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THE NEW SCIENTIFIC ORDER:
IDEOGRAFIC
AND
NOMOTETIC

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ABSTRACT

The scientific approach pursued by the paper "THE NEW SCIENTIFIC ORDER: IDEOGRAPHIC AND NOMOTETIC" sets approach to important issues in social science paradigms.

The purpose and the objectives.

The research goal is to analyze the complex of the scientific discourse. To achieve this goal the following objectives are proposed:

- Establishing communication structure verbalize as an element of the human action in social experience

- The review status of the action research;

- Defining the goal and nature of the scientific discourse;

- Analysis of the scientific discourse with the pragmatic purpose effectively.

The methodological and the theoretical scientific support.

The research process has been observed following the principles of the action which we considered very important for the scientific study:

- The rigorous rule of the conceptual analysis, it constitutes an imperative rule so as we have applied this principle to all instances of the effective scientific research,

- Based on the grounds that a conceptual analysis and ordered to be appealed and the principle of order. That this principle has helped to reclaim the analytical universe, the linguistic communication and understanding to establish a cyclical construction;

- The principle of rigor is a second element of the policy. From this point of view I put forward in research by a concatenation of all work immanent logic, this rule has been possible to establish the main strategies that have been taken by the scientific arguments;

- The "questioning" implies a problematisation that make scientific discourse really opened and problematical.

The methodological basis of our investigation is both of the philosophical tradition and contemporary philosophical investigations. In addition to traditional methods used in the paper, like - if the theory (methodological function thereof), business history and

logic, rising from the abstract to the concrete, systemic approach, the structural-functional model was appealed and the problematisation analysis of the discourse.

Scientific novelty lies in the following:

- Highlighting the factors that contribute to improving the scientific discourse

- Analysis of the scientific discourse in terms of a model for investigating the problematically discursively model and the problematical analysis of the discourse.

- Indication of the specificity of scientific discourse is followed by joint demarcation of the problematical analysis model, three concepts are essential in this model and they give operational consistency to the theoretical construct that it foreshadowed: problematical concept, and the concept problematically doubt situation.

- Establishment of concepts which varies according to certain dimensions and details of scientific discourse as for example:

- the concept of description that provides a certain state of facts found in the field of the scientific research is a descriptive condition for state of the problem

- the operational concept that shows all possible placement concept of the problem in relation to its two essential parameters: the presence of the absence of the torque problem categorical question and answer,

- the doubt concept is one differential, it is brand presence problem, it is often the outside sign to draw attention to certain peculiarities of the speech.

- Conceptual definable mathematical probability, but with applicability in the social sciences conferred by the significance of the probability rationality in the social sciences.

Keep highlighting the scientific originality argumentative strategies that define the essence of the scientific discourse, the rationality postmodern perspective treated in terms of mathematical probability which can applicable in the social sciences.

CONTENTS

In chapter I I treated epistemic argument that the specific issues should be sought in the invention of meaning, accepting that argument may create senses / meanings, not just order or express worlds. Epistemology is not only the demonstration, although it appears that the epistemic discourse is a privileged area in which to develop an argument organized demonstration is profoundly distinct.

The Argumentative discourse in its many updates have the following meanings: specific reasoning, practical reasoning, reasoning daily, is characterized by a number of specific structural features of micro and macro. The pragmatic argument is a discursive activity, because a statement has to use for a conclusion C (or to argue for C through to A) means to cause the recipient to conclude.

The Epistemological constructs based on a discursive rationality become the sources of the developments that occur in cognitive abilities as epistemic –logical explanations which can be used as benchmarks for training and orientation theorists from their research. For illustration, we mention the contributions of Thomas Kuhn in understanding the possibility of discontinuities in theoretical research. [1]

The conceptual fabric of his place in the scientific explanation is very complex, so extensive, the large number of related concepts more or less directly with the explanation, and intensive, with many of them ambiguity and polysemantic . Many terms are associated to the scientific explanation expresses a mindset focused on rigor, necessity, universality, in which attributes of the measurement and repeatability are the highest price: the law, concerned the predictive determinism, the prediction, the inference, the quantity, unit methodological explanation nomological -deductive. A second set of the concepts corresponding to different approaches in the philosophy of science, focusing on: intention, purpose, teleological determinism, chance, practical inference, analogy, qualitative methodological pluralism, understanding explanatory. The spirit immediately associates the concepts of the first class hard sciences and the

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[1] Th. Kuhn, *Structura revoluţiilor ştiinţifice*, Editura Ştiinţifică şi Enciclopedică, Bucureşti, 1976., p. 42

weak social and human sciences, repeating such a brutal distinction that gave rise to controversy already classical epistemological (the opposition between Erklären and Verstehen). There are also a number of intermediate concepts that balances and unifies oppositions: trend setting, , probability, induction, hypothesis, inductive-probabilistic explanation so.

In what follows, it will attempt to clarify the conceptual idea to allow the argument that scientific explanation is not in opposition to the deal, but reinforce each other and therefore they can not serve as criteria for dividing the whole science.

I Neacsu stops on several meanings of scientific explanation. It would seek: a true statement about something, about the model dependence to law; the ambiguity between events / classes, factors that allow changing the system state, necessary and sufficient reasons, grounds, explicit relationships between parts of a whole, the causes and the motives of the action, etc..

Therefore, specific explanation is given or logical element (inference, deduction, sufficient reason, etc..) Or the ontological (concerned, purpose, reason, intention), epistemology (reason, truth, justification) or semantic (meaning, definition). All these different expression levels of known ways.

The scientific criteria, sources of knowledge, building arguments, demonstrations, explanations, their validity, hypothesis testing and the consequences were always taken up and debated issues in philosophy of science. If we were to seek a common point, these issues might be found in the relationship between logic and science. This report was exaggerated sometimes unilaterally, considering that the only concern of philosophy of science would be to study the logical steps explanatory conceptual system and the various branches of science. Aspects of language have opened the way not only to study the production of knowledge but also to that of her presentation to an audience more or less informed. Argumentative speech (in effect, inductive or deductive), depending on the subject and field), the demonstration (predominantly

deductive), the alternative explanation would be in a specific logic, but rhetoric and se[2]miotics.

Against inductive type approaches have raised many objections, however, induction remains an extremely useful experimental research in various fields. Logical positivism (R. Carnap) gave induction of an essential in the effort background knowledge on experience. Fr.Bacon's footsteps, J. Stuart Mill synthesized five basic methods of inductive investigation of causal laws: consistency method (different situations S1, S2 ... in which a phenomenon x, sharing a single antecedent X, hence induce causal link between antecedent phenomenon X and X). difference method (S1 contains, besides other, antecedent X, S2 do not contain the rest is identical. Phenomenon x appears only in S1. It induces that X is because of x) method of concomitant variation (in S1, S2, .. . The density of x varies out in accordance with changes in intensity of X), the method remains or residues (in a causal complex, known part of the causal relationships and lead to law and consistent causal antecedent) combined method (which requires other methods).

A trenchant approach offers K. Popper theory in "research logic". From the first pages, the concept is opposite to the dominant deductive theory: "My design, which will be developed below, is opposed to all attempts to net inductive logic, it can be characterized as a deductive theory testing method. In addition, standards for validation of scientific explanations vary, depending on the general theoretical positions of those who make them. C. Hempel and P. Oppenheim develop these requirements with greater logical rigor: the formal condition: explanandumul explanansului be the logical consequence of (utterances that express laws and initial conditions lead to the conclusion that express wording) physical condition (empirical) propositions what is

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[2]Neacsu, I., Valori ale explicaţiei în logica didactică şi logica ştiinţei, în Revista de pedagogie, nr. 1, 1980.

[3] Dima, T., *Explicaţie şi înţelegere*, Bucureşti, Editura Ştiinţifică şi Enciclopedică, 1980, p.63

[4] Brathwaite, R.B., *Scientific Explanation: A Study of the Function of Theory, Probability and Law in Science,* Cambridge, Cambridge University Press, 1955, p. 132

[2] Popper, K., *Logica cercetării* (trad.), Bucureşti, Editura Ştiinţifică, 1981, p.75

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explanansul be true (for "false implies anything"), in addition, be tested empirically explanansul

GHvon Wrigt varies standards, stating that if the causal explanation depends as regards their validity, the truth of logical connections instead teleological explanations do not depend directly on it.

Chapter II will deal to the typologies of the methodology in the social research, from the meaning conferred term methodology used in the argument within the paradigm of social sciences. Social research methodology (science methodology) is thus identified with a logical scientific analysis of social reality is based on a priori theoretical assumptions. The structure of social research methodology includes the following classes of components:

a) all theoretical principles theoretical concepts representing referential facts, social phenomena, social relationships and processes, principles translated into an approach to social reality. Classical sociological theories of M. Weber, E. Durkheim and V. Pareto developed and specific methodological foundations.

b) All methods and techniques for collecting empirical data, ie operations that are defined and captured messages reality. Observation, survey, content analysis fall into this class.

c) Assembly techniques and empirical data processing procedures, ie ordering, systematization and their correlation.

d) All logical processes of analysis, construction or reconstruction of the theory based on empirical research results in developing the types, descriptions, explanations or predictions.

There are different criteria to classify as methodological guidelines outlined in the social sciences leading to the default classification Vlăsceanu .concerning to Lazar, the principal criterion by which classify methodological guidelines is the theoretical principles which have generated a certain approach to social reality . They acted as methodological principles. So one criterion is theoretically relevant methodological (research to practice). According to the same principles have proliferated more detailed guidelines, so that all in relation to them, but in opposition, to develop others. Thus, philosophical and sociological positivism generated certain principles of social

[3]research, developing methodological practices "objective", namely positivism, empiricism, structuralism and systemic analysis. In opposition to these practices have developed detailed guidelines interpretative sociology from M. Weber, GH Mead's symbolic, and phenomenology and ethno methodology.

If the methodological guidelines 'objective' main concepts used are explanation and prediction based on detection of cases, the methodological guidelines of interpretive rather, understanding and interpretation of subjective meanings of behavior by considering the purposes and reasons for action. In the latter case we are dealing with an intentional explanation, teleological type (behaviors are explained by future conditions, while causal explanation refers to determining the current status of the previous state).

Chapter III presents a historical study of specific research methodologies of social science discourse. Will be the main guidelines and practical connotations conferred concepts of objectivity and subjectivity, structure, social action function in different scientific paradigms. The aim of this approach is to highlight the complexity of meanings conferred research method according to the report established between researcher and research systems.

Relative Consistent with these principles, have developed several guidelines for social research. Of these, sociological positivism, and empiricism operational approach is characterized by increased empiricist, inductive, based on empirical data aggregation at the individual level. Furthermore, structural analysis, functional analysis and systemic analysis are consistent methodological practice principles "objective" research and theoretical models postulating but to explain the empirical reality and therefore have a deductive character and operating data that characterize the social system as a whole .

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[6] Brathwaite, R.B., *Scientific Explanation: A Study of the Function of Theory, Probability and Law in Science,* Cambridge, Cambridge University Press, 1955,p.130

[7] . Wright, G.H. Von, *Explicaţie şi înţelegere* (trad.), Bucureşti, Editura Humanitas, 1995,p.67.

[8]Muchchielli.A. Les Methodes Qualitatives, Paris, Puf, Ed. a II-a,1994, p. 146

[9] L. Vlăsceanu, *Metodologia cercetării sociologice. Orientări şi probleme*, Bucureşti, Editura ştiinţifică şi enciclopedică, 1982\ p. 41 – 46

Chapter IV will cover typologies interpretive methodology starting from Max Weber's interpretative sociology

The definition of M. Weber, sociology is the science concerned with understanding and interpreting social action. The Key concepts of the theoretical framework is social action, subjective meanings and interpretive understanding or comprehension. Significance of individual actions can be analyzed in two ways, but in any case but it was not an entity refers to "objectively" true metaphysical sense. First, the term refers to the actual meaning invested by an actor in a specific situation or the meaning attributed to average a plurality of actors in a similar context. Secondly, subjective meaning may refer to an ideal type, theoretically designed and assigned a hypothetical actor in a given type of action.

understanding (comprehension) subjective meaning of action is the task of the sociologist. M. Weber argues that it should be, as in all sciences, valid, reproducible. Mechanisms that are understandable to some significance must be clearly stated. Understanding may be direct, descriptive, or explanatory first, second. As a direct understanding of the mechanisms, Weber lists rational understanding, logic or empathy.

Although the idea of admitting such a sociological statistics, M. Weber a deemed valid and appropriate only when referring to phenomena and interpretation of subjective meanings saturated. "Uniformity statistical empirical generalization, says Weber, is the sociological generalization, which is understandable types of action, when they can be seen as manifestations of subjective meanings assigned to a course of social action.

Another paradigm that has marked the social science discourse is operating with symbolic interactions as the concepts of: action, interaction, social situation, meanings, symbols, rules, social role, acquisition or adoption of role (role taking). In 1938 H. Blumer used for the first time the term "symbolic interactivity" to characterize the influences that had reference psycho sociological Mead's conception.

Precisely because definitions are not univocal, social interaction involves negotiating meanings to reach common understanding. "Social action is the result of transactions or exchanges (...) the meaning (...). hifts resulting from these transactions

or habitual modes of action, customs, rituals and routine standardized rules, ie social institutions. " [4]

H. Blumer, Mead's continuer, stipulates the following basic premises of symbolic interactions: People relate to things on the meanings they had for her, meaning is created (derived) in the social interaction, meanings are altered interpretations used people in concrete social situations.

In addition to these current was observed and ethno methodology which is a type of social reality investigation focusing on the ethnographic aspects of language, investigating the interactions between social actors and those who are investigated, as well as common knowledge, that to the meanings involved in everyday actions.

Scientific project of ethno methodology is to examine methods and procedures common, ordinary people used (Lay methods) to accomplish their daily life activities. As a research method, term ethno methodology refers to study how people produce meanings common-to-self-understood (Taken-for-granted) and supporting the social order. The researcher is interested in how to construct common definitions of social situations, approved by members of a community. Generating theoretical concepts to the practice of investigation starts from the idea that common language describing social reality, but one and is the same time.

Ethno methodology used as methods of data collection participatory observation, focused interviews (focus groups) and, especially, experimental methods.

Phenomenology is the synthesis of contemporary sociological "sociology interpretative" proposed by Max Weber early last century, the "phenomenological method" developed by E. Husserl and symbolic interactions theory advanced by H. Mead and continued, among others, by H. Blumer. Indicating that the phenomenology sociological outline coincides with full interpretive methodological practice, regarded

10 Boudon, R. (coord.), *Tratat de sociologie*, Humanitas, Bucuresti, 1997,p 234

11 Max Weber. Caracterul "obiectiv" al cunoaşterii în domeniul ştiinţelor sociale şi politice (1904). În vol. Teorie şi metodă în ştiinţele culturii. Polirom 2001. Pp. 9-66.

12 L. Vlăsceanu, *Metodologia cercetării sociologice. Orientări şi probleme*, Editura Ştiinţifică şi Enciclopedică, Bucureşti, 1982, p. 101.

13 H. Blumer, *Symbolic Interactionism*, Prentice Hall Inc., New Jersey, 1969.p. 147

as an alternative methodological practice "targets." As such, constructs social sciences are, somehow, two level constructs, constructs that constructs developed by actors on the social scene. While research in natural sciences researcher defines his or observational field, select and interpret facts himself, dates and events, understood as "objects" of investigation which has a "conscience" of involvement in research, social science researcher operating with second-degree constructs, constructs, respectively (theoretical) about objects (empirical) have been pre-selected and reinterpretation of social actors in their everyday life.

Considering the irreducible specificity of social science and bearing in mind that it is based on subjective interpretation of the meanings of human actions, the question arises to what extent social science is able to reach objectively verifiable statements. In Schutz's view, objectivity should be the main attribute of scientific knowledge in sociology and is achieved by: applying rules specific theoretical construction of any empirical science and the development objectives of ideal types. Construction of models of rational human actions are common in social science, consisting of typical mistake in developing rational models of irrational human activities. Also, the models can be made common knowledge irrational actions rational (ie rational basis for decisions by sole reference to feelings).

Chapter VI and VII treat connotations conferred concept of rationality in the postmodern, from the speech analysis scientifically.

Postmodernism can be thought of as primarily a movement of revolt against rationality. Postmodern philosophical sources are nihilistic philosophy from the late nineteenth century (whose main representative is Friedrich Nietzsche), twentieth-century phenomenological philosophy (Husserl, Heidegger), French post-structuralism (Foucault, Derrida) and post-analytic Anglo-Saxon (Rorty). Moreover, the narrow, postmodernism and post structuralism are synonymous.

The central idea of postmodernism is that the problem of knowledge is based on what is outside an individual.. Because deconstruction is dedicated to the highest degree of postmodernism, its name was given it without hesitation. Thus, he said it was "in its sharpest and most acute deconstruction" or "deconstructionist.

Deconstruction is one of the relativistic theories of postmodernism that made them being specific. For deconstruction, discourse is a complex cultural process, always based on the interrelations between itself and other texts.

Jacques Derrida in The writing and difference (Universe Publishing, 1998) identifies three sources of his theory: replace concepts of metaphysics, being and truth, the philosophy of Nietzsche, with the game and sign interpretation, end the concept of consciousness itself, present itself, the subject consciously, through psychoanalysis, the end of onto-theology, metaphysics (the determination of being as presence), by Heidegger's thought.

Conceptual architecture, significant dissolution of a metaphysical system deployment coincides with text to be deconstructed. Consequently, the total concrete shape and meaning (and / or meaning), the structure becomes "formal unity" their, ie a place where meaning has been banished. The concept of rationality thus obtained would show himself "articulate" and "revealed" in three ways:-particular rationality, , and rationality, critical disclosure.

Three poses of rationality that supposedly take place "overcoming epistemology" (overcoming epistemology) actually correspond to weak model of rationality promoted knowledge today.

chapter VIII will presents relationship between meanings conferred on the concept of scientific rationality by postmodern discourse and mathematical probability in the speech to highlight the implications of probability theory has application in social science paradigms.

In connection with certain sectors reveals universal regularities in them being the hallmark of need. In the Dictionary of Philosophy (1978) is given the following definition (p. 490) "means the qualities that need a national basis, resulting inevitably in the essence of things, the laws of development. Chance designate attributes and relationships that have an external basis, it is therefore essential.

A. Cournot distinguish between logical and natural necessity. Retain only logical that the need is more understandable than natural: theorems, and only as necessary.

Must therefore distinguish between different types of need. M. Marković distinguish betwee[5]n:

1.Necesitatea logical   relative to a formal system, independent of any particular type of experience - analytical and a priori.

2. Empirical necessity (it relates to particular segments of reality and is highlighted by specific types of experiences, is a synthetic and a posteriori)

3. Physical need (the particular case of 2, refers to physical objects - that there are objective and can be localized in space and time and having properties of mass or energy) ..

In time, within different linguistic and epistemological paradigms have emerged concepts as "chance", "quota", "maybe ..."," chance, "luck", "fate", "chance", "random "," bad luck "," accident "," case ", etc..

Their main characteristic is that it refers to a lack of knowledge. Underneath lies a reference to a particular type of phenomena that are characterized by impermissibility .

How and when is random? Kolmogorov distinguished three modes of intervention in pursuit actual processes:

1. Deployment process is subject to rigorous laws, which define it uniquely on the initial conditions, but these initial conditions are random, meaning that may not be exactly reproduced in a new revival of the experiment.

2. Conduct of the entire process is random (Brownian motion)

3.petroleum the timing of the process can occur simply a fundamental law, but it may be complicated by random perturbations acting entire process.

The first who was willing to recognize a hazard theme was ontically A. Cournot (1802-1877). His theory of random object is in the heart of his conception of

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14 Husserl, E., „Fenomenologie. Articol pentru Enciclopedia Britanică, în vol XVII (1927). Prima variantă", în Criza umanității europene și filosofia, Editura Paideia, București, 1997.

15 Lyotard, J.-F., *Condiția postmodernă*, Editura Babel, București, 1993, p 85.

16 Jacques Derrida, *"Scriitura și diferența"* (Ed. Univers, 1998), p. 18-20

probability. Cournot's basic assumption in support of the theory is that the universe exists independent causal series of events. Effect causes are amortized over time and space "A man is a closed system, a spark, a small vortex (turbillon) compared with the world or other people away in time and space."

Another approach is given by von Mises (1919). We adapt the definition to particular strings announced, consisting only of 0 and 1. Von Mises calls the axiom of chance (randomness, Regelosigkeitsprinzip).

Definition. Be a string and. Random string is called (v. Mises says that forming a team (Ensemble, Kollektiv)) if:

There are as $a_n \in \{0,1\}$ $H_n = card\{k \le n \,|\, a_k = 0\}$

For any system of functions ("rule of game") substring satisfying a property where

$$, f_n \quad \mathbf{R}^{n-1} \to \{0,1\} \quad (a_{n_k})_k$$

$$n_1 = \inf\{i \,|\, f_{i+1}(a_1, a_2, \dots, a_i) = 1\} \,\dots,\, n_{k+1} = \inf\{i > n_k \,|\, f_{i+1}(a_1, \dots, a_i) = 1\}$$

Operation of a new substring extraction of the oldest is called "place selection" (Stellenauswahl, like selection). For example,

$$f_{n+1}(a_1, a_2, \dots, a_n) = 1$$

$a_n = 1$ and 0 if $a_n = 0$, the selection rule is: "to select only one's successors."

The Definition above raised a wave of criticism. Rechenbach H. (1935) noted that the concept of community in shaping not only the kind of randomly met "repeated experiments under identical conditions" which is an empirically established fact that the frequencies are stable, but not found in other situations where random one first type of random overlaps a deterministic trend (weather) or where the frequencies are not the

same in all substrings extracted by "love selection (traffic accidents are frequent on [6]Sundays). Teams in place, he proposes the concept of "normal strings.

K. Popper remove this shortcoming by replacing the concept of collective string "absolutely free". Essentially, a number that is not absolutely free - free for all n and n - free means that it is insensitive to "selections like" private type , ... , , , , which are given in advance.

The advantage is that such strings "absolutely free" algorithms can be built. Empirically, they are "more random" than those of von Mises, because they are irregular from the outset (in concept - liberty can be given and finite strings). Popper called them and attempts to show that their case can waive the limit axiom. His method entails a nuanced definition of "random" two-strings are more random than the free one-off, but "less random" than the 3-free, etc.. A third idea of formalizing the concept of "random string" is given by Kolmogorov, from the notion of recursive function and computing effort. Kolmogorov proposed the following definition: a string is random, if only describe the process is simple enumeration. A process description is a recursive function, recursive functions are countable set, so that "almost all" strings of 0 and 1 are random.

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17 Baynes, K., Bohman, J., and McCarthy, T. (eds.), A*fter Philosophy. End or Transformation?,* The MIT Press, Cambridge, Massachusetts, and London, 1996, p. 231- 237

18 Ramsey, F.P. – *Truth and Probability,* în Vol. / 4 / *'Weight or the Value of Knowledge,* ed. N.-E. Sahlin, British Journal for the Philosophy of Science 41: 1–3.