into *pragmatism*.<sup>3</sup> In other words, any theoretically and methodologically uncontrolled employment of various methods, techniques, models - that can be found in management consultancy, and suggested in postmodernist Pragmatic pluralism (White and Taket 1997, 379-405) - must not be allowed. In fact, only if the employment of methods and tools is under the control of the methodology which clearly serves to the one paradigm, can these methods and tools be tested, and the way of improvement of their efficiency in the intervention - managed by the paradigm in question - be revealed. Hence, a suitable epistemological control on the methodological level is needed in order to become aware of the real values and usefulness of the techniques and tools that can be employed in the intervention in the management problem situation. Only then can it be revealed on which conditions, for example, the models of Systems Dynamics - originally developed to be in a service of the *functionalist* systems methodology - can be usefully employed in the context of some *soft* systems methodology.

With respect to the above said, the methods, techniques, and models, originated to serve a systems methodology, may be regarded as candidates to support the functionalist, the interpretive, the emancipatory, the postmodernist paradigms, only if falling into pragmatism and imperialism<sup>4</sup> is prevented by a suitable, *theoretically* and *methodologically grounded control*.

#### *Paradigm diversity*

The second, crucial requirement posed to pluralism is that methodologies developed on the foundations of diverse paradigms are to be em-

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<sup>3</sup> As a strategy for a MS development, *pragmatism* has tried to put together the best elements of even opposite flows, according to the criterion of how successfully they have been employed in practice. The choice of methods and techniques, as well as the whole procedure, are viewed as justifiable according to the extent to which they produce results in practice. The attractiveness of this pragmatic option is evident among the proponents of traditional MS.

<sup>4</sup> The strategy of *imperialism* assumes that one of the MS approaches is superior and able to provide the adequate presuppositions for the MS development as a distinct scientific discipline. At the same time, there is a readiness to incorporate certain aspects of the other methodological flows on condition that they - in the terms of the favoured approach - may be beneficial and can strengthen it. Especially strong imperialist aspirations have been identified in *soft* systems thinking (*hard* systems thinking is often regarded as a special case of *soft* systems thinking (Checkland 1985, 757-767).

ployed in the same intervention, and different phases within the same intervention, so long as the valid reasons for the temporary relying on one paradigm, i.e. for the acceptance of some imperialist position arise. In fact, complexity, turbulence, and heterogeneity of the management problems in organizations aim systems practitioners at pluralism which stimulates the simultaneous employment of diverse methodologies based on the alternative paradigms. While doing so, researchers/managers should try to gain benefits from what each paradigm possesses and offers. Pluralism may provide its own greatest benefits only in the context of *paradigm diversity*.

The requirement in question posed to pluralism does not mean the rejection of the benefits resulting from the occasional use of only one methodology, which embodies a particular paradigm, and which is used to manage the employment of a variety of methods, techniques, tools. Such an approach should be followed prudently and should enable changes of the paradigm orientation. Unless the employment of one methodology, i.e. the paradigm, is supported by the appropriate *critical* considerations, which often happens in traditional Operational research, pluralism degenerates into imperialism. In other words, in this case, pluralism is deprived of:

- a *vitality*, which it derives from its ability to develop (and employ) diverse methodologies - founded on diverse paradigmatic assumptions - to their real potential, and
- a *flexibility*, which pluralism can gain from the use of the variety of methods and tools usually associated with each single methodology.

Therefore, in order to ensure the paradigm diversity, pursuant to the identified relevant inextricable link between pluralism and critical systems thinking, pluralism ought to provide a critical awareness of the connections between diverse methodologies and paradigms represented by these methodologies. It means that the understanding of the *theoretical* foundations of the systems methodologies is needed. If such theoretical underpinnings for the methodologies are neglected, suitable paradigm diversity cannot be guaranteed.

Strong disagreements about paying attention to the philosophical, i.e. theoretical foundations of the methodologies often rely on the insights into the work of consultants who combine methodologies and methods not dealing much with their theoretical sources (Ormerod 1997, 29-58; Ormerod 2001, 289-310). However, understanding the relevant relationships between methodologies and their theoretical foundations should enable the assumptions of diverse paradigms to be adequately operationalized, while the conclusions of these paradigms are tested within interventions in the real world. Accordingly, the realization that theoretically founded methodologies are essential to ensure a healthy connection between theory and practice in the *Systems Movement* is of vital importance to the paradigm diversity consideration.

It also emerges from critical systems thinking that the paradigm diversity may be protected if there is a suitable *social awareness*. Political, cultural, cognitive limitations may restrict the range of methodologies that can be employed, and, in this way, considerably reduce the strength of pluralism (Brocklesby 1997, 189-216). Critical systems thinking proposes that a particular support must be given pluralism in order to preserve its radical sharpness. As systems practitioners often work for the powerful clients, there will be a tendency for them to stick to the use of the methodologies backing up the *status quo*. Paradigm diversity requires that pluralism be assisted in overcoming this tendency. In other words, an appropriate attention should be paid to the development and employment of the alternative methodologies grounded on the radical paradigms - for example, on the radical humanistic or radical structuralist paradigm (Burrell and Morgan 1979).

For the paradigm diversity, it is important that the use of the methodologies based on the alternative paradigms, in many cases, will result in the contradictory understanding of the problem situation under investigation, i.e. in the contradictory recommendations for changes. Systems thinkers and practitioners need critical pluralism, especially in these circumstances.

#### *Paradigm incommensurability*

The third requirement posed to pluralism arises from the identified need for the paradigm diversity. Namely, pluralism has to accept and manage a certain degree of *incompatibility between paradigms* on the theoretical level. In other words, the particular sort of pluralism, needed by systems thinkers and practitioners, ought to admit that the problem of *paradigm incommensurability*<sup>5</sup> still exists on the theoretical level, and this problem simply can not be disregarded.

The conviction that the problem of paradigm incommensurability can be overcome by a reference to the meta-theory:

- for example, the preliminary *Total Systems Intervention*<sup>6</sup> reliance on the anthropologically grounded human interests (Flood and Jackson 1991, 45-60; Jackson 2006a, 647-657), or,

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<sup>5</sup> The *incommensurability of paradigms* could be figuratively presented in the following way: the groups of scientists relying on different paradigms see different things when they look from the same point in the same direction (Kuhn 1962, 149).

<sup>6</sup> The second version of *Total Systems Intervention* (Flood 1995) is still a meta-methodological proposal for the pluralism development based on: *creativity* (about the problem situation), *choice* (of methodologies/methods) and *implementation* (producing change proposals). This version of TSI especially encourages the practice of the *oblique* use of methods - the use of methods for purposes other than those they were originally designed for.

- for example, the *Multimethodology*<sup>7</sup> dependence on learning about the three 'worlds' (Mingers 1997b, 407-440; Mingers and Brocklesby 1997, 489-509; Mingers 2006, 217-240), can not be defended.

On the other hand, the paradigm incommensurability cannot be ignored in the way in which the proponents of pragmatism do it in *Management Science*.

The paradigms, which in the appropriate ways conceptually articulate the reality, are not *a la carte* menu from which researchers/managers could take the thing that satisfies them in a particular moment (Tsoukas 1993, 53-70). Therefore, the advocates of the pluralist strategy for the *Management Science* and *Systems Science* development have to acknowledge that a certain degree of paradigm incommensurability exists, and that they have to manage it.

#### *PERSPECTIVES ON THE PLURALISM DEVELOPMENT*

From the considerations presented above, it explicitly follows that the issue of paradigm incommensurability occupies the central position in the pluralist managing of problem situations. It further means that the future of pluralism within systems thinking and systems practice is directly determined by the way(s) in which theoretical pluralism may, i.e. is to be handled properly. With reference to the said, the following proposals, being of vital importance, can be pointed out (Jackson 2000, 385-392):

- Pluralism as a *meta-paradigm*
- Pluralism as a *new paradigm*
- Pluralism as *postmodernism*
- *Discordant* pluralism
- Pluralism as *critical systems practice*.

Each of these proposals for the pluralism formulating and operationalizing should be examined carefully so that the extent to which a particular proposal enables pluralism to reach its full potential can be evaluated.

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<sup>7</sup> *Multimethodology*, as a particular pluralist development in systems thinking and systems practice, tries to link parts of methodologies that may belong to diverse paradigms. There are three important dimensions of determining the Multimethodology context: the *real-world problem* under consideration, the available *theories and methodologies*, and the *agents* who make a choice and undertake an intervention in the management problem situation in order to improve it. The Multimethodology should be laid out in terms of two key features of the intervention: a) the *multidimensionality* of the problem situation under consideration - a *material*, a *social* and a *personal* 'world', and b) various *types of activities* that should be undertaken through four phases - *appreciation, analysis, assessment* and *action*.



*Pluralism as a meta-paradigm*

*Total Systems Intervention* (TSI), as a relevant, theoretical-methodological and practical development within critical systems thinking, relies preliminarily on the anthropologically based cognitive human interests (Habermas 1972). TSI tries to construct pluralism as an appropriate meta-paradigm, i.e. as an approach to operating '*above the paradigms*'. Diverse paradigms and their associated methodologies, methods, techniques, may be employed in accordance with the fact whether they serve to the technical, the practical or the emancipatory interest:

- giving a support to the *technical* interest in prediction and control, the *hard* systems approaches and the *cybernetic* systems approaches should help the improvement of material welfare,
- serving to the *practical* interest, the *soft* systems approaches should assist the refinement and broadening of *mutual understanding* between individuals and groups that take part in the management problem situations, while
- the *emancipatory* systems methodologies, through supporting the *emancipatory* human interest, should - by a critique and a denial of particular organizational arrangements - help the people *liberation*.

The greatest advantage of the pluralism understanding as a suitable meta-paradigm is a guarantee of *paradigm diversity*. Also, TSI improves pluralism during each of its three phases - creativity, choice, and implementation. Namely, TSI links pluralism in the creativity phase - a research into the management problem situation from diverse perspectives - with pluralism in the phases of choice and implementation - an appropriate managing the employment of the diverse methodologies in combination - one methodology as a '*dominant*' and the others as methodologies for '*support*'.

On the other hand, the main weakness of TSI, which makes it unsustainable, refers to the conviction that TSI remains '*above paradigms*', selecting the methodologies in accordance with a particular human interest to which they ought to serve. However, the diverse paradigms - relied on the diverse understanding of the reality, as well as built into the diverse systems methodologies - explicitly or implicitly provide the answers to the all human interests (Tsoukas 1993, 53-70).

Besides, the important problem is related to the assumption that there are inextricable connections between methodologies and methods, models, techniques, with which these methodologies are associated. This is what, undoubtedly, makes TSI *inflexible* to be employed, i.e. unable to appropriately respond to the crucial states of the management problems under consideration. In fact, the relationships between methodologies and their components (methods, models, techniques) are more conditional than TSI allows.

*Pluralism as a new paradigm*

The obvious difficulties of justifying the complementary employment of methodologies with contradictory paradigm foundations persuaded some systems thinkers to regard pluralism as a part of a new paradigm. Pursuant to this 'pluralism as a new paradigm' solution, the efforts have been made to generate a paradigm capable of building pluralism in itself. It is thought that the issue of paradigm incommensurability ought to be seriously embraced within debates about methodologies, as well as there are some bases for reckoning that the cross-research into paradigms is philosophically achievable (Mingers 1997a, 13-14).

An argumentation for 'pluralism as a new paradigm' is grounded, for example, in the corresponding understanding of critical systems thinking<sup>8</sup> (Midgley 1997, 249-290; Midgley 2000). Namely, in *Systemic Intervention*, as a particular version of methodological pluralism, i.e. a paradigm on its own, the meta-paradigmatic character of critical systems thinking is denied. At the same time, it is argued that critical systems thinking can establish the bases for a *new* paradigm. In order to develop this advanced form of 'imperialism', the critical systems thinking opportunities are being limited, while the emancipatory systems approach is being assigned a privileged status.

Overcoming the difficulties arising from a combination of the methodologies founded on diverse philosophical and sociological assumptions is a relevant strength of the pluralism as a new paradigm. On the other hand, a fundamental weakness of this approach to pluralism results from the fact that unless the new paradigm is accepted as being able to entail the divergent methodologies, then the power of the paradigm diversity is limited.

Taking into account the alternative paradigms, convincing arguments - which dispute a non-meta-paradigmatic understanding of critical systems thinking - can be made. Therefore, it can be stated that pluralism, on its own, due to the paradigm diversity protection, cannot be left to any single paradigm. In other words, one-paradigm pluralism is simply not pluralism.

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<sup>8</sup> As a theoretical, methodological and practical development within critical systems thinking, *Systemic Intervention* is based on the ideas of *process philosophy* and the *theory of boundary critique*. The resulting *methodology* is focused on: *critique* - reflection on, and choice between, boundaries of an analysis; *judgment* - judgment about which theories and methods can be most appropriate to the problem situation under consideration; and *action* - the implementation of methods to create - at least local - improvement in the management problem situation in question. In structuring the management problem situations, the *Creative design of methods* provides a strategy for selecting, designing and mixing methods during intervention in the management problem situations.

A special weakness of the pluralism as a new paradigm stems from the fact that, depending on the new paradigm embraced, pluralism may lose its relevant radical sharpness. If the paradigm, favoured to accept pluralism, does not pay enough attention to emancipatory practice, the opportunity for being radically sharp will be lost. On the other hand, when determining the pluralism as a new paradigm is connected to a radical paradigm, then this significant capacity will be preserved.

#### *Pluralism as postmodernism*

The third proposal for pluralism developing, labelled *Pragmatic pluralism* (White and Taket 1997, 379-405; Taket and White 2000), attempts to equate pluralism with postmodernism. This option is very appealing due to the fact that

- a) postmodernism relies on '*perspectivism*', i.e. on the conviction that the real world ought to be interpreted through diverse, alternative systems of concepts and beliefs, while, on the other hand,
- b) there is no criterion *independent of authority* which would determine that such a system is more valid than the others.

This *recognition of the diversity* and the *non-disregard of values* enable the corresponding ways of pluralism embracing to be generated.

Pragmatic pluralism calls for a reconceptualization of the idea about practice as well as a critical thinking about the relationship between theory and practice (White and Taket, 1997, 380-386). Theory itself has been set aside, while the accent has been put on dealing with theory as a means of impetus to operation and intervention, i.e. a means of critical thinking about practice. Therefore, the acceptance of the Pragmatic pluralism position implies abandoning the conceptualization of theory and practice as a dichotomy. That is the end of theory which provides abstract foundations for practice, but not the end of dealing with theory as an integral part of the process of critical thinking about practice.

The question of whether one method finds out more valid truths than the other has no sense for the advocates of Pragmatic pluralism (White and Taket 1997, 386-394). Since all methods reveal the truths, in one way or another, in the choice of a method, the essential concern is not whether this method discovers the truth (or not), but whether it is capable (or not) of giving a feeling of freedom and reinforcement to those who are included. Therefore, according to Pragmatic pluralism proponents, it is risky to conceive of any form of methodology as being inherently advanced or liberating. Only on the *local* level can it be decided whether the methodology achieves the results that can be comprehended as advanced or liberating. The appropriate guidelines, helpful in choice making, can be identified.

The main strength of the pluralism seen as postmodernism is *flexibility in the use of methods*, so that they can be in a close relationship with the management problem situation under consideration and the turn-arounds required by the intervention.

At the same time, this approach to pluralism is characterized by the weaknesses that by far exceed its strengths, and all of them are connected with pragmatism. Although the approach in question is labelled as *Pragmatic pluralism*, it really is not pluralism in the terms of the nature of pluralism (Jackson 2000, 385). The use of the methods, techniques, and tools without reference to the methodology and the paradigm endorsing their employment, means making impossible the *learning* about the effectiveness of these methods, techniques, and tools within the interventions managed by the paradigm in question. Besides, the eclectic use of the diverse methods without reference to the methodology, i.e. the paradigm, makes impossible the *paradigm diversity provision*. Any benefit of the strengths of diverse paradigms cannot be gained, because all methods and models may be used pursuant to the one implicit paradigm. Also, pluralism loses its own radical potential within pragmatism.

#### *Discordant pluralism*

In the *System of Systems Methodologies* (SoSM) (Jackson 2006a, 868-878; Jackson 2006b, 647-657)<sup>9</sup> and *Total Systems Intervention* (TSI), being pluralist developments within critical systems thinking, various methodologies are seen as 'coherent' (harmonized) in the sense that a meta-theory can be provided, which will make the involved methodologies complementary, while the differences between these methodologies are only important when these methodologies are aligned within the SoSM. In contrast to this, in *Discordant pluralism*, being a distinct understanding of methodological pluralism, the differences between paradigms, i.e. methodologies, should not be 'rationalized' by the use of a meta-theoretical structure. On the contrary, the 'discordance' of methodologies is to be preserved, and lessons - important for learning - should be drawn from it (Gregory 1996, 605-621).

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<sup>9</sup> The key step in the SoSM constructing is to connect the existing systems-based approaches to management with the ideal-type problem contexts:

- *hard* systems thinking (traditional Operational Research, Systems Analysis, Systems Engineering) is appropriate to the problems located in relatively simple-unitary problem context, because it is supposed that it is easy to set the objectives of the system under consideration, and possible to model it mathematically;
- Systems Dynamics, Organizational Cybernetics, Theory and Methodology of Complexity are attached to the complex-unitary problem context since they are essentially focused on the problem situations comprehending them as extremely complex systems;
- the various *soft* systems approaches (Strategic Assumptions Surfacing and Testing, Soft Systems Methodology, Interactive Planning) are identified with simple-pluralist and complex-pluralist problem contexts;
- Critical Systems Heuristics, Team Syntegrity, and some more recent post-modernistic methodological developments correspond to the coercive problem contexts.

The explanation of this special proposal for pluralism developing relies on the *constellation* metaphor. In fact, a constellation of methodologies, like a constellation of stars in the sky, is not arranged in a regular way, it changes over time, and can be understood from different standpoints. Each researcher can develop his/her own constellation of methodologies in the discussion with others, who, analogically, have their own constellations. There are no attempts to determine the theoretical unity for a particular constellation of methodologies once and for all. Instead, one tries to reveal some arranging regularities at a particular moment, which are visible due to the temporary domination of the theoretical perspective.

Therefore, it might seem that Discordant pluralism does not differ from atheoretical pragmatism in which researchers select and combine methods, techniques from diverse methodologies without any particular theoretical thinking. However, the *Theory of Critical Appreciation* is of paramount importance for Discordant pluralism. According to this theory, there are four pertinent dimensions of critical research practice:

- *empirical-analytical* - founded on experiment and observation,
- *historical-hermeneutic* - deals with two ways of communication with others,
- *self-reflection* - surfacing the individual's assumptions, and
- *ideology-critique* - discovering the assumptions on the level of society.

All four aspects have to be built into a critical research. The relationships between them are of a great importance, taking into account that it is possible to move from one aspect, any one, to the remaining aspects. Since the existing methodologies are not aligned according to the four dimensions in question, the trap of falling into a meta-arranging is avoided. A researcher is allowed to, in a debate with others, develop specific methodological expressions of the Theory of Critical Appreciation.

The practice of combining the methods is at the centre of Discordant pluralism. Various methods are combined so that empirical-analytical study, historical-hermeneutic research, self-reflection, and ideology-critique may be included. There is no special method capable of offering an adequate support for all four aspects of a critical research process. Researchers are requested to design their own constellations of methods and methodologies by means of observation, communication with others, self-reflection and critical discussions about society.

Discordant pluralism should permit the discordant theoretical approaches both to deny and supplement each other (Gregory 1996, 621). Therefore, it seems that this approach to pluralism, as a part of critical systems thinking, can be of benefit to systems theorists and practitioners.

#### *Pluralism as Critical Systems Practice*

*Critical Systems Practice*, as a distinct proposal for pluralism developing, is founded on the contemporary critical systems thinking and the coherent pluralism guidelines (Jackson 2000, 389-392; Jackson

2006a, 868-878; Jackson 2010, 133-139). Within determining the ways in which Critical Systems Practice ought to be formulated and operationalized, there are three relevant levels of consideration:

- the level of *methods, models and techniques*,
- the level of *methodologies*, and
- the level of a *meta-methodology*.

A broad variety of *methods, models, and techniques* from different sources should be available in order to maintain a needed flexibility on the level of such tools, which - in an appropriate combination - should be employed in each intervention, i.e. each stage of the intervention in the management problem situation. Methodologies can and ought to be decomposed if it is thought to be suitable. Systems practitioners are to be allowed all the possible freedom in tailoring their own use of methods, models, and techniques with respect to the features of the management problem situation in which they try to intervene and the requirements of the situation as it changes. However, it must be enabled in any instant of the intervention not only thinking about the paradigm to which the employed tools should serve but adjusting to it. So, the employed methods, models, and techniques are to be linked with the methodology and the paradigm they serve. The preservation of the connection between the methodology concept and the use of methods, models, techniques allows researchers/managers to learn about the employed tools whose efficiency and effectiveness, while serving special paradigms, may be tested over time.

The freedom in the use of a variety of methods, models, and techniques can make Critical systems practice more attractive to practitioners. They are to decide whether they want to learn more about methods, models, techniques through thinking about their connections with methodologies, or about methodologies through thinking about their connections with theory.

The principles of the use of diverse methods, models, techniques are provided on the *level of methodologies*. Methodologies are requested to reliably reflect diverse paradigms and expect to - in service of pluralism - make available the benefits inherent in the corresponding diversity of paradigmatic viewpoints. If the theoretical connections between methodologies and paradigms are made explicit, it is possible to protect the requested paradigm diversity and ensure that the emancipatory dimensions of the management problems not to be neglected. In this way, a better operationalization of the paradigms assumptions, as well as a testing the conclusions of the paradigms in interventions are also enabled.

Methodologies can be employed in intervention leading and thinking about changes in managerial decision-making. In that case, the attention must be paid to the specification of the nature of methodologies that represent the functionalist, the interpretive, the emancipatory or the postmodernistic paradigm, which all affect the critical systems practice. It is also necessary to explore whether the other paradigmatic positions may be useful, consider the ways in which the diverse methodologies serve on

each paradigm, and evaluate the efficiency of methodologies in the implementation of the proposals of diverse paradigms into practice.

In order to entail complexity, turbulence, heterogeneity of the management problems throughout the intervention, Critical systems practice - on the *meta-methodological level* - calls for a particular kind of meta-methodology that:

- induces and protects paradigm diversity and
- handles the relevant relationships between methodologies based on alternative paradigms (Jackson 2006b, 647-657).

*Meta-methodology* must recognize that paradigms are incompatible and that they cannot be integrated without considerable losses. Meta-methodology must manage the paradigms not aiming at a meta-paradigmatic status, but encouraging the critique addressed between paradigms. While doing so, none of paradigms is allowed to avoid re-examination, because each paradigm is continually facing with the alternative rationalities offered by the other paradigms.

The idea about the '*dominant*' methodology and '*dependent*' methodologies is of a great importance to the Critical systems practice operationalization. In fact, it is argued that the difficulties concerning the meta-paradigmatic practice could be overcome by means of a suitable choice of a '*dominant*' methodology as well as corresponding '*dependent*' methodologies reflecting the alternative paradigms. The relationship between the dominant and dependent methodologies can be changed during the intervention, so that the flexibility on the methodological level and the level of methods, models, techniques can be maintained.

This idea is considered to be powerful since it allows for the intervention in management problem situations to be carried out in a theoretically informed way, with the paradigm diversity protection and less confusion for participants. However, the essential issues are left open, particularly those concerning the initial choice of the dominant methodology and the influence of changes in the methodologies status when the intervention has already started.

### *CONCLUSION*

In accordance with the efforts made to embrace holistically the *different perceptions and interpretations* of the management problems in organizations, as well as to enable a suitably *combined employment of the diverse methodologies, methods, models, techniques* in problem situation structuring and problem solving, it can be concluded that critical pluralism in managing the problem situations in organizations represents a complex research area, relevant in the theoretical, methodological and practical terms.

The main proposals for pluralism formulating and operationalizing have been developed taking into account the significant dimensions of the relationship between pluralism and the critical systems thinking commit-

ments to critique, improvement and pluralism, as well as the clarified key requirements posed to pluralism to bring about the maximum benefits in systems thinking and systems practice.

Creative structuring of the management of problem situations in organizations implies a suitable *meta-methodology* that protects the paradigm diversity and validly handles the relationships between diverse paradigms. Accepting the assertion that diverse paradigms are founded on diverse ontological and epistemological assumptions, due to which they cannot be integrated without some losses, the meta-methodology strives to manage the paradigms, not trying to gain a meta-paradigm status, and not aligning the paradigms (and their methodologies) to the tasks, but mediating between them.

Accordingly, as a coherent systems approach to creative management of complex, dynamic, multi-meaning problem situations in organizations, the critical systems understanding and practice of pluralism:

- a) call for an appropriate meta-methodology to be employed, in order to gain the benefits of the use of *diverse methodologies* relying on alternative paradigms, as well as
- b) encourage a theoretically and methodologically founded combined employment of *various methods, models, and techniques*, so that flexibility in the intervention would be ensured.

The strengths and weaknesses of the key proposals for pluralism have been examined and verified in many different Case-Studies (Jackson 2000; Jackson 2006a, 868-878; Mingers 2006; Midgley 2000; Gregory 1996, 605-621; Taket and White, 2000; Ormerod 2001, 289-310; etc.).

For the pluralism advancement in systems thinking and systems practice, of great importance are also the experiences in pluralism developing in other disciplines, especially in organizational theory (the main focus being on the use of various methods in combination in order to improve the understanding of organizational phenomena), Operational research (different kinds of combinations of *soft* methods of Operational research, as a rule, managed by an interpretative paradigm), information systems (complementarism in the use of methodologies), and management consultancy (the efforts of management consultants with academic experience to strengthen the pluralist consulting practice by pointing out the relevance of theoretical underpinnings).

## REFERENCES

- Brocklesby, John. 1997. Becoming Multimethodology Literate: an Assessment of the Cognitive Difficulties of Working Across Paradigms. In *Multimethodology - The Theory and Practice of Combining Management Science Methodologies*, edited by John Mingers and Anthony Gill, 189-216. Chichester: John Wiley and Sons.
- Burrell, Gibson and Gareth Morgan. 1979. *Sociological Paradigms and Organizational Analysis*. London: Heinemann.



- Checkland, Peter B. 1985. From optimizing to learning: a development of systems thinking for the 1990s. *Journal of the Operational Research Society* 36(9): 757-767.
- Flood, Robert L. and Michael C. Jackson. 1991. *Creative Problem Solving - Total Systems Intervention*. Chichester: John Wiley and Sons.
- Flood, Robert L. 1995. *Solving Problem Solving - A Potent Force for Effective Management*. Chichester: Wiley.
- Gregory, Wendy J. 1996. Discordant pluralism: a new strategy for critical systems thinking? *Systems Practice* (9): 605-621.
- Habermas, Jurgen. 1972. *Knowledge and Human Interests*. London: Heinemann.
- Jackson, Michael C. 1997. Pluralism in Systems Thinking and Practice. In *Multimethodology - The Theory and Practice of Combining Management Science Methodologies*, edited by John Mingers and Anthony Gill, 347-378. Chichester: John Wiley and Sons.
- Jackson, Michael C. 2000. *Systems Approaches to Management*. New York: Kluwer/Plenum.
- Jackson, Michael C. 2003. *Systems Thinking: Creative Holism for Managers*. Chichester: John Wiley and Sons.
- Jackson, Michael C. 2006a. Creative Holism: A Critical Systems Approach to Complex Problem Situations. *Systems Research and Behavioral Science* 23(5): 647-657.
- Jackson, Michael C. 2006b. Beyond problem structuring methods: reinventing the future of OR/MS. *Journal of the Operational Research Society* (57): 868-878.
- Jackson, Michael C. 2010. Reflections on the Development and Contribution of Critical Systems Thinking and Practice. *Systems Research and Behavioral Science* (27): 133-139.
- Kuhn, Thomas S. 1962. *The Structure of Scientific Revolutions*. Chicago: The University of Chicago Press.
- Midgley, Gerald. 1997. Mixing Methods: Developing Systemic Intervention. In *Multimethodology - The Theory and Practice of Combining Management Science Methodologies*, edited by John Mingers and Anthony Gill, 249-290. Chichester: John Wiley and Sons.
- Midgley, Gerald. 2000. *Systemic Intervention: Philosophy, Methodology and Practice*. New York: Kluwer/Plenum.
- Mingers, John. 1997a. Multi-paradigm Multimethodology. In *Multimethodology - The Theory and Practice of Combining Management Science Methodologies*, edited by John Mingers and Anthony Gill, 1-20. Chichester: John Wiley and Sons.
- Mingers, John. 1997b. Towards Critical Pluralism. In *Multimethodology - The Theory and Practice of Combining Management Science Methodologies*, edited by John Mingers and Anthony Gill, 407-440. Chichester: John Wiley and Sons.
- Mingers, John. 2006. *Realising Systems Thinking - Knowledge and Action in Management Science*. New York: Springer.
- Mingers, John C. and John Brocklesby. 1997. Multimethodology: towards a framework for mixing methodologies. *Omega* 25(5): 489-509.
- Ormerod, Richard J. 1997. Mixing Methods in Practice: a Transformation-Competence Perspective. In *Multimethodology - The Theory and Practice of Combining Management Science Methodologies*, edited by John Mingers and Anthony Gill, 29-58. Chichester: John Wiley and Sons.
- Ormerod, Richard J. 2001. Mixing Methods in Practice. In *Rational Analysis for a Problematic World Revisited: Problem Structuring Methods for Complexity, Uncertainty and Conflict*, edited by Jonathan Rosenhead and John Mingers, 289-310. Chichester: Wiley.
- Petrović, Slavica P. 2008. Coherent Pluralism in Managing Problem Situations. *The Book of Abstracts of The 18th Triennial Conference of the International Fed-*

- eration of Operational Research Societies, IFORS 2008. Sandton, Johannesburg, South Africa, July 13-18. p. 77.
- Petrović, Slavica P. 2009a. Pluralism in Creative Organizational Development Management. *Management* (51): 47-57.
- Petrović, Slavica P. 2009b. Triple Loop Learning - A Complementarist Systems Approach to Management. *The Book of Abstracts of The 23rd European Conference of Operational Research, EURO 2009*. Bonn, Germany, July 5-8. p. 145.
- Petrović, Slavica P. 2010. *Sistemsko mišljenje, Sistemske metodologije*. Ekonomski fakultet Univerziteta u Kragujevcu, Kragujevac.
- Rosenhead, Jonathan. 2006. Past, present and future of problem structuring methods. *Journal of the Operational Research Society* (57): 759-765.
- Schwaninger, Markus. 2004. Methodologies in Conflict: Achieving Synergies between System Dynamics and Organizational Cybernetics. *Systems Research and Behavioral Science* 21(4): 411-431.
- Taket, Ann R. and Leroy A. White. 2000. *Partnership and Participation: Decision-Making in the Multiagency Setting*. Chichester: Wiley.
- Tsoukas, Haridimos. 1993. The road to emancipation is through organizational development: a critical evaluation of Total Systems Intervention. *Systems Practice* (6): 53-70.
- White, Leroy and Ann Taket. 1997. Critiquing Multimethodology as Metamethodology: Working Towards Pragmatic Pluralism. In *Multimethodology - The Theory and Practice of Combining Management Science Methodologies*, edited by John Mingers and Anthony Gill, 379-405. Chichester: John Wiley and Sons.

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## **PLURALIZAM U STRUKTURIRANJU UPRAVLJAČKIH PROBLEMSKIH SITUACIJA**

### **Apstrakt**

Rastuća varijetetnost metodologija, metoda, tehnika, modela može biti shvaćena kao metodološki odziv na rastuću kompleksnost, heterogenost i turbulentnost problemskih situacija sa kojima se u savremenim okolnostima moraju baviti menadžeri. Zasnovan na kritičkom sistemskom mišljenju, pluralizam u sistemskom mišljenju i praksi nastoji da pruži podršku kreativnom upravljanju problemskim situacijama iz višestrukih perspektiva ključnih stakeholder-a organizacija i da olakša kombinovano korišćenje različitih metodologija. U strukturiranju upravljačkih problemskih situacija u organizacijama, pluralizam: a) mora da ohrabri fleksibilnost u korišćenju najšire varijetetnosti metoda, tehnika, modela u bilo kojoj intervenciji, b) trebalo bi da podstakne kombinovano korišćenje različitih metodologija zasnovanih na alternativnim paradigmatama u istoj intervenciji, i v) mora da prihvati i upravlja izvesnim stepenom paradigmatске inkopatibilnosti.

**Ključne reči:** upravljačke problemske situacije, strukturiranje problemskih situacija u organizacijama, pluralizam stanovišta stakeholder-a, teorijski i metodološki pluralizam, kritičko sistemsko mišljenje i praksa