THEORETICAL AND METHODOLOGICAL ADVANCES TOWARDS AN
EPISTEMIC COMPETENCY OF DECISION-MAKERS

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Abstract: The study proposes a paradigmatic approach of a social necessity that emerges in the process of managing organizations: the formation of a decision-maker’s epistemic competence. The project implies that managers at any level of organizational hierarchy would be able to update their information processing capacity by assimilating a set of basic, but relevant metacognitive and epistemological principles. Starting from Lucian Culda’s processual-organic theory of social existence, the author provides a transdisciplinary theoretical framework and some basic methodological guidance for managers willing to participate in such an undertaking.

Keywords: Paradigmatic science, processual-organic theory, epistemic competence.

1 INTRODUCTION

The problem of the correlation between theory and praxis is one that preoccupies and intrigues specialists from most sciences, and the field of organizational analysis is no exception. In general, the task of converting fundamental knowledge into useful information for the organization is usually left to specialists who advise the top decision-makers. Thus, starting from the acquired knowledge, the highest levels of decision initiate certain policies or procedures to be followed by lower levels of conception or execution.

The optics proposed by the present study is different and ought to be considered at least complementary to the strategies described above. The epistemic competence of managers implies a highly decentralized approach of the issues in question in the sense of recognizing that people, regardless of their hierarchical status, make decisions that affect the organization that incorporates them and, that it is desirable, that these decisions be as favourable as possible both for them and for the organization. In a certain respect, the study enlists itself in the research that tries to overpass the now most advocated truism, i.e. knowledge is crucial for the organization, in the hope of providing some kind of theoretical and methodological framework that would be truly useful for the practitioner.

In essence, the envisaged competence can be a useful tool that would allow decision-makers to update their information processing capacity by connecting to the results of scientific knowledge, via assimilating a set of basic, but relevant metacognitive and epistemological principles.

2 THEORETICAL FRAMEWORK FOR INVESTIGATING THE TOPIC

The concept of the research derives from Thomas Kuhn’s interpretation of sciences’ nature and dynamics, and of the epistemological developments realized by L. Culda. Hence, we first considered the concept of paradigm and second, the difference between the pre-paradigmatic stage and the paradigmatic stage in the evolution of science.

T. Kuhn has gained the credit for drawing the attention on the theoretical models and methodological notions specific to scientific disciplines and on their evolution, starting from the pre-paradigm stage to the paradigm one. Concerning the latter, Kuhn states the following: "Before it (the transition from the pre- to the post-paradigm period in the development of a scientific field) occurs, a number of schools compete for the domination of a given field. Afterward, in the wake of some notable scientific achievement, the number of schools is greatly reduced, ordinarily to one, and a more efficient mode of scientific practice begins [1].”

In Lucian Culda’s perspective, the paradigm is a theoretical and methodological framework able to model globally, unitarily and satisfactorily a certain field of study [2]. Being inside the cone of explanatory possibilities risen by the before mentioned interpretations, we avoided disparate and reductionist approaches on the competence topic, in general, and on epistemic competence, in particular.

Thus, we were not interested in listing definitions and perhaps realizing a synthesis on them, but rather we are interested in identifying “horizons of information processing”, which should deal with or even just allow the dealing with the issue of epistemic competence in a pertinent manner. Our beliefs are apparently the opposite of the ones adopted by most social science researchers, well expressed by W.B. Gallie’s expression, “we must agree to disagree” [3], in hope that the consequence of the conceptual disputes will be an acceptance-synthesis, satisfactory for everyone.

Nevertheless, the attitude that we promoted is desired to be a middle means of epistemology (a Tao of epistemology), an acknowledgement of the inductive and deductive methods’ necessity to coexist in the scientific-type investment. Field investigations, empiric studies and observations have a role and a purpose under the condition that these must be conducted by a well defined
theoretical framework. But the latter might also undergo shape changes, even confutations from the empiric; therefore, the theoretic/empiric relation can only be one of a complementary nature.

A paradigmatic approach ought to track the problem of forming certain competences in a larger field of study concerning the explanation of the human being in all determinations that exercise influences on his becoming. In this manner we have reached an extremely severe but fully sustainable conclusion: as long as it treats the human being starting from reductionist snapshots of its existence, sciences like psychology, sociology, anthropology, etc. are useful to us only if they provide guidelines compatible with the paradigmatic framework on which we chose to locate the research.

In what regards our research, we had two options of theoretical explanations able to globally, unitarily and satisfactorily model the issue of epistemic competence: the General Theory of Systems and the Processual-Organic Interpretation of the Human’s Social Existence. Our option was for the second theoretical construction due to the fact that the Theory of Systems offers excellent methodological analysis guidelines, but it does not provide an adequate ontological framework. Regarding the latter aspect, the theory of systems, even by considering the two types of analysis – structural and functional – faces serious difficulties in the modelling of the investigated fields.

Our option is the processual-organic paradigm. Below we will briefly mention the fundamental theses for this approach:

- Existence is info-energy. Information organizes energy and the latter serves as information support. The acknowledgement of this fact determines a centring of the investigations on informational processes.
- Humans are interpreted as information processors, as a product and expression of two types of processors: bio-processors and interpreters.
- Bio-processors are information processors that constitute the biotic dimension of the human being. Due to the fact that they direct towards relative balance states, bio-processors are complexities.
- Homo-interpreters are information processors that are created from the bio-processors’ development (probably in the neocortex), from which they take over signals that are introduced in other types of processing. This is composed of the attribution of meanings to biotic-type signals, their introducing in a processing that uses more complex criteria and rules than the ones specific to bio-processors. Due to the fact that the meanings operated by interpreters have an extraordinary plasticity, we can state that the interpreters are processualities, existences with the capacity to reconstruct themselves.

- Socio-interpreters are networks of homo-interpreters who transcend the possibilities of the latter. Socio-interpreters are those who maintain social organizations (organization, families, markets, etc.) and who exercise a determining influence on homo-interpreters, especially through the socialization process. What we often call “knowledge” is, in the new interpretation, considered as a socio-interpreters’ network with cognitive finalities.

- The inherent boundaries of the human being condition lack it in the beginning to have access to accurate interpretations on their space-temporality. However, the people’s processors have the capacity to gradually approach the “good interpretation” of existence. The mentioned process takes place during several millenniums, especially as a consequence to the awareness of own proceedings.

- In a first stage, “more good interpretations” are reasonable to exist in all fields. As consequence of this fact’s acknowledgement, but also of certain adjustment necessities derived from praxis, interrogative interpreters, specialized in the assessment of interpreted products are constituted in phylogenesis. Epistemologies are networks of interrogative socio-interpreters.

- The recognition of the processual-like character of knowledge validates the thesis of “scientific revolutions” set out by T. Kuhn and draws attention on the possibility of the coexistence of several competing interpretations of the same subject, with non-equivalent praxiological opportunities.

- Within the processual-organic paradigm, existence is globally and unitarily modelled. Humans become humans in socio-organizations and socio-organizations are modelled in their complex relations. Also, the relations with abiotic beings ought not to be neglected. Any approach not modelling the “whole” can not be of any other kind than reductionist.

- The need to consider successive remodelling processes specific to social existence, urges the explanatory studies to include at least four dimensions: appropriate ontological interpretations, a historiographical analysis considering the past states that characterize the becoming of subject, an futurology exploration focusing on the possibilities of the subject’s development and, setting forth the conclusions emerged from the first three types of
investigation, praxiological analyses, trying to update the identified positive possible developments.

3 THE NECESSITY TO DEVELOP THE EPISTEMIC COMPETENCE IN ORGANIZATIONS

In his work, *The Turning Point*, F. Capra explores the “perverse” consequences of locating mankind in an out-of-date information processing horizon (mechanism). The latter, by means of its premises, can produce severe effects that place humans in dramatic situations. Although the mechanism’s criticism was not a revolutionary approach, Capra introduces a note of realism in his analysis, by pointing the adverse effects of a paradigm which apparently is designated only for scientists but, in essence, is often implicit in the management of areas particularly important for the human species (e.g. economy, medicine, psychology etc.).

In the attempt to explain the *de facto* state of mankind at the beginning of the 21st century, Capra states that: “...most academics subscribe to narrow perceptions of reality which are inadequate for dealing with the major problems of our time. These problems, as we shall see in detail, are systemic problems, which means that they are closely interconnected and interdependent. They cannot be understood within the fragmented methodology characteristic of our academic disciplines and government agencies. Such an approach will never resolve any of our difficulties but will merely shift them around in the complex web of social and ecological relations...” [4]

Actually, F. Capra’s message is just a pleading for giving up on the causal, mechanism-type manner of information processing in the favour of the systemic interpretation horizon, a very convincing approach as it comes out of the sphere of abstract by exemplifying and thus enforcing the validity of the approach as it comes out of the sphere of abstract by systemic interpretation horizon, a very convincing approach, Capra introduces a note of realism in his analysis, by pointing the adverse effects of a paradigm which apparently is designated only for scientists but, in essence, is often implicit in the management of areas particularly important for the human species (e.g. economy, medicine, psychology etc.).

We interpret our study as being one that creates “a step forward” in the effort of certain thinkers, such as R. Boudon [5], F. Capra [6] or L. Culda [7], to improve the social processing capacities. The novelty of our approach consists in the following two aspects.

The analyses of the listed authors address scientists. R. Boudon sticks to analyses conducted in the field of sociology and shows that interactionist schemes have higher explanatory possibilities. F. Capra, through interviews with experts conducting research at the borders of certain disciplines such as Economics, Physics, Psychology or Psychiatry, composes a systemic global and unitary framework for the interpretation of existence, able to become a paradigm for the query of existence. L. Culda approaches the matter similarly, but the epistemic competence’s “germs” exist only in the premises adopted by him.

The epistemic competence, as one expects from this approach, addresses not only philosophers or scientists, but also decision makers of organizations and, extrapolating, all the people who are put in a position to explain situations, objects, phenomena, problematic processes. Decision makers’ epistemic competence is not a way to streamline a decision, but rather a capacity of people to inform their own actions with the best guidelines offered by scientific knowledge. This broadening of the beneficiaries’ epistemic competence is determined by the acknowledgement of the necessity to actively and constructively involve people in the social organizations they belong to.

The epistemic competence allows the overcoming of the static nature views, such as “X Theory is the ultimate interpretation of Y object study”. In our opinion, such an assertion is highly unsustainable. The subscription to the Kantian distinction between the *object-in-itself* and the *object-for-us* and the recognition of the process-like nature of “knowledge” requires the adaptation of such a position.

Next, we highlight the terms of the decentralization of knowledge within organizations, as expected, in terms of our research.

The processual paradigm revealed the centrality of individuals in the accomplishment of the social needs which the organizations undertake; this is due to the fact that they are the key in the functioning of organizations.

Gradually, especially in the economic field, one has recognized the need to use the creative potential of individuals, in order to improve organization performance. In this context, we have over passed the conception that considered people as mere “objects” within organization, in terms of approaching people as a valuable “resource”.

As for the processual interpretation, any kind of approach, including the “human resources” are not satisfactory, as the domination relationships are still present, though highly modified, meaning that people are provided the necessary advantages, but they are still used in manners they don’t understand. The alternative interpretation is represented by people as “subjects” of the organization, as factors directly interested in the “wellbeing of the organization” (stakeholders). Relations of “subject-subject” type may not be characterized more or less explicit by domination, but by collaboration in searching for win-win strategies, useful for the individual and the organization.

The failure to recognize the necessity of building up the epistemic competence in organization would most likely deny the knowledge
advantages described above. Also we find plausible the following disadvantages, identifiable in some present-day organizations:

✓ lack of support from members of the organization vis-a-vis the constructive strategic options of the organization (e.g., bureaucratic sabotage);

✓ downward pressure from the organization, which may affect people's private lives or their health (e.g., occupational diseases);

✓ people's vague, incomplete, misleading interpretations on organizations and on their own situation within their organizations;

✓ low organizational use of people’s potential in terms of intelligence and creativity;

✓ lack of flexibility in adopting the latest advances, in the field the organization is specialized or in management;

✓ no voluntary involvement in solving problems facing the organization;

✓ difficulty in discerning the rules which favor one side only and not the members of the organization as a whole;

✓ establish relationships of power, dominance between members of the organization;

✓ stimulate competition at the expense of working together;

✓ duplicitous establishment of relations between members of the organization, opposed to the state of communication (affection, trust, honesty, etc)

✓ a climate of immorality based on the pursuit of selfish interests and neglect the interests of group or community;

✓ decisions based on superficial criteria, founded on uncritically analyzed experience or interest in the short-term at the expense of long-term interests of staff and/or organization.

All the identified issues are based on the premise of some incorrect interpretations on organizations and people. Of course, some of these situations may be overcome by means of using specialists. However, we do believe that the proper solution is to register a full contribution of the personnel, according to their role and status, in increasing the organization’s functionality.

The organizations are integrated in the specialized socio-organizations, which together with other social organizations with lucrative, commercial or managerial specializations define the public space. People have also a private dimension of their life. Once this is acknowledged, the analyst may spot the fact that part of the organizational culture is developed beyond inter-organizational space with ample effects on a long run. For instance, modern society is known as promoting the individualist values with consequences on the nations’ morality or on the values supporting the families.

4 METHODOLOGICAL LANDMARKS FOR EPISTEMIC COMPETENCE BUILDING UP PROCESS

Next, we shape up some methodological landmarks on supporting and managing the epistemic competence. First, we mention the importance of benefiting from a “hardware” support. Thus, we take into account the normality of the main maturity and socializing processes which human beings undergo until reaching maturity.

These pre-terms provide the normal individual’s state within all the undertaken actions. It is obvious that there are more or less deviations in a certain field, but it is also known that these mark the human being as a whole, which lead to the creating of noticeable difficulties, but extremely hard to explain.

In this context, we take into account the assessing/self-assessing of the normal state on the following directions, such as:

✓ sexual dimension of the bio-processing;

✓ affective dimension of the bio-processing;

✓ esthetic dimension of the bi-processing;

✓ the stocking capacity and the date and information’s updating;

✓ ability to perform complex selective awareness;

✓ ability to perform abstractions and abstract operations (conjunctions, disjunctions, implications, equivalences, affiliation, generation, denials etc.).

As a necessary premise to build up the epistemic competence we highlight the importance of the normality in the secondary socializing processes, of the ways in which human beings learn to accomplish their roles in the social organizations (family, organization, nations). The constructive involvement in the social organizations is a prerequisite for competence in every area.

As for the necessary cognitive premises, we do take into account the assessing/self/assessing of the evolution from spontaneous thinking (stage I) to systematic stage (stage II) and also to knowledge on knowledge (stage III).

In the event of the subject being “placed” in stage I or II, and the maturation and socialization being able to support the epistemic competence, we
will take into account the providing for that “software” (interpretations) that cause the disruption of the lower status’ and the organization of the interpreters on a higher stage.

This process must be one in phases, any jumps over certain stages are unlikely to produce the desired results and consequences. For example, a person located in the empirical horizon will not make the transition to higher stages of processing, say holistic thinking, directly by spelling out the benefits of the latter. It is plausible that this shift be performed by spelling out the limits of empirical thinking and by illustrating the causal analytical processing advantages. One must gradually make the transition to interactionist horizon and finally to the systemic one, and the so called “holistic thinking”.

Also, one should consider the conceptual processing capacity and the characteristics of the “knowledge on knowledge” one has access to and, eventually, the facilitation of higher epistemic horizons, if the case. Concerning the last aspect it is essential for the individual to assimilate knowledge, to create networks of concepts, correlations and integrations of the information of epistemic nature, especially the following:

- interpretations on “the nature and dynamics of knowledge”, of science in particular;
- interpretations on knowledge horizons, including explicitly seeing the limits of empirical processing, and the changing nature of “truth”;
- interpretations on scientific theories, on means of their understanding, assessing, implementing and improving;
- analysis algorithms of scientific studies;
- interpretations on one’s own processing capabilities, as well as ways to improve them.

Besides the mentioned “software”, we do believe it is necessary to assess/self assess the means by which the social context develops/blocks the interrogative interpreters building up (cultural norms, financial resources, information, time, roles, status, relationships, interactions etc.).

The subject’s motivation, the representations and images on himself and on the competence (the epistemic competence model) should be minded. Provision of “models of success” may be useful in such an undertaking.

The processual interpretation points to the importance of managing the epistemic competence. In this respect one will define a cone of possible competence developments, determine which of them are favorable to the subject and the social organizations that comprise him and, periodically, depending on the results and on the effects developed, make the necessary corrections.

5 FUTURE RESEARCH EFFORTS

The processual-organic approach of the epistemic competence has some advantages but also some disadvantages. The former category, remind us that this interpretation provides a trans disciplinary framework, a coherent perspective on an object of study “assumed”, inaccessible to the senses. It represents a departure from the classical way to solve the problem within a single discipline or an interdisciplinary framework, and the results have been more profound, offering not a simplistic and narrow vision of reality, but a nuanced and holistic one.

Of course there are also disadvantages of such a way of raising the problem. These arise primarily from the fact that the processual interpretation has not yet been subject to profound criticism from the scientific community, so it is very likely that it contains errors.

At this stage, the interpretation set out is a set of working hypotheses derived from the latest findings in various scientific disciplines, but also in philosophy, which form a whole, but has not undergone rigorous testing in practice. In the latter idea we have tried to formulate and partially solve a “puzzle type problem”, in Kuhn sense. Any corrections or nuances will only be welcomed in the idea of improving the theoretical and methodological framework proposed.

The necessity to develop the epistemic competence is obvious even at a basic, intuitive analysis. The major issue is on providing the informational context and the energetic one leading to a realist project. We cannot help wondering whether the organizations are intelligent enough as to encourage the cognitive development of the people, or whether the latter have the necessary resources and openings to such a development. These are only some of the questions coming as relevant to the success of a praxiological undertake that might be truly useful to people and organizations.

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References


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