Special article

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The epistemic characteristic of psychiatry

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SENSE OF APPROACH

Contemporaneous English literature on philosophy of medicine (Ledermann, 1986; Wulff, Pedersen and Rosenberg, 1990)[1] has informed on the scarcity of epistemic reflection in this type of knowledge and in our times. And this is more significant, given the varied origin of sources contributing to its unfolding and the distance between them.

The resort of all epistemology, according to Laplander in his *Vocabularies de la philosophie,* refers to the «critical study of the principles, hypothesis and results of science, aimed at determining its logical origin, value and reach.» In a more synthetic way, Piaget (1967)[2] understands it as «study of the constitution of valid knowledge», that is, resort to normative aspect of this knowledge, to its plurality according to different sciences, to the diachronic dimension of the process of knowledge and, of course, to the formal and experimental validity conditions and to those of the approach, both in regards to the object and to the subject of knowledge.

Philosophy of science, on its part, stresses the explicative order and the original thinking with which each scientific discipline is subjecting its premises and conclusions to a methodical strictness, that has been shaped in several ways[3].

To understand the history of these vicissitudes, it is sufficient to remember how, according to Aristotle's criterion, science is a type of knowledge through causes that makes it possible to access that which is universal and necessary. Galileo, on his part, offers functional, mechanicistic and mathematical perspectives having clearly different sign. However, the positivism of Comte and neopositivism, as a derivation of the former, will postulate empiristic as well as mathematical and symbolic logic type radical demands. The image of science as etiological congruent and linear knowledge was recently and subsequently shown to be in crisis. This has led us to open up to perspectives of a more complex view of reality, margined from the Greek era, as pointed out by Gadamer (1997)[4]. The complex phenomena are, above all, non-linear and the relationship between cause and effect does not need to be strictly proportional. The chaos theory and that of the fuzzy sets will be opening way in the order of physical science itself. There is nothing special in the fact that the contributions of phenomenology, of hermeneutics, of dialectics and many other personal approaches of human sciences open up such a special field as that of the so-called complex psychology, where, among many other examples, the fractal theory will facilitate the understanding of properties unknown up to now in processes such as sensorial integration, or formation of needs, as stated by professor Frederic Munné (1995)[5].

The work of Kuhn (1975)[6], *La estructura de las revoluciones científicas (The structure of scientific revolutions)* opens up a field of debate to all the situation of science today, examining «the accumulative conception of scientific progress and the postulation of paradigms and revolutions of science».

On his part, Barreaud (1971)[7] has encoded the terms of a renewal of the philosophy of science in the impact produced by the crisis of foundations in mathematics and physics (Russell); or by the attempt to measure the reach of scientific propositions and conduct a formal analysis of the conditions of its legitimacy, using logic, linguistics and mathematics; or by invoking the conclusion of the regional epistemologies, that aim to examine the problematic of the principles and methods of each science. And even following the road of the epistemologic historicity, to see how scientific theories are formed and evolve[6]. And finally, on the idea of Foucault (1990)[8] who has resorted to archeology and theoretic genealogy, above all in human sciences. All of this, parallel to that attempted by Piaget, who examined the psychological conditions by which the acquisition of knowledge flows.

Thus the fields of epistemological examination that could be consulted in our times to judge the scientific knowledge

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at present are very different. The contributions of Tomas Kuhn (1962), Phillip Frankl (1974), Karl Popper (1975) and Paul Feyerabend (1975) have led philosophy of science along new courses.

Kuhn begins with the distinction between a science in normal time and in revolutionary time, especially examining the junctures in which there is a change of paradigm in the tasks of a science. As is known, he concentrated his effort on the notion of paradigm, that he defines as «a constellation of beliefs, values and techniques, shared by the members of a certain scientific community». A paradigm, then, is an essential requirement for every scientific project, facilitating an operable scale governed by it, so that the scientific observation does not dictate unique and precise solutions that explain all the known facts but does so only within a certain framework. Furthermore, this framework can be revisable in a history of scientific process, since if the first stages in most of the sciences were antiparadigmatic, resolving in a conceptual chaos and in conflictive views, the acceptance of a paradigm by most cultivators is going to become the necessary approach of their problems, until it can be reviewed and substituted by a different one. And in this way, each new and radical theory does not represent an increase in the existing knowledge but rather a change in the basic rules that make it necessary to completely review the fundamental suppositions of the previous theory.

From another still more radically relativistic approach, Feyerabend[9], in his work *Again Method* (1975), would think that science is not governed by a rigid and immutable system of absolute principles, but rather by an anarchical desire where the violation of the basic rules is not an accident, but a need for the progress and an effect of creativity.

In a more hued way, Popper would consider that it is characterized not so much by the unanswerable stability of its principles but precisely by the permanent falseness of its hypotheses. The history of science is this, a permanent battle between theories where nothing survives by itself. Popper's theory of falsification excludes too many things that the scientists want to maintain, such as, for example, the theory itself of causality or the theory of evolution.

PSYCHIATRY AND ITS UNIQUE EPISTEMICS

We should approach the analysis of the epistemic condition of psychiatry, where both the scientific model that may be considered as the framework of its development, and the critical examination of its scientific validity and, of course, the argument that justifies its methodology for its better constructive activity are in play by considering the changes and flow of an epistemology and a philosophy of science that we just mentioned.

We will call metapsychiatry the reflection that tries to discover all these methodological suppositions on which our science moves. Needless to say, we aim to discover in it a scientific knowledge having a uniqueness, under which many polemics are found, although a constant task dedicated to this task has not been confirmed. Kuhn (1975) mentions the existence of knowledge affected by paradigmatic instability, in which, even though its cultivators do not perceive it, the subject of its rationale must be approached.

The fact that we live in an era of competitive concepts and that in the scope of psychiatry, different orientations, that sometimes play a dialectic of extremes, remain constantly in contrast, once again fertilizes the crisis in which psychiatric science lives, affected by the development of natural science as by that of human sciences. Psychiatry, as scientific and clinical setting, does not evoke the image of an essentially homogeneous construction but rather the plurality of ingredients and positioning of those that are a multifaceted knowledge and sometimes even conflictive. And this, for several reasons, can be synthesized in the following way:

- In its unfolding, different macroparadigms are practiced. If Kuhn (1975), as we have said, considers the paradigm as «code of interpretation and combination of theories and models of a scientific field», it can be stated, without any doubt, that psychiatry has been practicing a diversification, perpetually being installed in the scope of sciences that we can mention as multiparadigmatic. Thus, in it, the viability of this pluriparadigmatism must be unavoidably considered, given the distance that is produced in its bosom between these different approaches, since, as we have stated, it participates in those paradigms characteristic of biological sciences and in those others that correspond to human sciences. When Engel[10] postulates the biopsychosocial model, he is denouncing this plurality, and with it, the possibility of using Von Bertalanfy's theory of systems, to fit the pieces together.
- The second denunciable fact of this pluralistic vocation is that suggested by Villagran and Luque[11] when they state that «under the term psychiatry, a combination of cognitive and non-cognitive activities whose object is mental disorders is grouped.» In this sense, «psychiatry is articulated in a triple slope: *technical* (as branch of clinical medicine that gathers the combination of procedures to relieve the patient), *technological* (as it groups the combination of resources needed to develop and progress in their treatment) and *scientific* (in regards to the combination of knowledge on the nature, genesis and development of mental diseases)». The thoughts of Michel Foucault[8] serve for this deep reflection. He approaches «the different ways in which man has developed knowledge on themselves in our culture: economy, biology, psychiatry, medicine and penology, whose main point does not only consist in accepting this knowledge as a given value but in analyzing these sciences as specific *games of truth,* related with techniques that are also

specific, that mankind uses to understand themselves». He unfolds the analysis of four principal types of these technologies, which in the case of our science, occurs through the technologies of the self.

— There would be another fact to be mentioned that is capable of denouncing the plural sense that we are herein attributing to psychiatry. I am referring to that meant by the postulation of its object, one of the most delicate points in its definition, since formulation of psychiatry that we receive from Ey[12], as «branch of medical science whose object is mental illness», seems easy, although as Ey affirms, it is not at all easy to define the notion of mental disease with sufficient clarity. This occurs not only due to systematic reasons of distinction between the organic and mental but also by those that affect the application of this label to a complete collection of different mental conditions that are generally included. To mention a specific one, mention can be made to personality disorders, which, while not being diseases themselves, have, however, a special relationship to them. And even more, at a higher level of discussion, the map of different ideas and exceptional posture of antipsychiatry. The conception of finished profile entities or reaction against classical nosography may serve for a new indicative of plurality.

— With a historical perspective that aims to mark the future of psychiatry in the last two centuries, Georges Lantéri-Laura[13] made a brilliant consideration of the periodization of the paradigms in modern psychiatry. In the first place, he states that since the end of the XVIII century until the middle of the XIX, the different European psychiatric traditions seem to coincide in the postulation of a «single and special affection» characteristic of our field, that Pinel called «mental alienation». If this period began in 1793, when the Parisian commune named Pinel for the Hospicio de Bicêtre, it can be considered that it ended around the year 1850, with the occasion of the article of Falret, where all «monomania» is denied.

A second model, for Lanteri-Laura, is that which forms around *mental diseases* that consecrates special pathological designs, understood empirically and resistant to any unifying criterion. The chronological scope of this conceptualization goes until the end of the first quarter of the XX century, when the Swiss Congress of 1926 was held, in which Bleuler defended his version on the block of schizophrenia.

A third model is that suggested on the occasion of this dissertation of Bleuler, when, according to Lanteri, it can only be truly understood if we use the category of *psychopathological structure*. Such structure is developed, on its account, by Gestalt, Goldstein, phenomenology, and psychoanalysis in the decades of the 1920's and 1930´s. The author calls this model «paradigm of large psychopathological structures». And he states that its duration was maintained until 1977, with occasion of the disappearance of Henri Ey. Both Ey and Minkowski were, in their times, postulators of this idea of structure.

The distinctive characteristic of a possible present paradigm is played by Lanteri-Laura in regards to a neuropsychiatry that unendingly debates the subject of «cerebral sites» and «cytoarchitecture». The controversy between topologists and globalists and their disciplinary consequences illustrate the former while cytoarchitecture, its identifications, «its thalamus-cortical systematization and relationship between histological structures and physiological function» illustrate the latter.

It is thus understood how this great historian of psychiatry dedicates the second part of his work to the successive tour of the concepts of mental alienation, mental diseases, psychopathological structures and even the present version of the syndromic.

— However, so that this vocation that we have seen exemplified in plural is seen even more transparent, it is worthwhile considering the significance of the most outstanding problematic cruxes than the epistemic judgment that psychiatry denounces. The existence of epistemologies from very different theoretical sources and the controversy between models of unequal impression can be authentically verified in them. And, of course, that of psychotherapeutic, echotherapeutic and pharmacotherapeutic exercises, also extracted from their respective sources.

In the work that Jorge Tizón[14] dedicated to the *Introducción a la epistemología de la psicopatología y de la psiquiatría (Introduction to epistemology of psychopathology and psychiatry),* four epistemologies are listed as derivatives of empirism, of phenomenology, of the dialectic and of constructivism. Equally, the medical model and varieties of psychological models as well as the dynamics or conductions ones, etc. are reviewed and the existence of mathematic models is mentioned as well as another type of not as yet systematized models, such as those from experimental biology, communicational and linguistic models, the Piaget's logical model, cybernetic model, sociological one, etc.

In conclusion, it can be stated that the sense of this pluralistic sign, that we have denounced in psychiatry, is not only exclusive of it, but as Prigogine[15] states in his work *El fin de las certidumbres (The end of certainties)* «the study of complex systems will be the main ingredient of the science of the next century. Since the new science will not be limited to simplified situations, but rather presents us up against the complexity of the real world».

THE PROBLEMATIC CRUXES

I am going to make a summarized and successive discussion on the problematic cruxes that put into play the rigo-

rous version of scientific psychiatric knowledge: *a)* in the first place, an attempt is made to understand the role of subject-object in the psychiatric speech; *b)* next, reflect on the sense that scientific knowledge of the person or of the individual; *c)* explain the duality of psychiatry as systematic and clinical knowledge; *d)* assume the descriptive and explicative condition simultaneously, that our knowledge requires, and *e)* and, finally, solve the scope of the reductionist and antireductionist tendencies that the destination of psychiatry appears to pursue.

Objectivity-subjectivity

The matter is categorically posed, as indicated by Tizón[14], by the fact that it occurs in all human sciences, in which «having man as the object and being elaborated by man as a subject, imbricate subject-object to the maximum». That is why, according to Tizón, it is necessary to distinguish from the beginning «between individual subject focused on oneself or on ones own action *(egocentric subject)* source of all type of deformations and *subjective* illusions, and the *decentered subject or epistemic subject* who coordinates his actions with himself and with other scientists». It is clear that the first approach to the problem is then played in this decentering process. For Tizón, knowledge of human facts has an immediate sense, since they belong to a system of acts that may be evaluated by the individual or by the society itself. The risk consists, as it is said, in mixing this prescientific view with scientific knowledge itself.

The debate on the subject is focused by the mentioned author, analyzing the tendencies of egocentrism or postulation of conduct itself as a universal pattern, But, clearly, the correct solution to the crossroad must pass through the decentering process, often based on comparative methods.

The derivation resulting from the distance between subject and object, as source of psychic life, is perhaps the richest pathway that goes from Plato to our times. The contemporaneous approach of dynamic categories, such as that of structure or form, has been, for Ey[12], capable of supporting «the integration of the subjective and objective», and also has been with gestaltism (Meinong), structuralism (Brentano), phenomenology (Jaspers) and biopsychology (Von Weizsäcker).

In this regards, we can use the fine reflection made by Lain[16], when he discovered the pathway to combine «systematically objectivization with co-execution and co-execution with objectivization,» as a way of saving the subjective and objective involved in the medical relationship. For Von Weizäcker, this relationship is not a simple subject-object relationship but also the intersubjective and interobjective condition, which he has called *Weggenossenschaft,* that Lain translated as «comradeship on the same path.»

Thus, it is necessary to bet on the principle of objectivity of science[17], even when the individual is not understood only as an object among others, since, as Mardones[18] indicated, «based on the individual's structure, it is somewhat objective and subjective, it not being possible to emphasize the individual's condition of object.»

Knowledge of the individual

The problematic crux that looms around the possibility of scientific knowledge of the individual, which immediately seems to contradict that postulate of classical epistemology, according to which science is always knowledge of the universal, is also representative.

It was also Tizon who dealt with explaining the statute of scientific knowledge of the individual. This brings an immense volume of stumbling blocks and risks, that must be avoided. His argument is based on the fact that the individual cannot be denied an objective consistency. If there is behavior and significant behavior, Tizon argues, we must question if it is possible for scientific knowledge to act on it, and if it is, what should be the statue and modality of this knowledge.

Tizon stresses that science can never «reject contact with the facts and its occurrence». And in this sense, this contact is that which is designated as clinical knowledge. Thus, «clinical knowledge of the individual, as scientific knowledge, and scientific knowledge of the general may be compatible».

The individual, as indicated by this author, is overloaded with variables that are difficult to isolate scientifically in experimental investigation while interpretation is used in clinical attention, even when it is not rigorously based on demonstrated data.

The double role of psychiatry

No one who participates in the psychiatric work setting can avoid recognizing the existence of a double slope of activity in it. In that considered as basic, the science profile is designed and, in some way, entails a body of knowledge prepared to fact the phenomena of mental disorder, whatever its types and levels. This confrontation cannot be more than that of the analysis of its causes, especially understood in its reference, these being either those that are called efficient or those that are considered final.

From this supposition, psychiatry fulfils in its own way some of the classifications that Barraud[7] indicates as characteristic of the scientific spirit. One classification is that which reveals positivity, where theory of measurement is installed, that makes operatory definitions possible and that has provided such a brilliant stratagem to physiometric and psychometric instrumentation. Another is that of rationality, with that precious expression of Descartes, who symbolizes it in the desire of the scientist to become «owner and

possessor of nature» and knower of the laws that govern its activity. And, of course, that of objectivity, whose coded values Bachelard uses to refer to the thing, guidelines and cause of why and how. One more testimony could be that offered by Rojo Rodes[19] when he speaks of the structuring of knowledge in psychiatry, with the development of a classification system, of nomenclature and of conceptualization of mental disorder.

Clinical activity is found in the other activity pole of psychiatry. It is a foundation of knowledge. It means using the meeting between the patient and the clinician to acquire information produced by the anamnesis and different examination, that can be interpreted and then used in the treatment. Thus, synthesis of observation, knowledge, intuition and previous experiences will determine the starting point of the clinical aspects.

However, also closely linked to it is a fact that Michel Foucault[8] establishes as dialectic between Socratic statement of *know yourself* and the sense of an alternative order, verifying the duty of *taking care of oneself.* If in the Greek and Roman texts, it appears linked, Foucault explains how, in our times, there is a darkening of the duty of «taking care» in favor of that of «knowing oneself». The development of the modern theory of knowledge makes it explainable.

Geymonat[20] has seen it from another perspective, indicating the transformation generated at present in the technical-science relationships, a fact that may have been produced, as indicated, due to the great successes of the technique, or perhaps also as an effect of the so-called crisis of science[21].

Description and explanation

It would be necessary to begin with the fact, as indicated by professor Harre[22], that «one of the most noticeable characteristics of the world, such as we are knowing it, is the unendable succession of events». From his/her practice, the psychiatrist faces these critical, chronic, cyclic happenings, that come continuously. Undoubtedly, responding to them is done according to the two essential questions posed, and that Harre formulates by reference to «what has occurred?» or «why has this occurred?».

Describing and explaining are, for Harre, in the last resort, linguistic activities. Although these can sometimes be replaced by images or diagrams, it must be known how they are to be explained and how they should be understood. The stratagem of description makes it possible to name and compare. And the methods may begin by the exposition of traits, exemplifications can be resorted to and become generalizations.

Commonly, a science is generally classified as descriptive when its aspect of knowledge is limited to observation, without any intervention of parametrizations. The so-called descriptive sciences carry forward the handicap of seeming to not satisfy the demands of scientific control because they have not used variables, they have not been subjected to verification, nor are they sufficiently systematized. And they also support the judgment of the observer as censorship.

The explanation always responds to the account given on the why of the events. There is a different typology of explanations, in agreement with the type of events and with the type of reasons that can be accepted. There is a continuity between the daily explanation and the scientific explanation itself. In regards to the distinctions, we can distinguish between a linear explanation (from one specific event to another); or a hyperbolic explanation (where the cause of the result is declared, understanding only the connection between the postulated events); or an analogical explanation (fulfilling the formal requirements, but translating the rationale to a more ordinary and simple equivalent).

The explanatory function is complicated in psychiatry, as in all medicine, by two determining facts, as Gelder[23] stressed. The first concerns the fact that the causality is frequently «remote in time in regards to the effects it produces»; and the second to the fact that «a single cause may produce several effects». The multiplicity of the causes and of their species is entrenched behind the diachronic schemes as those that Gelder himself has studied when referring to the predisposing, precipitating and perpetuating factors.

The doctrinal positioning in psychiatry detracts from the compatibility of description and explanation, according to the different doctrinal orientations. The Jaspersian approach is also very linked to it when it distinguishes comprehension and explanation. However the *erklären* recurs to the etiological approach of the natural sciences, while *verstehen* invokes comprehension, intuitive reach of the relationship between suppositions of life and psychological states. In every case, it postulates that mental sciences require something more than a scheme of explanations, if they truly want to take charge of the personal subject facing them.

Reductionism and antireductionism

With this last problematic crux, I indicate a fact that continuously appears in the pluralistic dialectic of the psychiatric knowledge. It is necessary to begin from this pluralism, that is permanently explained by history and current issues. With good reason, González Monclús[24], in his editorial *Qvo vadis, psychiatry?* reviews the vicissitudes of the pathway of psychiatric knowledge. In the 1950's, as Sarro states, this covers a stage of psychologization of medicine and, in the 1960's, reverses, medicalizing psychiatry. It was to be expected that in the nineties «this pendular movement» would become balanced. However, the present situation continues to offer a technification of the physician-patient relationship and the notion of quality of life does not

totally define it correctly. The biological substrate is imposed, and the anthropological dimension decreases.

There has been swaying between reductionist and antireductionist extremes. Costa Silva has pointed it out, denouncing the monopolar passage from a psychiatry without a brain to a psychiatry without a mind. In the contrary extreme, we must, at least, demonstrate how one of the most outstanding antireductionist attempts is that from the speech of George Engel (1977), with the integration of biological, psychological and social factors, as we have already mentioned.

Reading the chapter dedicated to «Metapsychiatry» elaborated by Villagran and Luque (2000) gives us the occasion to reflect on the specific forms of producing this reduction and antireduction. In regards to the reduction, it entails «the unifying of sciences by the reduction of the superior sciences to basic sciences, and in the last extreme to Physics». It presumes that nature is constituted by different levels of organization, so that the inferior levels serve as a step for the superior ones. That which they call «bridge law», translates the name of one science to the other. And that called «law of derivation» searches for, as its name indicates, the genesis of the superior laws in the inferior ones.

There are suppositions, referring to co-evolutive models, that denounce the fact that is emitted when «there is the reduction of a superior theory to an inferior one, the superior theory not being original but rather a modification of it that is reduced.»

According to Villagran and Luque, the examination of a supposed biological reductions causes special problems that play with the biochemical and physical-chemical chain that is inherent in the biological, and with the dualism found, more and more, in the background of neuroscience.

In the antireductionist aspect, Villagran and Luque (2000) support the possibility of an interstitial knowledge «that is based on the presuppositions of post-positivist science». The variants of the so-called interdisciplinary theories, as that of Darden and Maull (1977), seek to detect links between phenomena investigated in the areas of different knowledge. And, of course, Engel's (1977) scheme of antireductionism can serve as an example.

CONCLUSIONS

The following could be considered:

- The need for an epistemological approach, that is that of a metapsychiatry, as a pathway to clarify the nature and sense of psychiatric knowledge. It seems necessary that every psychiatrist assumes the practice of his task responsibly.
- The approaches of post-positivist epistemology offer a rich source of reflection for the examination and judgment of our science today. The crisis of the concept of science itself makes it necessary to take it into account.
- The immediate factor that can be discovered in psychiatry is that of the patent multiple aspects in its multiple paradigmatism where, at least, the paradigms of the biological sciences must be combined with those of human sciences, and to a certain extent, also those of formal sciences. Or in the simultaneous fact of its basic and clinical condition. Or in the multiple variety that the object of mental disorder and its abnormalities harbors.
- The first problematic crux requires us to establish the level and means necessary to reach a grade of objectivity essential in a science of the subjective, and with it, the operation that Tizon calls «decentering», without which symptomatology cannot be translated to scientific expression. The second crux requires us to establish the possibility of a scientific knowledge of the individual, and the conditions for it to occur with the due rigor in clinical knowledge. The third refers to the distinction of the scientific systematic from the clinical and the support that it has in the present design of the technoscientific task. The fourth refers to the opportunity and convenience of the descriptive and explanatory management and the contributions of one and another in psychiatric knowledge. And the fifth, to the reductionism-antireductionism confrontation and the formulas and arguments proposed in each case.

Finally, the condition of biological, psychic and social intersection in plural chains of articulation capable of aiming at a rigorous level of integration should be stressed to the maximum. Psychiatry is, simultaneously, explanatory knowledge of the causal multiplicity of some phenomena and of a clinical praxis.

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