



Full Length Review Article

A COMPLEX SOCIAL THEORY TO THE ANALYSIS OF THE SOCIAL HIPERVARIABILITY

***¹Augusto Renato Pérez Mayo and ²José Alberto Hernández Aguilar**

¹Organizations, Strategic Competitiveness and Sociology of Organizations Accountability, Management and Informatics Faculty Autonomous University of Morelos State University Avenue Number 1001 Morelos, Mexico

²Decision Making and Optimization in the Organizations, In the Faculty of Accounting, Business Administration and informatics at the Autonomous University of Morelos State, UAEM, Mexico

ARTICLE INFO

Article History:

Received 29th July, 2016
Received in revised form
14th August, 2016
Accepted 27th September, 2016
Published online 31st October, 2016

Key Words:

Social theory,
Emergent propriety,
Organic,
Social hipervariability.

ABSTRACT

In this article the elements of crisis of a sociology are described, which deserves the emergent possibilities of new logics to understand the complexities through the concepts and categories different to the own nature of the social discipline, it means, elements coming from cybernetic the logic and the biology among others. It is presented the possible biological predictions in the integrated proprieties of the architecture of the social theory, which will have as a result a discourse based on the theories coming from the biology called by us organic social theory, as a future social science: it is made evidence the substitution of the concept called social variability as a normal component of the traditional societies, and its switching to a concept social hipervariability as a characteristic of nowadays societies emergent or in risk. It is reflected about the new object of study of the sociology. At the time of using a new theoretical object, which as a central object of study conjecture the social as well as the organic, noticing that its object of basic analysis must be the social hipervariability (not the confused complexity by Luhmann, as an object of study. The social hipervariability as a dynamism, as an excess of possibilities, as a presence of multiple choices as a predominant difference, as a space, where predominates the relationship n in front of any kind of mechanic determination.

Copyright©2016, Augusto Renato Pérez Mayo and José Alberto Hernández Aguilar. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

INTRODUCTION

Could the sociologic concepts of nowadays be the base of a new sociology to study our old societies in America, Europe and other parts of the world? In the being time we are living an age of so great changes, like those that emerges, the sociology as a science. In our world are taken place meaningful changes, and even breaking, in its ideologies, values, ways of living, complex systems and as a consequences its emergencies, in a time of changes as the being time, an age of total risk. ? Which concepts, categories, and sociological tools do we have to be able to discover the internal functioning of a society? The theoretical crisis and the method of the sociology based on the old simplified, rigorous, simplifies, fragmented and partial dominated by sectorial specters, which lack the vision of joint, it is an alley without an exit, where it is immersed the social theory of the being time.

The following questions are aroused:

¿Is it possible to explain the current reality with the existing theory of today? ¿Is there a corpus theory capable of understanding the basic characteristics of a complex society, where we live? ¿Is it necessary to make a proposal about the evolution of existing social theories? ¿Shall we work with the most advanced and mature theories? ¿Is this the effort we should made, to discover the future scenery in the social science?

H. Going at the game

Everything deals with a great question: How is it possible to create a science of the society that reproduce, in the study of the social and human life, the same species of sensational lighting, and of the explanatory power, which had been provided by the science of the nature? (Giddens, 1997:1). This natural condition from the beginning of the systematization of the social science to our days has not ended. This is the desire; The Einstein of the social science is being search.

*Corresponding author: Augusto Renato Pérez Mayo, Organizations, Strategic Competitiveness and Sociology of Organizations Accountability, Management and Informatics Faculty Autonomous University of Morelos State University Avenue Number 1001 Morelos, Mexico.

One of the most powerful arguments against the scientific character of the social science is that until now it has not been possible to make something comparable to a Natural Law (Bottomore: 1992:26). The methodology base of the sociology, in its task of history interpretation or in the interpretation of social actions of the individual, is the introspective knowledge of our own-minded states (the psychologist, the subjective), and nothing else. The attempts in matter of theoretical building, without the sociology have been very scarce lately: the research about the theoretical competence of that science has not taken place because it does not have the theoretical corpus, which let them happen. The classic and the modern sociology based on an old rationality, which simplify and fragment, lacks a holistic vision of the reality and of the theoretical production.

Thus, the sociology is in crisis of theoretical character. The empirical research, with a lot of success, has contributed to improve the knowledge of the discipline, but it has not led a formation of the specific theory of the subject. Renunciation of building a specific theory in its field does not avoid the problem, avoid only raise it. Let's see:

In the present research is presented an exposition where it is made evident that some concepts, making references to other disciplines, impact theory and methodologically in the ambit of the sociology. The attempt is that the scientific notions could be useful to lighten some aspects of the social reality, in spite of the level of abstraction, where they were exposed, looking for the unity in the difference. These differences respect to the disciplines alike make perfectly comprehensive why the sociology goes background in regard of threshold, shouts up and gathers complexity without having paths. The advance would only be possible if it made a design of a theory of different character. In the sociology there are not prototypes to that purpose. Therefore; we have to make reference to successful multidisciplinary developments, belonging of another specify of the subject. We are convinced that perceiving reality, first it must be clarified its concepts and its mythology, beside of taking care of the use of the theoretical concepts and design theory. The state of the art of social sciences is exposed.

The New Logics of building the social reality

The importance of the architecture and of the design of the theory consists on the possibility of providing the visibility of arguing. Our purpose is that the present work makes up an instrument of description. It is not a much usual idea of writing about the social theory under three rubrics: kinds of generalization, the concepts a basic outlines of explanatory theories (Bottomore, 1992:28) in the first place gives the impression that in the real situation are presented a series of factors that hinder an appropriated confrontation with it. It is about factors joined to the specific characteristics, and to the specific paths of its theories, which makes difficult its approach, and for this purpose this work would be useful. The arrival of the illustration is a fact, it means that it is necessary to make a revision of the validity of concepts, perspectives and modes of analysis of them, which were useful for an age, but there is no anymore, the analysis of a society of the XVIII and XIX century is so different from our society. Concepts and tradition have formed the great human discourse of the European illustration and its influence on countries such as Mexico, the reason, the purpose, and the subjects, determine

concepts about the politics, the economy, and the law among other. All of them illustrated its own and roused with a strong character, innovation at its time; nevertheless, for our time, they are just valuable memories. They will never be the proper instrument of analysis to understand the currents society, which is more complex.

The “new logic”¹ of building the reality of the society

The new society must be conceived as a self-referent that creates its own conditions of change (Luhmann, 1993). A system that differentiates itself (in a process of self-evolution) to undertake new spaces of possibilities offered. From this process of differentiation of the society in diverse social systems, which are specialized in each of them undertakes determinate segments of complexity. That is how the process of the society is equal to the progressive differentiation of in different social system. And that is what it looks like, with particularity and own independence, the law, the economy, the education, the politics, the religion among others. The society will be self-referent, with encounters such reflection the strength of its own evolution, and must find a path of salvation among the paradoxes, which overwhelm its own reflexion, and its sufficient content. The most elaborated theory nowadays in social science is the theory of Lehmann and its analytic system. Let's see some elements of the theory formed in one of his lately writing, the book *Theory of the Social System*, published in 1998 by the Iberoamerica University, where are included the following contributions: The Cybernetic of a second order of Von Foerster, the logic of operations of Spencer Brown, the polyvalent logic of G. Gunther, the theory of scientific evolution of Donald P. Kampbell, and the theory of the self-referent and Autopoiesis de Maturana and Varela. Without evidently forgetting everything what is related to the functionalism, the theory of systems, the theory of communications, and the theory of evolution.

Cybernetic of second order of Von Foerster

The denominated cybernetics of second order is a contribution of Heinz Von Foerster, who has developed an extremely suggestive theory about the cybernetic of theory of systems, and epistemology, at the time that suppose an important contribution of the epistemology to constructivism. To the social theory, the importance is the concept of observation and to make use of a basis that permits analyze the social systems that observe and are observed. The theory of the observation has its bases on the contribution of Von Foerster. In his book *Vision and Knowledge, Dysfunction of Second Order* propose the concepts of the second order metatheories (based in Bates) such as learning to learn, knowing the knowledge, explaining the explanation (Foerster, 1981, 1985). The second order is the necessity of the existence of other more complex order to explain the preceding one.

The logic of form of Spencer Brown

In the law of form, Spencer Brown pretends to show how is originated a whole universe once it is shortened in a determinate space. In this sense, his research pretends to show the basic forms that underlie the linguistics laws, the

¹These new logics are , in a way, conceptual tools, the application of addressing continually new areas of analysis and face new problems and new solutions

mathematics and physics of our own experience, and that are aroused in an initial originated the limitation. It leads to an original logical theory from a universal reach based on the principle of distinction of (restriction of a space) indication (limitation of a space), and self-reference, expressed with extreme elegance, simple formalism and great theory a scope. The work of laws of form² is a heterodox manual of logic, where it is planned a logic of operations, which includes a particular instrument of self-referent operations is original formalism which permits the self-referent operations. Nevertheless, they will specially be the concepts of *distinction and indication*, basic concepts and initials of the logic of Spencer Brown, first, it is necessary to establish distinction, and afterwards, indicate or suggest what the distinction is. The distinction is like that, what is building all the others forms (Brown, 1969: pp. 1-7).

The polyvalent logic of G. Gunter

Gunter has the purpose of making a fusion between the cybernetic and some of the basic principles of the German classic philosophy. His heterodox attempt of planning an efficient and polyvalent logic will be especially outstanding, which presents as a choice, to some aspect, to the bivalent logic of the occidental tradition. In this crucial aspect to the social theory; it analyzes the consequences which are derived of the existence of the plurality of the systems observed reciprocally. In search of the attempt of Von Foerster and Gunter is found the problem of the plurality of subjects and the demand locating in the context of the observation (Gunter, 1989). These new logics are to certain extent. Conceptual instruments, whose applications suppose trying continually ambits of analysis and afford new problems and new solutions.

Theory of the autopoiesis of Maturana and Varela. An attempt that emerges in the social theory system: The organic.

A fourth element takes place in the new logics. The theory of the autopoiesis developed by the Chilean biologist Humberto Maturana³ y Francisco Varela⁴. It is about a biological theory which considers that the autopoiesis as a central feature of living and a theory and calculation is developed (in the case of Francisco Varela) found in the capacity of the autopoiesis will be a centered perspective in the scientific structure or Luhman, who conceives the society and the social systems as autopoiesis systems, understood the autopoiesis as the capacity that the organisms have to produce and reproduce by themselves the elements which constitute them, and in such a way it is defined its own unity. Each cell is the product of a reticulum of internal operation to the system, from which it itself is an element, and not an internal action.

²In any case the work of Spencer Brown is more than a simple manual of heterodox logic, it addresses issues of ontology and epistemology, with an obvious constructivist content.

³H. Maturana (Santiago de Chile, 1928) studies medicine in the University of Chile and anatomy in University College of London, with especial attention in Neuroanatomy and Neurophysiology, during his stay in the MIT Cambridge, Mass, US, he recorded the activity of a directional cell of a sensory organ, together with the scientist Jerome Lettvin. Since 1960 teaches in the University of Chile where he developed his theory of the autopoiesis by the first time 1973 with his disciples Francisco Varela, who was born 1946 and studied biology with Maturana in the University of Chile, and obtain P.D. Biology University of Harvard - His main theory interests are centered in epistemology, cybernetics, neurobiology an philosophy of the science.

⁴Maturana disciple.

The Mexican sociologist and discipline of Luhman, Dr. Javier Torres Nafarrete in the introduction of the preface the invitation to the reading of Maturana:

"The image of the world that contributes Maturana is, with intensity, clear: the constitutive principle of the cell, in quality of ultra element of the organism is kept in all the levels of complexity related to the everything that has to do with the alive: cells, organism, nervous systems, communication, language, conscience, society: in other words, there is not discontinuity between the social, the human and its biological roots" (Maturana, 1995).

By the other hand, Maturana says, "love or if we don't want to use a strong word, the acceptance of the other beside one in the living together is the biological basis of the social phenomena; without love, without acceptance of the other joined to oneself, there is no socialization, and without socialization there is no humankind. Anything that destroys or boudners that the social phenomenon takes place y consequently because it destroys the biological process that generates it" (Maturana, 2009). The most peculiar characteristic of an autopoietic system is rising by its own ties and establishes itself as distinct from the surrounding environment through its own dynamics, so that the two are inseparable. The theory of the scientific evolution of Donald P. Kampbell states that the cells keeps its internal the information that is obtained through the time and all the organic that live, therefore, the human unities keeps something similar called gem of the learning of its surrounding, similar functions like the cells have, it means, they are genes that learn and learn from its social environment like to the experiences structure.

"What does in case deal with?" and "what is hiding behind?" the two sociologies and the theory of society⁵. Paraphrasing Luhmann

From its start, sociology has tried to respond to two questions of radically different nature. The first poses two issues: what is the case all about? and the second, what is hiding behind? In the face of these two questions of such a different makeup, it has always been difficult to claim the unity of the sociological discipline. But above all, it has been in the seventies when, based on this difference, a dispute arose that threatened to make the discipline explode. In Germany this controversy called the attention under the name of discussion of the positivism.⁶ Merton (1972) in the United States proposed the question of, if this conflict, already fueled, would not lead to a theoretical production that would end up dividing sociology into insiders and outsiders. These excesses with their controversial staging are not, at present, more than powders from those silts.⁷ In view of this fast development, which is joined by the political economic disaster of Marxism, there is a risk of forgetting what has characterized sociology since its start: the strain between the two questions, what is the case about, and what is hiding behind. On the basis of this difference, sociology has developed an extended culture of suspicion of the motives. In the Chinese paintings the elegance of its strokes may be admired and how these end in the fog or

⁵Last lesson of Niklas Luhmann Chair at the University of Bielefeld, Germany.

⁶ See it as summary although tendentious until the introduction to Adorno et al. (1969)

⁷Historians only read the publications of that time now and in the example of Habermas it may be clearly that the dispute is not the most appropriate way for the presentation of the theory itself.

in the clouds. However, it may be observed, also, in the fact that the clouds are put there where the lines must have remained faded, that in the Chinese painting the central perspective is not mastered. The universalization of the suspicion of the motives takes place of a general attitude of observation, if not of critical relevance. To ask in this manner has already become customary. The fatigue which characterizes sociology at present is typified by the resignation to this tension. Now almost everything is permitted, as long as it draws upon an external reference. And this is always possible because the press allows treating what is absent as present.

The business of empirical investigation has been able to hold under the assumption that reality has to decide what is true and what is false. In this manner it secures the financing and the job positions to continue doing more research. Critical sociology keeps strong because it considers it has been successful inasmuch as it shows how society has failed. Society and critique mutually outsource each other. For a long time there was a hope that the discrepancy between these theories could have been solved through the technique of comparison, in the same way that elephants and giraffes compare as far as being both bulky and complex animals: in some the length of its trunk; in the others, the neck. But this attempt lead to disappointment, perhaps due to the lack of a theory that could substantiate the comparison in a sufficiently abstract period. On the other hand, the German sociologist NiklasLuhmann states that the current discussion of the theory is carried out drawing upon the resource of past positions that cannot be changed but it is possible to take a step back in order to interpret them. In that regard Merton considers that sociology is at an intermediate point between the humanities and science, for this reason they still work with what he calls "historical systematics", about which he disdainfully says:

"...the only thing that historical systematics does is to offer to contemporaries, mirrors in which previous texts are reflected. These are "critical abstracts", "mere commentary", totally sterile exegesis, sets of critical synopsis of chronologically ordered doctrines" (Alexander, 1987). Merton in a nutshell considers that the investigation of previous figures does not have anything to do with scientific work. Such activity corresponds to historians and not social scientists.

The empirical criticism on the centrality of the classics is based on two central assumptions:

- The absence of the classics in the natural science stems from its empirical and cumulative nature.
- The natural sciences and the social sciences are basically identical to these effects (Ibid). I agree with Alexander in regard to the fact that social science is different from natural science, but we agree with Merton in that it is necessary that social scientists dare to write with new conceptual and methodological tools the realities of a world that is still far from the one in which classics lived.

If we argue this, we have that the attention paid to the five star heroes of sociology is also recognizable: the classics. Authors become classics when you realize that the diagnostic they have made on time is exceeded. One must find a reason to follow them and this can be no other than the fact others also devote time to them. Instead of looking for references in the outside

world, it is externalized in the sense that to return to that which cannot be changed and to a past that can only be interpreted. In this, it may be appreciated with enough clarity how the past serves as an externalization: the absent dominates the present. One evades the criticisms when it allows to see that which it affirms has already been said by the classics, and with this reverence is awakened.

With this triad: The external relation of empiricism, the self-certainty of the critique and the relation to the past of the discussions of the theory, it loses the unity of the discipline. And nobody, naturally, dares to proclaim this as a Trinity. The game of internal freedom of research and external references (very diverse) establish themselves. It remains pre-supposed, without exception the resignation to the unity of description of society in which the one that describes is part of it. This may be justified, it even may be necessary. But then, does one have to relinquish the fundamental difference that at one time constituted the unity of the discipline: what is the case and what is hiding behind? Perhaps it is very difficult to restore this difference. But in case this is not possible, at least the reason why must be clear. To gain unity through difference, to achieve unity as a unit of a difference seems to be a paradoxical program of the theory, and indeed it is.

The future

At the time of having a new theoretical instrumental which as a central element combines the social with the organic, cautioning that its object of basic analysis must be the social hipervariability as an impetus, with an excess of possibilities, like the presence of multiple alternatives, as a reign of differences, as an space where the relation in the face of any type of mechanical determinism rules. In our time we face the challenge of complexity (and its object of study) and our society is an answer to this challenge. It is intended to reduce complexity so that this becomes transparent through the study of social hipervariability, but never with the intention of disappearing it, because this would be equivalent to cancelling its object of study. In light of the fact that sociology is a biological science since it is a science that deals with living beings (Popper: 2002). The failure of the social sciences, when they are conceived as a natural science in society is evident not only in the lack of an integrated body of abstract laws, whose implementation conditions are known precisely and count on the approval of a professional community.

Start from the most mature theory of the Social Sciences. And from there give it an eminently social character, to the eminently organic, that is to say, develop the most advanced theoretical architecture with conceptual organic categories. Set the difference between what the social researcher sees when he studies an individual and calls it Subjectivity and what we propose is a category that can be called THE INTERNAL which implies a more profound level than the SUBJECTIVE, that is to say, a detailed understanding of the INTERNAL STRUCTURE of the human unity that can allow a more profound knowledge of the characteristics of its units and the biological-social systems in which it participates. Namely, THE INTERNAL is beyond the subjectivity of the social. The biological-human organisms are complex systems. Very few properties of a complex component are independent of the rest of the components of the system. The structure (human unity) depends very much on the environment, on the interactions with other systems, and frequently on subsequent

modifications in the construction of the social (language, culture, others). The biological-social systems (societies) obviously consist of many elements. The study of the interactions within the system turns more complicated as the system being studied is larger. Nonetheless, it is necessary to consider the influence of the social hypervariabilities and other possible unforeseen occurrences in motion and active, in order to simulate the real social behavior *in vivo*⁸, which further complicate the analysis. Knowledge as well as scientifically secured knowledge, are products of the history of society. They are part of those achievements that are only possible to explain with the aid of a theory of evolution. Donald P. Kambbell in his theory of scientific evolution proposes that the cell preserves in its internal structure the data it is obtaining with the passage of time, and all the organic experiences it lives; similarly, the human units contain something similar called the gene of learning that carries out similar functions as the cell, that is to say, they are genes that learn and learn from their social environment. The first incentives to think in this direction started from Darwin and Spencer; but that gave rise to a little elaborate concept of evolution and the theory finally stagnated due to this initial concept.

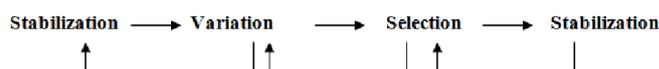
Nowadays, biologists are the ones mainly interested on evolutionary theories of knowledge and foster discussion, but still lack a more developed evolutionary explanation of knowledge, that corresponds to the cognitive-theoretical problems and the immanent historicity of the semantic traditions of knowledge. The theory of sciences itself should have explained what is really said when discussing the evolutionary-theoretical explanations. It is no coincidence that the start of epistemology, at the end of the last century, coincides with the generalized crisis in regards to irrationality and consensus. Thus, the change of the theory of knowledge towards the evolutionary paradigm has in sight at the same time, several differences: it deals with the renunciation to rationality and the renunciation to consensus as the explanation of the morphogenesis of science. It is about a theory that does not link with the immediate aims of the researchers and with their faith in the truth, but it considers this faith in the truth only as a vehicle of evolution. Aims and truth, if so desired are differences of a set that imposes the same evolution of knowledge. And it remains unclear what possibilities exist to be carried out jointly. The deep-rooted epistemology by Quine sought to access the theory of evolution through psychology or biology, and the most modern cognitive sciences conclude through an investigation of the brain. The above may have aroused the hope of reaching an evolutionary theory, homogeneous in the knowledge that gave the impression of being able to evolve from biological investigations. It is first necessary to create a general theory of evolution that may suppress what is specifically biological: for example the genetic inflexibility to open it to wider comprehension levels that may also include the social.

Luhmann proposes in this regard that "a theory as such is still in the making, although there are enough incentives" (Luhmann: 1996). This general theory of evolution has carried out a development that arose out of the necessity of supra-natural interventions in the elements consequently the result of

the transformation appears as a phenotype⁹. The evolution may be observed physically, biological or sociologically. This ends in a close cooperation between the theory of systems and the theory of evolution, and this in the level of the general theories in which they intertwine at the level of physical, biological and social systems. The evolutionary theory of knowledge has come to be utilized to solve the problem of the reference. The reference and only be self-reference, a distinction that is made possible by the differentiation between the self-reference and the hetero-reference. For the theory of evolution, the system not only adapts itself to its environment, but also selects or changes the environment in order to be able to adapt to its own preferences, this means that knowledge selects what it may know from what is already known.

A theory of evolution should be required that must explain both, the invariable conservation of knowledge through the passage of time, as well as sudden and profound changes in a relatively short period of time without having to resort, in order to do this, to changes that had broken away from the evolutionary niche in which knowledge would already be formulated. The adaptation is considered as a positive feedback: as a reinforcement of divergence. Possible reinforcement of divergence in respect to the environment: process of differentiation. The structural changes are explained in an evolutionary and theoretical manner due to the variation and selection. Therefore we must distinguish between functions and mechanism for the variation, and the selection, counting on three differences: variation/selection, selection/stabilization, and stabilization/variation. Evolution only results from the joint reaction of these. The variations are finely regulated by procedures that can hardly be described as causative. Causation consists in that variation and selection are not coordinated beforehand, but variation leaves selection to discretion. The variation may foresee selection, thus selection can only take place when resorting to variation, and varying it again.

In the following scheme we describe this state of affairs:

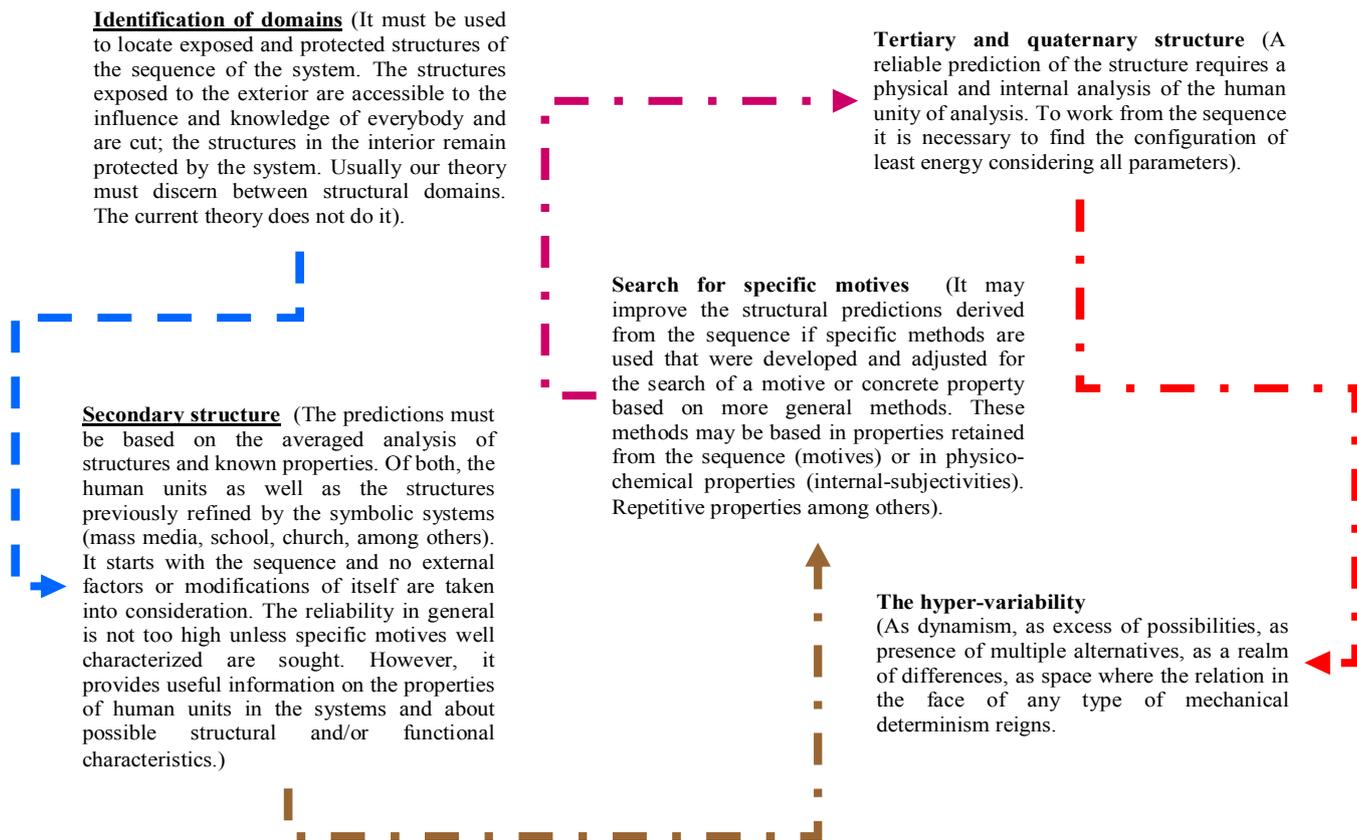


In the reality of the system of science, the methods themselves are only a moment in the evolution. The mechanism of variation only concerns single operations, and communicative events. The selection refers to structures, the prospect of re-application of the determinations of sense. Evolution is conditioned by the fact that events are not structures yet, and the structures are not systems yet. The variation depends on external impulses, while the selection of the appropriate theoretical material arises from internal processes. The casualty of the variation does not consist in its spontaneity, mainly inexplicable, but in that the system that evolves does not coordinate with the systems in its surroundings. The systems in the surroundings of the system are not units with a dynamic of its own, and if the events that these systems produce are convenient to other systems, it is mere casualty.

⁸ Understood as a living organism, i.e., within or attached to the body, simulate the research *in vivo* (organic).

⁹ The phenotype is any detectable characteristic of a structural, biochemical, physiological, behavioral, or social organism determined by an interaction between its genotype (the genetic content of an individual in the form of DNA) and its environment together with the environmental variation which influences the individual and encodes the individual's genotype.

Theoretical analysis model



Scheme designed by Perez Mayo, Augusto Renato

Something that in a typical system that is structurally determined appears as casual, it may be produced causally in its entirety. And this is not only true for scientific methodology but also for the theory of evolution. In the above another concept manifests itself: for the first time in sociology we submit the birth of a concept characteristic of the dynamics in modern societies:

Social Hipervariability or the emergencies these being understood as a result of changes in the symmetry of societies as the base of the complexity that characterizes them. Gondelfeld and Kadanoff, (1999), claims that the emergency is an essential characteristic of the complexity, the emergency is the appearance of structures and/or unexpected and inexplicable in complex systems. In addition, we incorporate for the first time the birth of a sociology that must consider in its theoretical corpus social genetics that emerges from the consolidation of the discovered genetic mapping. It is not possible to analyze with concepts, categories and fundamental theoretical premises such hipervariability, thus, it is necessary to build the fundamental guidelines of a new sociology: the Sociology of the hipervariability or the Sociology of Social Genetics. The social hipervariability generated by a society at risk it must be treated with theoretical corpus or paradigms of complexity or meta-sciences: Trans-disciplinary Methods. Letustake a look at anapproximatemodel:

As a manner of conclusion

At present, it is necessary to refine the structure with emerging methods of the most advanced sciences to be able to calculate the real coordinates of the human units and the existing

interactions. However, if a sequence sufficiently similar to ours is available, whose structure has already been refined, it is expected that the structure would also be similar: it could be assigned to our unit of analysis as an initial configuration of the other unit of analysis, and from there initiate the process of explanatory generalization from the organic theoretical system. Societies are characterized by their evolution and thus are dynamic; the theoretical architectures which are built to understand, comprehend or explain them must evolve, but it is also necessary the building or systematic definition of a new object of study. It is evident that the object of study is not equal because it is also evolving, it is dynamic. In view of this, several questions arise. What efforts within the current sociology are geared towards the definition of a new object of study? Is it possible to think that there only exist crisis in the theories and not in their objects of study?

REFERENCES

- 1973. La Lógica de la Investigación Científica. Ed. Tecnos, Madrid.
- 1975. La Investigación Científica. Ariel, Barcelona.
- 1978. Segundos Pensamientos sobre Paradigmas. Editorial Tecnos. Madrid.
- 1982. La Tensión Esencial. Editorial Fondo de Cultura Económica, México.
- 1983 Fin y racionalidad en los sistemas. Madrid. Editorial Barcelona.
- 1985 El amor como pasión. La codificación de la intimidad. Editorial Barcelona, Península.
- 1987. La Ciencia de la Sociedad. Ed. Anthropos. Barcelona, España.

- 1991. *Las semillas de la cibernética. Obras escogidas*. Barcelona, Gedisa.
- 1992 Sociología del riesgo. México.
- 1996 Introducción a la Teoría de Sistemas. Ed. Anthropos, México.
- 1996. Teoría de la sociedad y pedagogía. Editorial Paidós.
- 1998. Complejidad y modernidad de la unidad a la diferencia. Editorial Trotta.
- 1998. Lineamientos para una teoría general. Ed. Anthropos.
- 1998. Teoría de los Sistemas Sociales. Artículos. Ed. Iberoamericana, México.
- 2002. La miseria del historicismo. Ed. Alianza/Taurus, Madrid.
- 2002. Teoría sociológica moderna, Mc Graw Hill, México.
- 1973. La Lógica de las Ciencias Sociales, en Th. W. Adorno y otros: La disputa del Positivismo en la Sociología Alemana. Ed. Grijalbo, Barcelona.
- 1996. La Ciencia de la Sociedad. Editorial Anthropos. México.
- Alexander, Jeffrey C. 1987. "La centralidad de los clásicos", en Giddens, Turner y otros, *La teoría social, hoy*, Alianza Editorial, México.
- Bottomore, T. B. 1992. *Introducción a la Sociología*. Editorial Península, España.
- Brown, Spencer. 1969. *Laws of Form*. Londres, A Allen & Unwin.
- Bunge, M. 1980. *Epistemología*. Ariel, Barcelona.
- Campbell, D. F. Y., Stanley, J. 2005. *Diseños experimentales y cuasiexperimentales en la investigación social*, Ed. Amorrortu. Buenos Aires.
- Corsi, Giancarlo, E' Esposito, Y. C. Baraldi, 1996. *Glosario Sobre la Teoría Social de Luhmann*. Ed. Anthropos. México.
- Feyerabend, P. K. 1975. *Contra el Método*. Esquema de una Teoría anarquista del Conocimiento, Ed. Ariel, Barcelona.
- Foerster, H. 1981. *Observing Systems*, Seaside.
- Foerster, Heinz Von, 1985. En "El ojo del observador". Editorial Gedisa
- Giddens, Anthony, 1987. *Las nuevas reglas del método sociológico*. Amorrortu. Buenos Aires.
- Gondelfeld, N. and Kadanoff, L. 1999. Simple lessons from complexity. *Science*, 284, 86-90.
- Gunther, G. 1989. *Beitrage zur Grundlegung einer operations fahigen Dialektik* (4 Vols.), Hamburgo, Felix Meiner
- Izuzquiza, I. 1990. *La sociedad sin hombres*. NiklasLuhmann o la teoría como escándalo, Barcelona, Anthropos.
- Kuhn, T. S. 1975. *La Estructura de las Revoluciones Científicas*. Ed. I.C.E. Madrid.
- Lakatos, Imri 1998. *La metodología de los programas de investigación científica*, Editorial Alianza.
- Luhmann, N. 1993. *Soziale Systeme*. Francfort, Suhrkamp.
- Luhmann, N. Y., Eberhar Schorr. 1993. *El sistema educativo (problemas de reflexión)*, México, Universidad de Guadalajara/Universidad Iberoamericana/Instituto Tecnológico de Monterrey.
- Luhmann, Niklas Y De Georgi, Raféale. 1993. *Teoría de la sociedad*. Ed. Antropos.
- Maturana R. Humberto y Varela, F. 1989. *El árbol del conocimiento*, Chile, Editorial Universitaria.
- Maturana R. Humberto. 1995. *La realidad: ¿Objetiva o Construida?*. Fundamentos biológicos de la realidad. Editorial Anthropos. México.
- Merton, K. R. 1972. *La sociología de la ciencia*, compilación e introducción de Norman W. Storer (Madrid: Alianza), 2 vols. Trad. de Néstor A. Míguez.
- Parsons, Talcott. 1991. *Sistema social*. Editorial Alianza. España.
- Popper, K. R. 1983. *La ciencia: conjeturas y refutaciones*. Barcelona, Paidós.
- Ritzer, George. 1993 *Teoría contemporánea*. Mc- Graw Hill. España.
- Rodríguez, Darío y Arnold, Marcelo. 1990. *Sociedad y Teoría de Sistemas*. Editorial Universitaria. Santiago de Chile.
- Thuillier, P. 1975. *La Manipulación de la Ciencia*. Ed. Fundamentos. Madrid.
- TorresNafarrate, Javier, 1992. "El sistema educativo desde la perspectiva de NiklasLuhmann", en *Educación, Separata*, México, UG.
