COMPLEX THOUGHT: A WAY TO HANDLE MANAGEMENT PROCESSES IN PUBLIC ADMINISTRATION

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Abstract

This article is made evident that the handling of management processes in public entities requires the administration of their complexities and the understanding of their multifaceted systems. The feeling of subjects with experience in this sector is revealed by answering the following question: Can the degree of institutional complexity be managed to improve good practices in public management? To respond to this, it is emphasized that the “complex thinking” approach raises the articulation of the different elements and actors that interact in their different dimensions with a view to promoting the resolution of social problems. The methodology one assumed is the dialogic character, since the phenomenology of Husserl (1990), as an approach and method, which attempts to immediately understand the world of man through an intellectual vision based on the intuition of the thing itself. The instruments for the gathering of information are represented by semi-structured interviews that were applied to the key informants, as well as an intentional analysis matrix structured (Krippendorff, 1990) according to the dimensions of the study, applied to one manager of public administration, an employee and public policy academic. By way of closure, the following categories were revealed: Architecture of complex thinking in public management; Uncertainty in decision making from complex thinking and the approach of complex thought in public management.

Key words: complexity, complex thinking, management processes, public management.

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Introduction

The course of current changes has a relative dynamism that is put into practice both in the spaces in which they occur and in the time in which they take place. There are contexts, environments and actors that combine a set of elements with the purpose of promoting actions aimed at channeling the processes that affect the behavior of society, the economy, private relations, public life and the interactions that bring together the actions of social groups and the collective in general. Currently, there is no absolute precision related to the course of problems and solutions of an institutional nature; this has made it possible to rethink the fact that categories such as design, redesign, innovation, restructuring and change are invoked in all latitudes of public life and that government agencies institutionalize them in order to enhance their response capacity (Uvalle, 2011, p. 19).

It should be noted that public management has the task of solving problems to meet the needs of the community. These problems are of diverse and growing complexity and many of them are difficult to address from the perspective of the dominant conventional thinking. It is here where complexity and complex thinking have given rise to unsuspected possibilities of approaching the opening towards the spirals that sensitively, receptively and perceptively approach the layers of answers, and the ways of explaining knowledge, through the reconstruction, recreation and admiration of being, beings and the universe holistically (Najmanovic, 2008, p. 16).

Based on this, complexity leads to consider unexplored paths by means of non-foundational logics, to discovering new cognitive networks and epistemes that overcome the dichotomous positive paradigm and break through the boundaries between the “hard” and “soft” sciences, thus understanding that reflection on the rethinking of the role of thinking of the self and its performance in public management should be incorporated in terms of better and good practices when designing and executing public policies.

The incorporation of other ways of thinking is therefore required to study, analyze and address problems of growing complexity; ways of thinking that underlie complex thinking and that characterize the task of viewing reality not in a fragmented or segmented manner, but in terms of interactions, interrelations, interdependencies and inter-definitions. It is this reality that erodes the development of public management, for it is there that different currents of thought coexist, as well as specific areas of knowledge, all of which are put to the benefit of management itself to show the accentuated complexity of the institutional environment and to assert that multidisciplinarity provides a whole set of holistic thinking that promotes diversity not only of knowledge but also of present values and heuristic actions.
This reveals that the complexity of public management provides its own actors and methods; it highlights the procedure of tasks performed; it shows the lack of interest, discouragement and lack of initiatives to restore order; these members of the sector bet on their own logic and thinking valued as adequate, without realizing that the disorder achieved is the product of a needy attitude, which does not accept change as an opportunity for improvement, but as a threat that ends up preventing the effective and efficient execution of all processes, placing the individual in his own comfort zone.

Given the complex aspects involved in understanding the processes associated with public management, and based on the premise that the paradigm of complexity can be understood as a method of thinking through which the solution of different social problems is given a cosmovisionary scope, the following question is posed: how can the degree of institutional complexity be managed for the improvement of good practices in public management from the complex thinking approach? This question calls for justifying the necessary and sufficient premises to develop the following objectives.

**General Objective**

- To demonstrate the level of complexity in the understanding of the managerial processes related to public management.

**Specific objectives**

- Explain the considerations that complexify the context in which public organizations exercise, manage, administer or manage power to coordinate activities that contribute to the resolution of social problems.

- To interpret from complex thinking the degree of institutional complexity from the levels of authority; this for the improvement of good practices in public management.

This research offers a preliminary advance in the understanding of the decision-making process generated in public management from the approach of complex thinking; it proposes some notions that facilitate the understanding of managerial processes in this field of action in order to improve the way in which social problems and possible solutions are conceived, in accordance with the context and reality. This study aims to contribute to the generation of knowledge that allows understanding the highly complex problems of our society from a reflective perspective, neither totalizing nor reductive.
A look at public management processes from the perspective of complexity

Complex thinking, Rojas (2009) points out, is capable of seeing beyond the evident, since it does not remain in the perceptive stage, in what is established or instituted, but seeks to observe what has not been seen, to think what has not been thought and to feel what has not been felt before; complex thinking is not satisfied with universal truths but investigates the whole set of possibilities and therefore values all types of thinking. This means that the actions of “integrating” and “globalizing” are the central attributes of complex thinking (p. 1).

Under this premise of the aforementioned author, it is possible to visualize the disorder and controversies, the actions of the actors of public management, evoking the order of the processes and procedures from each current of thought that congregates in the organization. This critical and creative approach seeks to unbalance, indeterminate, undiscipline society and conventional knowledge. It is precisely what complex thinking seeks to do is to break the straitjackets that the epistemological, economic and political tradition leads to finished or single thoughts. However, it does not ignore the contributions of Cartesian thought, but rather resignifies it in order to enter into a fruitful dialogue with the paradigm of complexity.

Chirinos (2017) refers to the type of journey that is undertaken through this path: complex thinking is a dynamic path to explore, to investigate, to approach a phenomenon, to confront hypotheses, but also to establish links between management, management, social interaction and complexity. Complexity has made it possible to open up the field of research, limited in many cases by the rationalistic universality of classical and modernist paradigms that structure reality as a whole; this openness has led to greater divergences and fragmentations with respect to new possibilities of approaching knowledge in the transdisciplinary fields of science (p. 1).

According to Maldonado’s approach (1999, cited by Sotolongo and Delgado, 2006, p. 1), three main lines of work and understanding can be distinguished in complexity studies. (a) complexity as a science (the study of nonlinear dynamics in various concrete systems); (b) complexity as a method of thinking (the proposal of a method of thinking that overcomes the dichotomies of disciplinary approaches to knowledge and basically consists of learning relational thinking); and (c) complexity as a worldview (the elaboration of a new view of knowledge that overcomes reductionism based on the holistic considerations emerging from systems thinking).

In this sequence, Gil (1994) accurately maintains that “the organization cannot be considered as a (pro-grammed) mechanism, or a (natural) organism, but as a complex system, with a social, political and technical base” (p. 9). On the other hand, Morin (1994) emphasizes that “complexity is not completeness or perfection, it is the consideration of uncertainty, chaos, non-linearity, unpredictability and contradictions as substantial elements of the approach to reality” (p. 42).
In complex systems, what is at stake is the relationship between the object of study and the disciplines from which the study is made, and when it comes to human social systems, these are considered to be those of maximum complexity. From this point of view, the aim is not to achieve the sophisticated use of tools that make it possible to quantify or qualify, through indicators, the individual or collective performance of organizations, but to take into account a holistic apprehension that makes it possible to navigate in the confusing waters of political and managerial instances, accepting contradictions, diffuse conceptual and organizational boundaries, and the imprecise but very significant wisdom of qualified informants.

With respect to these contradictions and conceptual boundaries within public organizations, Waissbluth (2008) makes the following points. Gharajedaghi (1999) uses the term “formulating the mess”, and dares to translate this expression as “formulating the mess”. After receiving several criticisms regarding the use of this phrase, he has tried to use a more elegant or academic word, but has not succeeded. He claims that by using the word “chaos” or “disorder” he fails to accurately convey the original concept of “mess” (Gharajedaghi, 1999, cited by Waissbluth, 2008, p. 10).

Waissbluth (2008) states that this “mess” is what one sometimes finds in organizations, and the first task of the re-trainer is to understand and order it. Its most evident manifestation is in the behavior of the majority of people within the system; the symptoms are clear: a feeling of hopelessness, that everything is a mess, that things are not clear; impotence, and a resignedness that leads people to self-generate a small island of mediocrity, a “comfort zone”, doing their tasks in a mechanical way and without a group feeling of building a desirable future. It is not an aberration, nor a manifestation of irrationality or low IQ of people, who usually act, from their own point of view, with impeccable logic. Despelote” is a reasonably stable situation of mediocrity, low effectiveness, hidden conflicts and lack of control, and at the same time it is: a) the natural consequence of the existing order, based on the false assumption that nothing can change; b) an announcement of coming indispositions and, therefore, that things can always get worse; c) a phenomenon highly capable of regenerating itself. The “despelote” is the consequence of a long list of problems and cause-effect relationships, with their corresponding interactions.

Diagnosing the type of program or the situation to clarify the root causes of the “mess” then becomes critical, as it reveals the problems in the right context, generates a common understanding of the drawbacks, minimizes resistance to the program, and helps to identify the root causes of the “mess”.

change and identifies key areas for action. The clarification of this “mess” involves three tasks: a) analysis of all system components in their structures, functions, processes and behaviors, taking special care not to make value judgments; b) an analysis of existing obstructions and difficulties in power relations, knowledge generation, value-added production, emotional components and institutional values, and c) understanding the interactions between critical variables within the system and with its environment (Waissbluth, 2008, p. 10).
In view of this, then, the approach to complexity requires first of all the identification and analysis of all the elements of the system, distilling and selecting what is truly relevant, in order to subsequently understand in depth the positive and negative interactions between the different elements of the system. A hypothetical example of the complex situation that can be found in a public service at a given moment could be illustrated in Figure 1.

### Figure 1.

Complexity situation in a public office.

![Diagram](chart.png)


In this diagram it is possible to observe that there are bidirectional arrows in the interaction between “organizational climate” and “complex and redundant processes”. This is a characteristic of complex systems, where two elements can be mutually cause and sequence, which is generally not the case in the complicated but predictable systems of the exact sciences. Synthesizing the real issues and significant elements of a complex system is, in the words of Mintzberg (2004, quoted by Waissbluth, 2008, p. 5), a mixture of science, art and craft; craft derived from experience. There are, by definition, no mechanical analytical or methodological tools to adequately diagnose the situation and, therefore, to intervene constructively in it.

The environment in which the management of public activity is carried out, as in any for-profit organization, is determined by exogenous aspects (politics, regulations), but also by the actors involved (officials, institutions). The latter are, in short, any individual or institutional agent that puts the future of the organization at stake, whether positively or negatively. In Public Administration (PA), the levels of authority are defined through hierarchical structures, and sometimes there is a marked difference between the normative level (decision-making) and the
operational level (process execution); however, the interaction with other actors involved ends up showing the degree of institutional complexity. A hypothetical example refers to the Public Works Service, which reports the execution of its projects to the respective ministry (Figure 2).

**Figure 2.**
Interaction of a public service office with the public. stakeholders.

The above diagram contemplates an integrated and positive interaction, since the management level of public entities must also take into consideration the relations with those actors on whom financial (availability of resources), political (mayors and elected parliamentarians) and trade union (public officials) decisions fall. It is likely that the availability of senior managers’ agendas will not coincide with those of the rest of those involved, and it may even be difficult to define a common space for programming, execution and follow-up of tasks; this reveals the real complexity of public process management. Senior managers will find it difficult to establish relationships if they do not first understand the extent of the “contradictions” that they may have with the actors involved. This diagram also shows that some interactions can be bidirectional, which shows the complexity of the feedback of an apparently simple phenomenon. A private entity will be exposed to the pressures of the market and competition, since it is a for-profit entity, but in the case of public entities, the pressures of the market and competition will be more complex.

Political, budgetary and administrative relations and restrictions are much greater, and their requirements of efficiency, effectiveness, quality and transparency are, or must be, equivalent to those of private entities, since one of their main objectives is to guarantee the well-being of the community.
Complex thinking, a way to establish links between management, social interaction and complexity?

Waissbluth (2003) states that there is a generalized tendency of large organizations and systems, particularly public ones, to create within themselves “autonomous islands” with their own agendas, with the consequent shortcomings derived from the absence of coordination and common higher purposes. Together with the lack of timely, relevant and reliable performance indicators, this is the most frequent pathology of the public sector, and is an emerging property of complex systems. It is possible to draw up a list of frequent pathologies in the public sector and obviously, it would not be possible to detect all of them, but it is possible to approach them by mapping the interactions of these complex systems and the relationships that derive from them.

Figure 3 shows a hypothetical diagram reflecting most organizational pathologies. The preliminary visualization shows that complex systems are just that, complex systems. In this diagram the boxes show the pathologies, the arrows their interactions, and the larger dotted line boxes denote the three different domains in which these pathologies can be grouped: environment, people, and processes and strategies.

**Figure 3.**
Frequent interactions in the public sector.

Along these lines, Segura (2009) argues that many of the diagnoses of governance and institutionalism show that the lack of articulation and communication between public entities is endemic. It also proposes frameworks for modernizing public management that stipulate policies of creativity, innovation, articulation, among other measures. Some of the ways of overcoming sectoriality refer to the creation of multisectoral commissions, working groups, special commissions, among others. However, as long as these groups remain in the perspective of the sum of sectors and multidisciplinary work, it is not possible to break Cartesian thinking.

It is important to recognize that reality is not organized into sectors or disciplines that we have created. Reality is a whole in which matter/mass, energy, information and meaning interact, considering tangible and intangible aspects.

In this regard Segura (2019) specifies:

We have to be very daring and ingenious in order to generate organizational forms that allow the development of complex thinking precisely to have the capacity to address the highly complex problems of our society. Workforces could be generated with license to think beyond all frameworks (epistemological, sectoral, institutional, disciplinary, among others) to see beyond the obvious. This requires political will, legal and institutional frameworks that allow these task forces to find out what works, what does not work and how it could work better. These groups must have an epistemological framework consistent with the paradigm of complexity and with the supreme values of sustainability, justice, equity and peace (p. 4).

The management of managerial processes in public entities requires the handling of their complexities and the understanding of their multifaceted systems. It is not enough to think in a complex and systemic way, that only works well when activities are already established and routines are in place. It is necessary to approach the paradoxical nature of organizational life, the constraints, the predictability, and the inevitable tendency for people to spontaneously self-organize around power, politics and conflicts.

**Methodology**

This research has a qualitative approach because its object is centered on human action. This type of approach is epistemologically nourished by a phenomenological current of thought because it recognizes, in the process of knowledge, the levels of interdependence that exist between the subject and the object. This knowledge is mediated by the social and personal characteristics of the observer; that is to say, that there are different ways of interpreting the object of study and the researcher tends to be attracted to it, it is not neutral. Everything will depend on the reality perceived by the key informants and the perspective of the researcher. The methodological route assumed is of a dialogical nature, in that beliefs, mentalities, prejudices and feelings will be accepted as elements of analysis to generate knowledge about human reality, from Husserl’s phenomenology (1990), as an approach and method. This author
defines it [as a] method that attempts to understand immediately the world of man through an intellectual vision based on the intuition of the thing itself, i.e., knowledge is validly acquired through intuition leading to in-mediated and originating data. (p. 36).

Key informants

Key informants help the researcher to inquire and have clear and pertinent ideas about the research because they are the object of study. According to Martínez (1991), key informants “are all individuals who in one way or another will provide valuable and coherent information, which allows the researcher to deepen the problem addressed” (p. 37), i.e., they are the primary sources of information. In this regard, three people were selected according to the following profiles: a manager active in public management, a civil servant and an academic with experience in the field of public management. All three individuals have at least 25 years of experience in different roles of responsibility within different PA organizations and institutions, in administrative or managerial and executive positions. The time spent working in these public management spaces has allowed them to integrate knowledge and experience and thus contribute ideas that have helped to ensure efficiency in the execution of management processes.

Data collection techniques and instruments

The instruments for the collection of information are semistructured interviews. They are also called colloquial dialogue. Martínez (1991) states that “the instrument [is the] one that allows us to know the nature of the being, relying on the personality structure of the interlocutor, as well as [on] the verbal contexts” (p. 93). It should be noted that the semi-structured interview, as an instrument of data collection in qualitative research, is a tool with a great tuning in the arrangement of the dialogue with the purpose of collecting the required information. The questions posed were the following:

a) How do you consider the managerial processes in the Public Administration to be?

b) Do you consider that the complexity of social problems can be managed? c) In the resolution of social problems, how complex do you consider the context in which public management takes place to be?

Analysis of data collection

Since this is a research framed in an interpretative phenomenological approach, the data collected were categorized through matrices that allowed relating the categories found and their attributes or emergent properties, for later analysis and interpretation. It should be noted that the information was collected by means of instruments, semi-structured interviews and observation, supported by technological instruments such as tape recorders and notebooks.
Subsequently, the information was codified, categorized and triangulated, comparing the evidence collected and presenting the interpretations as a result of the research. To this end, a coding and categorization process was developed based on the ordering, comparison and contrast of the information obtained, and establishing the different relational links that made it possible to interpret the different situations detected, all of which resulted in an intentional analysis matrix structured according to the dimensions of the study under investigation, considering the possibility of interconnection between the units of analysis.

Analysis and interpretation of results

The general objective of this research was to demonstrate the level of complexity in the understanding of managerial processes related to public management. In order to develop this research, a planning was carried out for the collection, analysis and interpretation of the results. The technique used to interpret the information was content analysis, since it was intended to include two or more qualitative approaches, namely, participatory observation and the semi-structured interview, in order to diagnose the same issue, seeking its effects and meanings, critically evaluating the existing live findings and establishing reproducible and valid inferences that can be applied to the context of the research (Krippendorff, 1990, p. 28).

Results and discussion

Complex thinking” in public management from the phenomenology approach

From the above-mentioned, the categories of the analysis of the results are derived from the questions that gave rise to the study for the design of the interviews; this in relation to the considerations of the managerial processes in PA, the management of the complexity of social problems, and the complexity of the context in which this type of management is carried out. Figure 4 shows the diagram of categories resulting from the analysis and interpretation process.
Architecture of complex thinking in public management

The criticisms of the levels of effectiveness in public management and in the execution of public policies are such that they require the generation of modernization and transformation plans that are in line with changes in institutional design, i.e., the modification of organizational forms. This implies reforming the regulatory framework, proposing new organizational structures and reducing the size of the State and its functions, in order to achieve an administrative adaptation that makes possible a better link between the citizen and the public apparatus. It is essential for the PA to value the spaces for citizen participation; this should be seen as an indicative element of the roles of effectiveness and efficiency, as well as an activity of co-administration whose formal intention contributes to the construction of a management that responds to the requirements of modern changes. The results of the application of an institutional architecture based on complex thinking should favor not only the recipes of adjustments in public management but also the collective that makes life in the organization that generates, in its own dynamics, management models full of improvisation, almost always under an entropic system. This is why a public management model is required that goes beyond implementation protocols with conventional and ideological labels.

Uncertainty in decision making from complex thinking.

Complex thinking is manifested when the understanding of a given problem incorporates the reasoning of its subsequent solution. From this problem the necessary information is obtained, thus admitting the division of the whole into its elements, and analyzing the parts that compose it separately. Seeing the organization as a whole, instead of its parts in isolation, will make it possible to produce new qualities. Complex thinking is based on abstraction, but it does not allow the construction of a common context in which all its dimensions and results coexist. The
analysis of problems and their independent elements generates more than one text for study and observation.

In public management, problem-solving begins with the decision-making process, which incorporates the use of managerial tools that contribute to the continuous achievement of the organization’s objectives, together with control and direction systems. According to modern management, the common element in all instances of the organization is decision making, whether in response to observations, models, actions or reactions. Decision-making models have been empowered then to build procedures oriented to the adequate application of the effects of the procedure, but from complex thinking this can broaden the horizon of alternatives when it comes to deciding. In this sense, it is argued that the decision-making process should consider the set of subjects involved in them, and this will not only materialize in reports, statistics and analysis of the manager or management staff, but will allow the inclusion and articulation of transdisciplinary elements with a view to the implementation of change actions, which is the most effective task of a manager.

**Approach of complex thinking to public management**

Traditional public management serves purposes that contemplate the delegation of administrative responsibilities and the fulfillment of legally assigned objectives and activities. From this approach, it is perceived that the requirements formulated through the regulatory framework (codes, laws, decrees, ordinances, statutes, instructions, manuals and the like), guide the conduct of individual responsibilities and the behavior of the system, which leads to identifying that the performance process of those who manage public administration begins with decision making in complex and formal situations.

However, it is understood that the notion of administrative work is limited by the fulfillment of what is legally assigned, which is insufficient in some cases, in the face of the challenges of public management; In view of this, it is necessary to move from simplistic and traditional thinking to a complex type of thinking, that is, to move from a welfare model, exercised from above with merely administrative methods, to a cooperativist model, where public management guides and implements government decisions, applying a coherent and sequential cycle, which contributes to the generation of opportunities for the development of best practices in a harmonious and articulated manner.

This makes it necessary to understand the need for a change in management paradigms in the design and execution of public policies with a view to fostering innovative public management. Perhaps the idea of a model is intelligible through symbolic structures, since the dimensions and structures that compose it are complex, as are the organic bodies that coexist and are the product of the sum of a whole and not of a model that only seeks to solve the particular inconsistencies of management.
Discussion of results

Social problems are among the most complex due to the number of variables and interactions that occur among the actors involved. Thus, major problems such as wealth distribution, inequality, hunger, poverty, racism, conflicts, gender violence, human trafficking, smuggling, illegal mining, corruption, among others, not only cannot be controlled, but several of them increase over time. In view of this, complex thinking has been incorporated as another way of approaching, studying and analyzing these increasingly complex problems.

If complexity is associated with the impossibility of addressing particular aspects of a phenomenon, process or situation from a specific discipline, then it is possible to consider that in complex systems what is at stake is the relationship between the object of study and the disciplines from which the study was conducted, and when it comes to human social systems, Maldonado (2016) affirms, “these are considered as those of maximum known and possible complexity” (p. 59). This assertion radically affects the social and epistemological status of the social sciences.

Undoubtedly, it can be affirmed that there is a close interaction between complex thinking and phenomenological study, because the former will always consider other paths, uncertainties, nonlinear aspects, overlaps, multiplicity and in confluence with the second aspect, the observed phenomenon. Completeness allows the approach to the phenomenon not in an aseptic way, nor in isolation, by the one who studies it, but arises from a consciousness and intentionality of the researcher to contemplate the subject/object dynamics, and why not, from his own subjectivity, in fact, it makes this interrelation more intense in the context of the sciences that study human and social relations.

In a complex system, the elements cannot be studied in isolation. Therefore, it is not possible to approach management as a phenomenon without taking into account the experience, the experience of the managers, who are the subjects who exercise it. The subject who performs in public instances and who manages decision-making from the respective levels of authority is a social entity, in that he is and results from a sum of experiences that coexist intersubjectively; he can also be understood in his organizational and institutional context from the perspective of complexity, since he is constituted as the main element in the interrelation of the various capacities and tools: leadership, assertive communication, emotional attitude and professional aptitude.

Exercising roles of responsibility and supervision is part of a system of coexistence and meaning in which relationships with others become complex, since they are expressions of the sensitive phenomenon of the experience and reasonableness of managers in the face of others and their environment. It is therefore impossible to explain the complexity of the decision-making process in public management without the involvement of the subject humanized by the experiences of group understanding, since it is he who unfailingly carries out the task of managing the resources available to meet the proposed objectives. Therefore, it is essential to highlight the field of intersubjectivity that collectivizes them socially and politically, since it inserts them in some referents of “encounters”, person to person, that allow to generate the symbiosis
of affectivity and filiation between human beings, in an act of convergence, whenever there are two or more interacting subjects, in the construction of their complex preceptions.

**Conclusion**

The conceptual reconfiguration of contemporary public management is based on a systemic, holistic and complementary approach, not on the result of the standardization of singular processes that serve the menu of political and ideological decisions of the public sector.

Each nation’s public management is invested with a universal pattern composed of the characteristics of a complex thinking that leads to decision making and includes all dimensions and not just a part of them; that takes into consideration the change of paradigms and hierarchical organization. Each public management is invested with a universal pattern composed of the characteristics of a complex thinking that leads to decision making and includes the exchange of all dimensions and not just a part of them; that takes into consideration the change of paradigms for others that respond to collective management and involve the actors that intervene in the process of designing and preparing proposals to solve public affairs; that promotes the orientation of organizational objectives and admits the replacement of the political-administrative dichotomy by managerial action.

The subject is then the protagonist who intervenes in the processes of social transformation and the proposed solutions to collective needs would be the result of the interactions between the individuals who constitute it. Morín (1994) puts it this way:

Society itself, as an organized and organizing whole, acts to produce individuals through education, language, school. Thus it is that individuals, in their interactions, produce society, which produces the individuals who produce it (p. 78).

This means that the understanding of complexity and its scope within society require openings that seek a continuous attunement with the structures of thought.

It can be observed that public authorities are trying to moderate this harmony between the actors and their relations with the environment, which has allowed the accentuation of a strongly sectoral and disciplinary approach that has proven to be effective for many aspects of political, economic and social life, but has not been able to provide effective schemes for the solution of the major problems that afflict our nations. It is necessary to overcome the sectoral, institutional and disciplinary paradigms from a holistic and integrating vision, otherwise the alternatives of proposals for the solution of the major problems afflicting our nations. to solve social problems will continue to be insufficient and simplistic.

Thus, with all the existing organizational architecture, aspects such as corruption have become entrenched in a highly worrisome manner. In the same sense, the fragmentation of management and the lack of a real management framework have caused the consequences to continue to increase. The management of management processes in the public sector requires
the handling of its complexities and the understanding of its multifaceted systems, and the complex thinking approach constitutes a way to solve social problems through the articulation of the different elements and actors that interact in their different dimensions.

**Bibliographic references**


