Qualitative Epistemology: A scientific platform for the study of subjectivity from a cultural-historical approach

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Abstract
This article contributes to the platform of thought proposed by González Rey in the development of qualitative epistemology and the theory of subjectivity. We discuss three core aspects: firstly, the general epistemological problems of modern science, with its non-critical, non-theoretical scientific ideals, and low reflexivity; secondly, we propose Qualitative Epistemology as an alternative for the study of subjective processes and their complexity, explaining its fundamental principles and its scientific legitimacy. Finally, we present a set of interpretive constructions based on several cases from a Brazilian mental health service to illustrate the logic in the production of knowledge in Qualitative Epistemology. In this theoretical-empirical type of production, we show the heuristic value of this theoretical-epistemological framework to study phenomena that can only be understood and intervened using an approach that is equal as complex. This epistemological perspective could be useful for research around childhood and adulthood education, health, as well as other cultural processes, such as organisational and political dynamics. The human character of research is emphasised, or in other words, its intrinsically subjective dimension.

Keywords
Qualitative Epistemology; subjectivity; science; knowledge production; interpretation; singularity
General epistemological problems of modern science

Science written from a perspective in which subjectivity is central to its conceptual framework has not been very common in philosophical, sociological, and psychological studies. Likewise, research on the producer of knowledge is not a strong scientific field in education. This may be due to the classic conception of positivism that dominated a great part of the representations that fed the social subjectivity of scientific circles and which eliminated the connoisseur in the process of knowledge construction. This division between the subject and object made it difficult for the emergence of a philosophical reflexivity to open new ground in science, and what we now call epistemology. This vision of the world, and the misconception division of the so-called Cartesian science, also limited the possibilities to develop science, its objectives and methods, and its social relevance (Dazinger, 1979; González Rey, 2002; Japiassu, 1978; Rose, 2011). A part of that science became a science without conscience, by separating itself from culture, without spirit and without humanity (Morin, 2005).

By re-examining this historical impasse in psychology as a science, we would like to present some contemporary epistemological problems that psychology and that the social sciences in general face today. We will not discuss the semantic or formal aspects of scientific production, which is seldom productive from our perspective, but rather focus on the subterfuges through which other meanings of scientific activity navigate. In other words, we examine the less pristine side of science. We will look at some of the fundamental problems in this discussion to which Qualitative Epistemology provides criticisms and an alternative.

Universalism: the most positivist form of science claimed that the goal was to develop models to describe certain objects of knowledge, without any consideration of cultural, historical, or subjective differences. This paradigmatic mode of thought was, in a certain historical and cultural moment, very useful in some fields of thought, which in appearance at least, had more “epistemological stability”. The natural sciences in a positivist perspective believed in the existence of universal laws to “explain” the world. One of the most serious problems generated in the history of psychology as a science was precisely its attempt to emulate the methods of the natural sciences, which dominated science in the 19th century, as expressed by Kuhn (1971).

Different approaches in psychology emerged from this counter-epistemological movement: non-theoretical behaviourism, indiscriminate use of psychological tests in schools, and the pathologising of daily life through non-critical and non-ontological practices.

The positivist vision, in its most empiricist version, dominated a good part of the social and human sciences for almost all of the 20th century. It is important to clarify that we are not rejecting the existence of universal concepts, at least not in the macro-theoretical dimension of knowledge. However, we cannot confuse universal thought with naïve universalism and empiricist style. In the natural sciences, although they developed more favourably in positivist modes of thought, quantum physics demonstrated that the concrete vision of positivism did not completely dominate the most prestigious of fields in mainstream science. In fact, one of the most prominent authors of physical chemistry, the Nobel laureate Ilya Prigogine, made enormous contributions to epistemology, which crystallised in ontological production, through his concepts on dissipative structures. It is interesting to see this reflexivity in science, that normally conceived physical chemistry as a representative of the most radical positivism, when many authors in physics have made progress on concepts with great heuristic value, such as self-organisation, nonlinearity, dynamic and complex systems, and historicity, among others.
Instrumentalism in science: in the process of development of the science disciplines, instruments with relative heuristic value were generated. Yet, due to the distancing of philosophical thought in education and psychology, and the subsequent absence of epistemology, as well as the non-theoretical reproductions lacking both innovation or creation, instrumentalism and its methods, which initially had a descriptive goal, gained global relevance to explain, illusorily, the phenomena studied. It did not deal with real explanations but non-theoretical descriptions with reduced heuristic value, which evolved into naturalistic causality. As González Rey (2013a) stated:

The way techniques have been used in the traditional empiricist paradigm of psychology is the most compelling evidence of the instrumental, positivist epistemology underlying the use of them; instruments appear as a guaranteed resource for the validation, standardization and reliability processes implied in its construction. These processes legitimize the conclusions of the instrument, omitting the ideas of the researcher in the process. The participation of the researcher is reduced to applying and organizing the system of universal categories that guide the production of meanings from the information given by the instruments (pp. 9-10; our translation from Portuguese).

The exclusion of meaning and sense in scientific explanation: the spirit that promoted empiricist science rejected any possible explanation about the phenomena studied. Dominant behaviourism in the United States was one of the schools that best represented this exclusion of interpretation, in which the unit of analysis was behaviour in its most universal expression and void of subjectivity (Dazinger, 1979; González Rey, 2002; Koch, 1981). In fact, many approaches of phenomenological materialism argued it was necessary to depict reality “as it is”, and hence, also established the separation between knowledge and the producer.

The subalternity of qualitative research, faced with the quantitative and experimental approaches inserted into “mainstream science”, also made so-called qualitative studies conform and describe phenomena with neutrality. The epistemological debate was weak and many limited themselves to presenting an inventory of “collected data”, the methodology of which was not an expression of a deep theoretical-epistemological reflection, but only a non-critical application of tools. González Rey (2014b) comments on this:

The cult of what is empirical and the simplification of theory has reached such an extreme to place both these inseparable moments of research as separate questions: the empirical, in this form, appears external to the researcher who is conceived as the substance of the knowledge produced—which implies assuming the idea that concepts emerge as a resource of meaning from some given evidence at the empirical level. From this point of view, theory is merely a reflection of it, appearing through descriptive and isolated concepts, paradoxically dispensing with its own theoretical construction (pp. 13-14; our translation from Portuguese).

The false opposition between the qualitative and quantitative approaches: In the 1960s and 1970s there was huge debate about both qualitative and quantitative methodological approaches (Glaser & Strauss, 1967). The former, as many authors have demonstrated (González Rey, 1998, 2002, 2004, 2007; Koch, 1981), dominated the latter as it was considered the “real science”. Many reports were presented with statistical knowledge, with tables, graphs, coefficients, and the results from mathematical formulas. Sadly in many cases, researchers ignored the heuristic value of their statistical knowledge. Only the superficial statistical validity was taken into account, and not what
was meant when a variance, for example, had a relatively high range and what effects this had on its scientific legitimacy. Thus González Rey (2007) claims:

The methodology leads to a methodologism, where instruments and techniques have freed themselves from theoretical representations and have been converted into absolute principles of legitimacy for the information produced by them, whose process doesn’t pass through the reflexivity of the researchers. On this path, where measurement and quantification are an end in themselves, bypassing all theoretical constructions about information that appear in the instruments. (p. 2; our translation from Spanish)

Even though the social sciences are now interested in narratives and symbols rather than establishing numerical constants and their respective descriptive and analytical statistics, it does not necessarily imply that the qualitative studies have overcome the empiricist and positivist vision. In fact, many qualitative studies have demonstrated the same unreflective, empiricist vices, for example, by wanting to verify hypotheses through narratives, stories and graphs with a supposed projective value. The problem was not even the number itself, but the epistemological platform which tried to reduce the subjective richness into standardised profiles (González Rey, 2002).

The elimination of innovation: The subalternity of the qualitative researchers was not only seen in the descriptive passivity of reality but also in the lack of ambition to develop alternative theoretical positions and test them in scientific communities. This strongly connects with the common idea of the time that science, above all, was the social reproduction of what was already established. With this perspective, most of the qualitative studies were dedicated to producing replicas, even in totally different cultures, to verify if the hypothesis proposed in larger scale studies, usually by authors with significant political capital in science, were correct. This reproduction model influenced education, psychoanalysis, and the social sciences in general. It is not uncommon, therefore, that psychology curriculums include replicas as a value strategy in the learning of science. We can ask ourselves, where does the author of the production of knowledge enter? Vygotsky had already asked the question about innovation in his book *The Psychology of Art*, proposing the following:

Every inventor, even geniuses, are always the fruit of their time and medium, their creation begins with the needs around them and base themselves on the possibilities that exist outside themselves; this is why we observe a strict order on the historical development of techniques and of science. No invention or scientific discovery appears before the material and psychological conditions needed for their development are created; creation is a process that is developed historically, where all new forms are determined by their predecessors (Vigotsky, 1999, p. 17; our translation from Portuguese).

Since Cartesianism, the researcher’s role was an instrument through which the “perfection” of nature was expressed. The expert, from this perspective, did not have an epistemological or ontological position of their own but they did have the “facts”, established *a priori* and conceived under the illusion that they had and intrinsic truth value. Popper in his famous essay, “Epistemology without a knowing subject”, from his 1972 book *Objective Knowledge* radically separated epistemology from the scientists’ knowledge processes when he stated his thesis of Three Worlds:

Without taking the words “world” or “universe” too seriously, we may distinguish the following three worlds or universes: first, the world of physical objects or psychical states;
secondly, the world of states of consciousness, or mental states, or perhaps behavioral dispositions to act: and thirdly, the world of objective contents of thought, especially of scientific and poetic thoughts and of works of art (Popper, 1972, p. 106).

It is interesting how these representational elements, based on objectivism, constituted the idea of social subjectivity in Western science and remained strong until the early 20th century until the works of Freud, Vygotsky, and Planck (quantum theory) provided counter-hegemonic theoretical thought. Yet, even though Freud and Vygotsky opened new ground in science, they also maintained positivist and naturalist positions, typical of the social subjectivity of their time.

It is important to note an historical fact: although scientific thought of early modernity was novel to Christian metaphysical thought, that same science with its institutionalisation in socio-political state circles and in the beginnings of capitalism, also limited it. This is an excellent example of how initially revolutionary subjective productions, at a social or individual level, tend to become conservative and representative of the “establishment”. As González Rey (2002) comments:

Often the objective elements which define a new order disappear and the imaginary continues subsidizing the subjective sense of that, legitimizing its identity. This often occurs with revolutions, when the processes of institutionalization and bureaucratization associated with new power relations and the discourses that they produce kill the revolutionary spirit, but people still feel part of the revolution, at least for a few generations. (p. 92; our translation from Spanish).

Science was, however, significantly revitalised by Marx’s contributions and his introduction of the historical dimension in the process of knowledge production. For Marx, objects of knowledge are created by the researcher from an implicit or explicit political perspective. This remarkable author was, in recent history, the first to develop a progressive scientific theory that recognised the historical, political, and cultural role in research and its relation to the social class struggle under capitalism. Marx thus allowed us to recognise scientific communities as human production organised in the context of private interests, which was a partial demystification of science and also confronted the empiricist and positivist view (Meksenas, 2011).

For his part, Qualitative Epistemology by González Rey has opened a new field of reflection on the researcher as a producer of knowledge, and not as mimetic expression of nature. As González Rey (2007) proposes:

Researchers as subjects do not only express themselves in the cognitive domain; their intellectual production is inseparable from processes of subjective sense that is marked by their history, beliefs, representations, values and all other aspects which express their subjectivity. The legitimacy of the researcher as a subject of production of thought, and thought as a way of production of models of intelligibility, are an inherent part of the theoretical character of research (p. 50; our translation from Spanish).

Distinctive features of Qualitative Epistemology: heuristic-cultural principles and value
One of the most frequent questions we have received in different arenas of scientific debate is what precisely differentiates Qualitative Epistemology from qualitative research in general.
Looking back on our critique of qualitative studies, these are some of the more controversial complications that a qualitative philosophy of science raises (Bachelard, 1987; Feyerabend, 1986; Polanyi, 1970): 1) theoretical apriorism, 2) the hegemony of empiricism, 3) ideological militancy, 4) the neutrality of the researcher, and 5) non-theoretical and apolitical descriptions.

These problems led González Rey to propose a platform of scientific thought: Qualitative Epistemology (González Rey, 2000a; 2005a; 2005b; 2007) in conjunction with the Theory of Subjectivity in a cultural-historical approach (González Rey, 2002, 2011b, 2011c). His work was inspired by several Soviet psychologists, such as Vygotsky, Rubinstein, Bozhovich, and Chudnovsky, among others. One of the most influential theoretical contributions of these authors was the transition from an element-based representation of psyche (such as traces and isolated psychological functions) to a representation based on process principles and psychological units. An example of that is Vygotsky’s (1994) concept of *perezhivanie*, which expresses the unit that emerges as the dialectical expression of personality whenever facing a social influence. According to this concept, there is no external social influence apart from the person’s personality. Vygotsky (1994) highlights the generative character of the psyche, in which emotions play an essential role. This dynamic and systemic representation of psychological processes also demands different epistemological and methodological approaches.

It is not our intention to delve in the theoretical and epistemological details around the concept of *perezhivanie* in Soviet psychology, which can be seen elsewhere (González Rey, 2013b, 2014b, in press). Nevertheless, it is important to mention that Vygotsky’s pioneering idea of units as part of a psychological system was never successfully developed by him. Using the concept of *perezhivanie*, for example, Vygotsky did not make explicit how *perezhivanie* is an expression of subject’s performance that integrates a variety of historical elements and different social spaces that are part of the subject’s experience.

In order to construct further theoretical resources to overcome this and other theoretical challenges in cultural-historical approach, González Rey has been advancing the construction of the topic of subjectivity, proposing a new ontological definition to the study of human processes. Focusing on subjectivity in the process of scientific production implies changing the classical concepts of learning that have governed the science of psychology. These concepts never overcame the metaphysical bias that characterised the development of psychological ideas of modern Cartesianism and Newtonism, which was evidenced by the behaviourist and cognitivist theories promoted by authors who identified with the more crystallised American approaches. If the cognitivist revolution sought to break with the behaviourism of half of the last century with its Vygotskian theoretical and epistemological developments, the truth is the new form of cognition practised by Americans interpreted the Soviet author in his more mechanistic and deterministic view (González Rey, 2011a, 2013a; Rodriguez, 2009).

From this time forth, the theoretical models of Jerome Bruner and Michael Cole were developed and were to have a profound impact on Western psychology. Their theories were progressive compared to the conservative behavioural adaptation theory, but they too overlooked two central elements in the cultural-historical view: the importance of emotion in the subjective production process, and the centrality of the individual as a subject that produces subjective senses.

Under this American cultural line of thought, the theory of subjectivity has experienced a double ontological revitalisation. First, it recovered the condition of the subject in the subjective
productions of social or individual spheres of human life, previously annulled by structuralist and deterministic views of modern science. The category of subject here is not synonymous with person or individual, it is rather a field of intelligibility that helps identify, understand, and promote some form of subjective production characterised by the active and critical position of individuals, families, or groups, when they are in situations that threaten the processes of singularisation. Second, it revived the importance of thinking about the researcher as the author of his or her own production. In this view, the researcher is seen as a producer that creates, imagines, and produces alternatives of intelligibility about the reality that he or she seeks to study. This living and active vision of research is reflected in the following quote:

Theories are systems of meaning, generators of intelligibility of representations in process, whose meanings are organised in the course of an empirical moment of knowledge production. This means that in the theoretical systems of a constructive-interpretive nature, the empirical represents an external dimension of the theoretical process ... theories are living systems (González Rey, 2013a, p. 10; our translation from Portuguese).

In this way, our understanding of ontology was redefined when we considered that all research objects are necessarily a theoretical construction of the researcher who opens ways for problems which in the past would not be thought of in the same way. This epistemological positioning brings together what modern science divided: observer and observed. This means that the quality of the observed object will depend on the observational quality of the observer (quality that depends on the epistemological-theoretical platform) and the observed object only exists in ontological terms when it is imagined by the producer of that reality. Here, the ontological dimension is not understood as the essence of the being, but as a theoretical construction of the researcher. In other words:

The local character of the measurements and therefore knowledge that is achieved based on them will inspire the rise of a second theoretical condition of the crisis of the dominant paradigm: quantum mechanics. If Einstein revived Newton's laws in astrophysics, quantum mechanics did so in microphysics. Heisenberg and Bohr demonstrated that it is not possible to observe or measure an object without interfering with it, without altering it and therefore, the object that emerges from a process of measurement is not the same as before (Santos, 2008, p. 43; our translation from Portuguese).

These assumptions about knowledge, the knower, and the known imply an understanding that is innovative: reminding us that there is no neutrality in science. Instead, the researcher has the ability to act and these actions have implicit or explicit political, economic, cultural, and ethical motivations. Recognising the researcher's ability to act in the world not only means making them ethically and politically responsible for their actions and decisions, but also means recognising them as creative and dynamic subjects in methodological production and construction of information. In consequence, the researcher, rather than being a reproducer of technicalities and reified theories, is a builder of ideas. The researcher articulates ideas, in a resourceful and imaginative way, at the theoretical, empirical, and interpretative levels and this opens zones of senses that are much more enriching in epistemological terms.

Therefore, we can say that the category of subject has represented an ontological alternative for scientific conceptions and practices about any form of cultural process, such as childhood and adulthood education, health practices, and institutional dynamics. Moreover, the concept of subject has been useful on the professionalisation of psychologists, educators, sociologists, and
anthropologists. Studying the subject from the theory of subjectivity has both heuristic value in scientific production and counter-hegemonic power over the established social order. Thus, an ontological revitalisation has implications for science as the production of knowledge as well as for the ways in which society is recreated in history.

In this revival, there are three principles in the spirit of Qualitative Epistemology for the study of subjectivity in a cultural-historical framework:

1. **The constructive-interpretive process of knowledge**

From this view of the social sciences, we contest all epistemology that claims that pre-existing data has its own ontological truth, and that it is detached from any knowledge constructing process. In the classic expression “the data speaks for itself”, the researcher, as an epistemic creator, was deprived of their agency, while reality *per se* was a carrier of meaning. Due to the constructive-interpretative nature of epistemology, we can say that:

Reflexivity and epistemological awareness lead to the creation of direct and in particular, indirect methodological resources, which allow us to confront meaning and subjective senses…. The processing of information does not happen directly but passes through a researcher who is active in the process and a researcher who is a thinking subject (Mitjáns Martínez & González Rey, 2006; our translation from Spanish).

From this point of view, empirical research means nothing without a theoretical position on the authorial nature of researchers, which opens a zone of sense to develop understandings and explanations about what is studied. There is the risk that the strong positivist influence may produce immediate and stereotyped interpretations of empirical expressions by the non-critical use of theoretical categories. This is part of the direct interpretation fetishism that has been promoted by mediocre epistemological reflexivity within the construction processes of psychological and educational knowledge, a fact that has characterised research in these areas. To complement this idea, González Rey (2013b) comments:

It deals with the ability of the researcher to generate meanings capable of integrating several empirical manifestations that only become intelligible when the meaning is organised by the researcher in the course of the research itself. This meaning is defined, in our methodological proposal, as an indicator. An indicator does not allow an immediate and direct theoretical statement. It is only the first moment in the creation of a hypothesis, within which the indicators are transformed into concepts that feed into an ongoing theoretical model (p. 22; our translation from Spanish).

From our methodological perspective, instruments are designed as a resource that allows someone to express themselves in the context that characterises the research (González Rey, 2005a). In this way, they are not used solely to reach conclusions. They are resources of information that, when closely related, allow for the development of hypotheses based on information that emerges with their use. This information is interrelated through constructed interpretations and thus, the researcher is not merely a passive presenter, but an active agent in the construction of the world (Bortoní-Ricardo, 2008).

Even though the instruments used in a determined study can be thought of before the empirical experience, it is subject to “forms and colours” within the dynamic scenario of research. In this process, its idealised conception is modified and, little by little, it adapts to the particularities of the
empirical reality. The intention is to develop the instrument around the key questions of the research study, as well as obstacles and opportunities that arise from the empirical scene; instruments demand creativity, tension and the reflection of the researcher throughout the research study. On this point, Vygotsky commented:

A judge, who passes sentence based on the declaration of an accused or victim, is a bad judge because an accused or victim are obviously partial and because of the essence of the question, deforms the truth... Likewise, a psychologist never refuses to use this or that material even though it may be considered in advance to be false...psychologists are more often asked to question material evidence, their works of art, and based on these, to recreate the psychology that corresponds to them in order to be able to study psychology and the laws that bind it (Vigotsky, 1999, p. 26; our translation from Portuguese).

It is interesting how Vygotsky gave a material value—albeit relative value—to the empirical. That is to say that, according to his metaphor, the truth (in the broad relative and not essentialist sense of the word) would not be in the discourse of the implicated in a phenomenon or in the material evidence of the object in question but in the capacity of the psychologist-researcher to construct a theoretical model that restores what they hope to know. Yet, this is one of the characteristics of this Soviet author's aspiration to consolidate general laws that govern the psyche is a condition to which he will not give up. This is precisely the zone of hegemonic sense of that social subjectivity expressed through an author; it is an epistemological field that governed scientific though at the beginning of the last century and characterised mechanistic Soviet materialism.

In this line of argument, the constructive-interpretive method is expressed in research papers that are founded in fiction: they are imaginative acts that the researcher makes intelligible from the vision that they have of the studied field together with their theoretical and epistemological understanding. As Castoriadis (1982) comments:

Moreover, the essence of creation is not the discovery, but the creation of something new; art does not discover, it creates; and the relationship that it creates with what is "real", which is a very complex relationship, is not a verification relationship. And at the social level, which is our main interest here, the emergence of new institutions and new ways of living is not a discovery either; it is an active creation (p. 162; our translation from Portuguese).

It is relevant to note that the heuristics of the researcher’s epistemic construction, denominated as configurational logic, does not develop in a continuous, increasing or linear way. On the contrary, the rhythm of production of the knowledge process is recursive Therefore, it is much more than a sequence, in which one stage precedes the next. Thus, the researcher uses methodological (e.g., in the case of the creation of tools) and interpretive resources to provide consistency to the production of knowledge, in a process accompanied by their permanent reflexivity.

This research perspective represents a progressive process and complex communication in which different methodological tools can be used as resources to advance more deeply in the dialogues of the study. Therefore, in this proposal, the tools never result in direct outcomes; tools are provoking instigators for the expressions of the participants. The constructive process through which theoretical meaning emerges, result from complex constructions that integrate indicators and hypotheses that are progressively produced during the research process (González Rey, in press, p. 23).
2. Singularity as a legitimate source of information

In the most conventional educational studies, as in social sciences in general, singularity was used as a term that was popular and appealing, but it was not always used in its deeper meaning or taken into account for epistemological and theoretical implications for the production of knowledge.

Singularity, from our perspective, has a qualitative feature that allows us to see the particularities of individuals processing in the production of subjective senses and meanings (González Rey, 2007). In the interpretation of singularity, the theoretical education of the researcher is central due to the fact they cannot depend directly on the empirical experience. They need to have ontological and epistemological understanding to create an explanatory recursion that gives singularity the relevance that is absent in other proposals.

Assuming singularity has complex implications for education, psychology, and the scientific field. On the one hand, the verificationist ideal, so common in educational studies, is surpassed by the constructive-interpretive vision in which, without accounting for a priori pseudo-theoretical formulations, the researcher emerges as a subject in the construction of knowledge. However, when we speak of singularity, we are also confronted with the old ideas about the number of participants in a research study defined the scientific character of the study. In this sense, a study that uses a strategy of a representative sample (usually defined as 10% of the population that is object of the study) it would be more “legitimate” than one that used one or two cases.

This has been one of the most frequent discussions about the qualitative scientific methodology (González Rey, 2000a; 2000b; Guba & Lincoln, 1994): that the number of cases defined whether the study was more scientific than others. Depending on the epistemological platform used, this can constitute a false criterion. For us, legitimacy is defined by the contribution to the theoretical model represented by the study, which does not conclude in an inductive generalisation. This does not mean we do not have ambitions to generalise. As fieldwork is integrated in a recursive and dynamic way, into a theoretical model that the researcher develops, processes of generalisation develop so that the system of thought earns value in representing particular problems. However, this process of generalisation does not mean to deny singularity, but to create new resources to understand it.

From our point of view, the scientific character is not defined by the number of cases, but the recursive capacity of the researcher to bring together the theoretical, epistemological, and ontological dimensions into a certain configuration of thought that generates new zones of sense and promotes epistemological ruptures with scientific value (González Rey, 2007).

Castoriadis (2008) provides another meaning of the concept of singularity, not necessarily implicated in the process of the construction of knowledge but related to the performance effects of the professional and scientific actions on people. This author proposes that although society has forms of imposition that are necessary, from a psychoanalytical point of view, this in no way determines the singularity of subjects. In that regard, he would say that becoming human is assuming the imposition of education as well as resisting and building a path of their own, a process we can call processuality of subjectivity. Both childhood and adulthood education, in this way, would be called on to promote fields of subjectification in which processes of singularisation can emerge and at the same time, make the emergence of collective or individual subjects possible.
Finally, we can say that the search for the understanding of how a particular sphere of social life is subjectified demands the development of a theoretical explanatory model based on the study of processes and forms of organisation of experiences with their singular features of expression. This implies believing that it is impossible to talk about social aspects without taking into account people. In turn, it is impossible to study a social topic, for example, institutionalisation in mental health, without taking into account the subjective senses produced by concrete individuals who are part of it. In this way, it is the legitimisation of singularity that leads us to reflect beyond the singularity and it is impossible to achieve if we do not pay attention to the differences that characterise them. One of the results of this redefinition of the importance of singularity in scientific research is the development of methodological strategies that facilitate the work with the object of study on different levels at the same time and aim at taking into account the theoretical construction of subjectivity (González Rey, 2002, 2005a).

3. The dialogical nature of the production of knowledge

Through this perspective, the production of knowledge is a process that depends on the qualitative nature of the relationship the researcher has with their participants. In this sense, the researcher is the best instrument of his/her research study, who is encouraged to creatively develop situations, strategies, and practices that allow participants to engage subjectively in the dialogue and to produce new zones of sense regarding the topics dealt with in the study. Hence, the dialogical and open character of the investigation based on Qualitative Epistemology does not follow an instrumental logic oriented towards the understanding of the research as a sequence of instruments to be applied. The understanding of the research as a dialogical process leads to the focus on the creation of a dialogical climate that demands from the researcher the ability to motivate, provoke, and stimulate reflections from and the interest of participants in the study (González Rey, in press, p. 13).

The production of knowledge, in this case, is considered as singular production of the author within his cultural and historical framework, which is permanently dynamic in the research. Because of this, we consider the quality of commitment by the researcher to the research topic, has a singular relationship and a particular ontological value. This active role of the person, as well as a subject, is central to the production of ideas. If we conceive that the information is produced dialogically, it implies that the researcher must have the ability to provoke participants and lead them to subjective positions on the topics that are the object of study (González Rey, 2007). This is in large part what research in qualitative epistemology hopes to achieve, that the participants not respond passively but become passionate about the study and become active, curious, restless, and recursive.

Moreover, we can say that it deals with knowledge that abandons the ideal of perfection in its logic and reasoning, and raises doubts and questions within a permanent creative process. From this epistemological position, according to González Rey (2005a), the central aim of research is the construction of comprehensive theoretical models, with explanatory value of complex systems, without the hope of appropriating, in terms of knowledge, the problem in all its complexity. According to the author:

The model represents a theoretical construction with the ability to develop in the empirical moment and is expressed in the progressive development of the researcher’s hypothesis and constructions (González Rey, 2009, p. 220; our translation from Spanish).
This model is based on theoretical concepts that aim at generating new intelligibility spaces on the question studied and not to represent a given reality in a linear way and exhaust all its supposed meanings. Such constructions are never disconnected from the researcher’s biography, or from their personal values or social and cultural integration. In the words of González Rey (2005a),

the theoretical is not limited to the theories that constitute pre-existing sources of knowledge regarding the research process, but implies knowing the processes of intellectual construction that accompany the research very well. The theory is expressed in a way that has, at its centre, the thinking and constructive activity researcher (p. 11; our translation from Portuguese).

The communicative possibilities not only respond to the specific and controlled external stimuli, but also refer to the ways in which personal relationships develop during the course of teamwork. Hence we move from an epistemology of answers to an epistemology of construction. In this way, the consideration of communication as an epistemological principle leads to a conception of research that pays more attention to the quality of information produced rather than to quantity of supposed “facts” considered (González Rey, 2004, 2005a).

**Qualitative Epistemology in action: some case examples**

As we discussed above, the aim of research from a Qualitative Epistemology approach does not reside in the isomorphic representation of a given reality, but in the construction of a theoretical model, which only gains shape and consistency with the progressive development of hypotheses related to the topic studied. The gradual elaboration of these hypotheses is made possible through the process of construction of indicators during the research. These would be, according to González Rey (1997, 2005a), the elements that gain significance through the interpretation of the researcher and that, with the development of the research, gain shape and form chains of meanings in a way that makes the previous indicators raw material for those being constructed later. In this way, indicators do not emerge in a linear fashion from the instrument of research, but they are products through which the researcher is able to construct using the instrument.

We will now present some information from a research study carried out in a Brazilian community-based mental health service called Centre of Psychosocial Attention (CAPS) for people diagnosed with “mental disorders”. In this study, we have been able to conceptualise that the biomedical practices still appear to be associated with the pathologisation of human suffering and the difficulty to treat users of CAPS as people capable of facing their dramas beyond institutionalisation. What follows are some cases that are part of the fieldwork of a larger research project. They will serve to illustrate how knowledge is generated using the Qualitative Epistemology approach. We will begin with Amanda and her participation in a CAPS group:

I entered the network group but actually the doctor had already released me. That’s why my mother said, “Don’t release her yet because she will have nothing to do at home all day”. That is why I came to this group. But I don’t know… I like the CAPS but there are things I don’t agree with… for example, I overheard them one day saying that my diagnostic was bipolar, but that they were still investigating. My goodness! I have been receiving treatment for so long and they still don’t know what I have? (Amanda, 20 years old, 2 years in treatment).
In this example, it is interesting that Amanda, when talking about her release, only comments on what others have said and done and not what she thinks or feels about it. It is something the doctor or her mother decides, but her subjective senses that imply personal responsibilities appear distant. This position can be seen as an indicator of a process of Amanda’s dependence on her doctor and mother, which compromises her emergence as a subject in her treatment.

Following this, Amanda speaks about how her treatment has been handled; she expresses her disapproval, but the way in which she criticises seems to indicate a subjective process of naturalisation of the mental disorder in so far as she wants to know what she “really” has, and not medical interpretations that will provide a dynamic and complex subjective process. These incipient indicators become relevant when we look at Sebastian in the group:

What really makes me uncomfortable is when someone I don’t really know looks at me and says: “You are fine, there is nothing wrong with you”. Hey, how can they say that? I don’t have this disorder because I want it…no-one knows how I am, only the psychiatrist (Sebastian, 37 years old, 6 years in treatment).

In this example, Sebastian defends the recognition of his own suffering. However, the figure of the psychiatrist as central in his knowledge of himself is made evident, as in Amanda’s case. Also, in assuming this position, the “illness” seems reified as an object of technical knowledge of another, hiding the relevance of his own acts in the course of its development. Sebastian holds the same position when speaking to him informally in a conversation:

Sebastian: …I think that the cure for these disorders these people have is treatment. There are many institutions that allow the person to improve, such as the CAPS.

Researcher: And what do you think your role is in this process, Sebastian? What are your responsibilities?

Sebastian: I don’t know. I don’t know what to say. But one thing I do know is that I’m doing the treatment properly. I took the medicine and realised I can’t stop taking it. I think it’s for the rest of my life! I don’t like it when others say I’m fine when I’m not. The psychiatrist is the one who knows about that, and if the psychiatrist says it’s OK, then I can be released.

Researcher: And you don’t know what to say about yourself?

Sebastian: I know very little.

As we interpreted Amanda’s expression, Sebastian’s position seems to indicate a distancing between the field of action and the direction of his treatment, and consequently the process of the institutional release, in so far as he doesn’t seem to reflect on his responsibilities apart from attending his therapy sessions. His responsibility in his own process is experienced as following what has been prescribed by another, which indicates a position of submission. Also, at first he talks about a cure, attributing the resources to reach a cure entirely to the mental health institution. However, this becomes contradictory with his own process, which is an intensive and prolonged treatment in CAPS. It is also contradictory when he says, “I think it is for the rest of my life”. In this sense, his situation seems to become even more chronic, excusing himself from the responsibility of knowing what to do to improve his own life.
In both cases here, their position of objects of knowledge of others is highlighted. This process can be seen as an expression of an asylum logic that is still present in the life of people, not as railings and walls, but as the way they live their experiences. This dynamic eliminates the legitimisation of the patients’ production of knowledge and consequently, makes it difficult for them to participate actively in their development process. This opens the way to understanding theoretically that treatment and development appear separated by the institutional logic.

These processes seem related to a subjectified biomedical logic that justifies the frequent lack of responsibility of people, culminating in the persistent psychiatric institutionalisation. It is precisely this separation that the role of education has hidden in the conception of medical treatment, which ends up hypertrophying its instrumental aspect. The set of these indicators gain strength when analysing the expressions of the participants of the network group related to the central topic of “work” for them all. According to several stories, it is very difficult to keep a job:

You begin to work, you do it well. But then all of a sudden, out of nowhere, it becomes so depressing that I leave at once. But that is because of the mental disorders we have. (Sebastian)

Here, Sebastian assumes the direct cause of his current inability to hold down a job is the inherent condition of his “mental illness”. He seems to be prisoner of a situation in which he can do very little, placing his life in the illness and not vice versa. This can lead us to think that this expression indicates the existence of subjective productions beyond those he makes consciously, such as the production of subjective senses related to insecurity, low self-esteem, and fear. These may stem from a lack of social bonds-processes, which intensify because of the reification of his mental disorder and because of the subsequent de-subjectification of life.

Another two cases, Neto and Nina, during a group session in the service, also fed into our set of hypotheses related to work:

I am looking for work but the problem is the majority of jobs are in the morning. I can only get up at 10 am because I take medicine and it is impossible for me to wake up before then. (Neto, 30 years old, 4 years in treatment).

I understand what Neto is saying. Only someone who has taken that medicine knows what is happening to us. They are important but they have side effects. It is not about being subject to the effects of medication…but they make you lazy…really lazy! If I get out of bed before 9 or 10am, I feel like I’m going to fall asleep… there are always so many things to do at home- wash the dishes, clothes, floors to clean…but it’s very difficult with all the medicine we take (Nina, 47 years old, 4 years in treatment).

As opposed to Sebastian, Neto and Nina use medication as the central reason for their inability to do daily work or chores. On one hand, as Nina says, the importance of medication for certain treatment cannot be denied, and they sometimes help in the social rehabilitation of some patients. However, on the other hand, we need to be critical about the abuses committed through “chemical doping” of the resources generated by people, ignoring other existing therapeutic resources available. This focus on medication places people in the passive position of consumer, in a logic where the resources to overcome the disorder are external to the patient. In these cases the
importance of creating new spaces of socialisation is hidden, in order to prioritise the biological emphasis in the vision of human processes.

In general terms, the processes analysed until now are related to the dissociation between the development and treatment addressed previously. Treatment is experienced as a process to be carried out and not as way to develop, so that the subjective implications of the patient become indispensable.

In this way, these incipient interpretive constructions can be thought of as indicators of the same social subjective configuration of the institutionalisation in CAPS. Such a hypothesis needs to be accompanied by the construction of other indicators, which may make it more complex, elaborate on it or may eventually contradict it. It is worth mentioning that the collateral effects of institutional processes are expressed in a particular way by individuals. When a theoretical model is created, with the intelligibility capacity to bring together the distinct individual productions, it is possible to explain the processes of the social subjectivity of the institution beyond the individual dimension.

Final considerations
As already mentioned in the discussion about Qualitative Epistemology, developed by González Rey (1997, 2007), the aim of scientific research from this perspective does not consist of the isomorphic representation of a given reality. It is the construction of a theoretical model that gains shape and consistency through the progressive development of indicators and hypotheses related to the research topic.

The gradual production of the hypotheses is made possible through the process of creation of indicators during the research itself. According to González Rey (1997, 2007), these will be the elements that gain meaning through the interpretation of the researcher and which, throughout the research process, take shape and create chains of broader meanings. In this process, the first indicators become “raw material” for those that follow. The author comments on this point:

The concept of the indicator, in turn, expresses the relevance that is given to process in this kind of research, just as the hypothesis and the researcher’s initiative do. The indicator in this case, will always be only a moment in the process, and never a conclusive concept about a process (González Rey, 2014a, p. 28; our translation from Portuguese).

The importance of this concept is to allow the intelligibility of a process that is not explicit in the research, but is an expression of not only the quality of information that the participant gives but also the quality of the interpretation of what is being researched. In this sense, there is no external objectivity of the researcher that needs to be respected; and this is the subversive nature of this type of research because it hopes to extrapolate the distinct normative rules which underlie the social fabric that shape us and are part of us. Hence, indicators do not appear in a linear fashion according to the research tool that is being used, nor are they explicitly expressed by the research participants (González Rey, 2007; 2014a). In fact, they are produced through what the researchers are able to construct using the tool and their intellectual capital that enriches their interpretations. From this standpoint, this construction does not use abstract logic as an invariable parameter for the given interpretation because it only gains one meaning or another according to the interests of the researchers based on the aims of their research. Through the connection of distinct indicators,
it is possible to develop a broader and more consistent hypothesis, which slowly leads to a theoretical model from the research.

The legitimacy of this type of research resides precisely in the quality of the connection between interpretive constructions and how the information has been used presenting the path the researcher has taken in the construction so that the reader can follow the gradual development of the theory that is a result of the research. Here, we are not interested in criteria of legitimacy observable on an empirical level, but a legitimacy that defines itself on the consistency of the organisation of indicators and hypotheses in movement.

This consistency refers to “the possibility to develop that construction, opening new zones of senses about the research problem and allowing for the intelligibility of the research problem, as well as the continuity of the theoretical, core ideas in construction” (González Rey, 2005a, p. 49; our translation from Portuguese). Consistency also focuses on the historical nature of science once it is relative and contextual. In this respect, for example, what is considered today as an excellent doctoral thesis, in a few years will lose its heuristic value precisely because of the new representations, concepts, and conceptions that will begin to develop from that moment in time. The researcher, from this standpoint, is a type of adventurer creating journeys of knowledge always beyond his or her individuality and science, the limited path that was possible until now, but which is permanently in transcendence.

The reflections of the researcher are fundamental in this process because they allow him or her to organise the apparently distinct indicators into a meaningful and specific set related to the studied object. As González Rey (2014a) explains,

The relationship between the theoretical construction and hypotheses established represents a constructive-interpretive process, in which one of those moments is legitimised in the other without being its cause, which allows us to achieve criteria of legitimacy that goes beyond the concept of demonstration to legitimise the result through empirical evidence. This would be an inherent process called “empirical research”, from which this epistemological position distances itself theoretically (p. 31; our translation from Portuguese).

Hence, it would be erroneous to say that research from this perspective is strictly speculative. Undeniably, speculation is a fundamental part of this process because without ideas, new meanings that transcend the obvious and pre-existing ideas are not possible. Nevertheless, there are rules and processes that must be met when implementing this methodology, even though the methodology is not normative because of criteria external to the processes of its own construction. Surely, we are not saying it is not the only way to do research, but González Rey (1997, 2007, 2014a) opens new methodological and epistemological possibilities to legitimise a type production of knowledge that transcends “empirical evidence” and induction, defending the theoretical nature of the production of scientific knowledge. Here, we are dealing with a productive way to emphasise the human character of research, or in other words, its intrinsically subjective dimension.

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It is worthy to note that Marx also shared some positivist stances such as his teleological and progressive view of science. His conviction was so strong in this regard that he militantly promulgated that socialism was going to overcome capitalism, with categorical statements that later succumbed to the historical developments of the West. Yet, we would like to highlight this new intelligibility field that Marx opens up towards a critical epistemology of science.

Zones of senses means “a form of intelligibility of reality, and not a correspondence with reality” (González Rey, 2005b, p. 32; our translation from Portuguese)
References


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