



The relationship between the psychology and education: crafts interconnected

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ABSTRACT. The classic thesis that Psychology and Education have a very recent history doesn't seem to have any consensus among epistemology researchers. When the relationship between Psychology and Education is assessed, one realizes that only recently these fields of knowledge have become interconnected as disciplines. Current analysis demonstrates how psychology and education, formerly relatively independent sciences, became interdependent disciplines and professions with wide acknowledgment and social application. Current debate is divided into three sections: the initial discussion between Education and Psychology in their search for laws of human development; the historical and contextual constitution of this knowledge; and the transition from school Psychology towards a broader view between Psychology and Education. It should be underscored that the source of such a close relationship between these sciences does not exclusively respond to a human and more or less universal and synchronic requirement. Paradoxically, conditions of historical development of human sociability and of modern economy and culture, especially in Western capitalist societies, formed and established the interconnection.

Keywords: psychology, education, pedagogical practices.

A relação entre psicologia e educação: ofícios entrelaçados

RESUMO. A clássica tese de que as ciências psicológica e educacional têm uma história bem recente parece não ter um consenso entre os estudiosos da epistemologia dessas áreas. Quando se averigua a relação entre psicologia e educação, só recentemente se percebeu o quanto esses campos do conhecimento estão entrelaçados como ofícios e disciplinas. O objetivo deste trabalho é demonstrar como a psicologia e a educação, outrora saberes relativamente independentes, tornaram-se disciplinas, ofícios e profissões interdependentes e de enorme reconhecimento e aplicação social. Nosso debate está dividido em três seções: a discussão inicial sobre educação e psicologia, na busca das leis da formação humana; a constituição histórica e contextual desses saberes; e a transição de uma psicologia do escolar para uma visão mais ampla entre psicologia e educação. Ao longo da discussão, tentamos deixar patente a tese de que a fonte de uma relação tão estreita entre esses saberes responde não só a uma necessidade humana mais ou menos universal e sincrônica, mas que, paradoxalmente, foram certas condições do desenvolvimento histórico da sociabilidade humana e da economia e da cultura modernas, especialmente nas sociedades capitalistas ocidentais, que cunharam tal entrelaçamento.

Palavras-chave: psicologia, educação, práticas pedagógicas.

La relación entre psicología y educación: oficios imbricados

RESUMEN. La clásica tesis de que las ciencias psicológica y educacional tienen una historia bastante reciente parece no tener un consenso entre los estudiosos de la epistemología de estas áreas. Cuando se averigua la relación entre psicología y educación, solo recientemente se ha percibido cuánto estos campos del conocimiento están imbricados como oficios y asignaturas. El objetivo de este trabajo es demostrar cómo la psicología y la educación, otrora saberes relativamente independientes, se volvieron asignaturas, oficios y profesiones interdependientes y de gran reconocimiento y aplicación social. Nuestro debate está dividido en tres secciones: la discusión inicial sobre educación y psicología, en la búsqueda por las leyes de la formación humana; la constitución histórica y contextual de estos saberes; y la transición de una psicología del escolar para una visión más amplia entre psicología y educación. A lo largo de la discusión, intentamos dejar evidente la tesis de que la fuente de una relación tan estrecha entre estos saberes responde no solo a una necesidad humana más o menos universal y sincrónica, sino que, paradójicamente, fueron algunas condiciones del desarrollo histórico de la sociabilidad humana y de la economía y de la cultura modernas, especialmente en las sociedades capitalistas occidentales, que acuñaron tal imbricación.

Palabras clave: psicología, educación, prácticas pedagógicas.

Introduction

Gundlach (2007) highlights that psychology as a subject with disciples and professional social practices is only constituted at the beginning of the nineteenth century, but as a philosophical knowledge it has been discussed for more than two thousand years. Gal (1989) claims that something similar can be attributed to education, because as knowledge and social practice it dates back to the beginning of civilization, but as a specialized subject it is a phenomenon of modernity. Only with the advent and strengthening of modern science, psychology and education were configured as a group of theories and teaching and learning practices that go beyond the art of teaching (Carvalho, 2002).

The aim of this study is to demonstrate how psychology and education, erstwhile independent knowledge, became interdependent subjects, crafts and professions which are greatly recognized and socially applied, notably, dating the end of the nineteenth century, as a consequence of the modern thought development (Pfromm Netto, 2008).

The idea is to show that the approximation between both skills happened due to certain social needs derived from the modern capitalist society, as science is inserted in the productive process and the industrialization becomes the society economic basis, symbol of industrial revolution (Oliveira & Maia Filho, 2012). This process between both subjects implied the birth and evolution of the psychology field which makes the most explicit interface with education: changing school psychology into the paradigm of psychology and education, which will be deeply viewed in the last session of this study.

We must carefully observe that the idea of paradigm, in human sciences, does not necessarily follow Kuhn's concept (1991) when it discusses upon the paradigms ruptures in natural sciences. As for him, a paradigm is a present truth, accepted by a scientific community, as universal explanation for problems of a field of science. Carone (2003) has already approached this theme and concluded that psychology does not have paradigms, i.e., there are not truths that may overlap, except if they coexist at certain moments of the scientific thought of their field. Thus we intend, through the admission of the word paradigm, to discuss the apogee and decline of certain ideas, although we make an epistemological route through some thoughts in psychology, mainly the ones connected with education. Then it is important to highlight the ideological character, many times pungent, of each historical period.

Then we can highlight another interest in common, foreseen in this new way of sociability promoted by the interface between psychology and education. It deals with the fact that the basic concern of science is also to guarantee, publicly and systematically, the production of the new, and not only the mere conservation and maintenance of the cultural products (Romanelli, 1996; Ponce, 2001). Its growing insertion into the process of social wealth production itself has boosted the so called new education, in which the access to tradition is only a pre-condition to problematize the reality and search for new answers to the problems of the world. As Lukács (1981, *apud* Lima & Jimenez, 2011, p. 92) claims, "[...] man [is a being who] gives answers"; every answer starts with questions, inquiring is the source of problems through which the scientific research starts.

It is not by chance that the finding of childhood becomes the motto from which psychology and education emerge, as subject knowledge, at the beginning of the twentieth century, on the steps and contributions of previous centuries, derived from J.-J. Rousseau to J. H. Pestalozzi; or in the end of the nineteenth century, from J. Dewey to M. Montessori and so many others who claimed that the child is the constructor of man (Montessori, 1971).

The child is still conceived as a seed of creativity, and it is the duty of the psychologist and teacher to cultivate it through the scientific and experiential teaching. The metaphor created by Pestalozzi, Fröbel's ex-student in the first half of the nineteenth century referring to child education and the children's creative potentialities, is not surprising: kindergarten. It happens in a naturalist conception of children development, supported by botanic, with all the parts that come together: seed, growth, caretaker (gardener), among others (Vygotski, 1996).

In this sense, our discussion is divided into three sections that will be object of this text: the initial discussion between education and psychology, in the pursuit of laws of human formation; the historical and contextual constitution of this knowledge; and the transition from an educational psychology into a wider view between psychology and education.

The pursuit of the laws of human formation: psychological and educational basis

How does human development connect with education, under a comprehensive perspective? Here is a question that permeated several guidelines in psychology, sometimes producing complex

answers, sometimes reductionist. Let's carry the analysis of some of these ideas to understand the comprehensiveness of this discussion.

In a psychology guide designed for educators, written in 1926, Vygotski (2001) presented a thesis that became reference in the discussion between psychology and education, which has not met a satisfactory resolution until nowadays, because there are still defenders and opponents to this thesis currently.

In his classic text, "Learning and mental development at school age", the famous Belorussian psychologist discusses the crisis of psychology of his time and compares his reading of psychological phenomenon, inspired on historical and dialectic materialism, world-known as historic-cultural psychology, to the idealistic and mechanistic view that, according to him, was predominant at that time, especially J. Piaget's constructivism, K. Koffka's gestalt structuralism, and E. L. Thorndike and J. B. Watson's behaviorism (Wertsch, 1988).

Vygotski's discussion can be summarized into the following opposing thesis: learning promotes human and psychological development; or is human development a pre-condition for learning? The thesis can be presented in another way: can learning happen only if certain human development maturational and/or socio cultural conditions are present as pre-conditions of the process or, on the contrary, is learning the pre-condition itself of access to culture and human formation?

It is noteworthy that, when we present the idea of learning, we refer to the original Russian word *obutchenie*. It, in turn, is more commonly translated as instruction, as a teaching and learning process. According to Prestes (2010, p. 184), "[...] *obutchenie* is an activity, which promotes development and must be ahead of development and not following it as a shadow."

It is in this perspective that Vygotski's issue aimed, in that occasion, to fight the inatist and environmentalist thesis in psychology and their bias, sometimes idealistic, sometimes mechanistic. Piaget's constructivist idealism, although at first favorable to an interactive reading of human formation, in practice, it overestimated the biopsychological isomorphism and necessary maturational pre-conditions to the psychological and cognitive development, as claimed Vygotski (2001). On the other hand, although it was anti-inatist, the environmentalist and mechanistic Thorndike's perspective, overestimated the elementary determinations of the environment and the organism (stimulus and answers, reward and punishments), without adequately considering the

historic-cultural and interactive dimensions of human formation.

Koffka's and collaborators' structuralism was a particular case. It attempted to integrate the biological, physical and psychological dimensions of human development, but it underestimated the historical and cultural dimensions of the psychical structuration; in Piaget's words, it was a structuralism without genesis (Penna, 1991). In summary, according to Vygotski (2001), Piaget's genetic psychology claimed that the development would be a condition for learning; in turn, the behaviorist conception equated development with learning; and in Gestalt's school of psychology, there was the conception that the development promotes learning, at the same time that learning promotes development.

After a long discussion, Vygotski (1996) concluded that learning is the fundamental process so that the development of higher psychological processes can occur. Nevertheless, if Vygotski (2002) is correct, his thesis generates an unexpected consequence for beyond the purely psychological discussion, because such paradigm would lead us to inquire: if psychology is a science that studies the learning processes and the general laws of the psychological development, is its duty to explain the educational phenomena? The educators, in turn, could oppose to this discussion: if there are individuals who learn it is because there is also someone teaching them, and it happens through social, biological and cultural pre-conditions preceding the learning process. In short, Carvalho (2002) asks, would it be the psychology duty to determine the general laws of learning and the consequent development of human being, or would it be the pedagogy duty to find the laws which enable the learning and human development conditions?

It is true that Vygotski's argumentation takes into consideration Piaget, the one who he met in the first decades of the twentieth century. In fact, in a famous book of the end of the 1940's, "Para onde vai a educação?", Piaget (1973, p. 22) seems to replicate this Vygotskian interpretation with a point that is, at the same time, a defense against the unfair reading and an attack on Vygotski's thesis:

In its wider aspect, the problem at issue here returns to the question whether there is some advantage in accelerating the succession of stages of development or not. It is obvious that all education consists of, one way or another, a similar acceleration; but the issue is about establishing at what extent it is useful. It is not without a reason that childhood goes much further for men than for inferior animal species; it is

likely that for each type of development an ideal speed is imposed, and its excess may be as harmful as its slowness. However, we do not know these laws and, also about this point, future researchers will be in charge of clarifying education (Piaget, 1973, p.22).

In addition to Piaget's irrefutable epistemological humility, expressed in this passage, there are, however, other issues that precede Vygotski and Piaget's own argumentation, such as: what education are we talking about? What psychological processes are at stake? It is obvious that for Vygotski (2000), the educational process is not limited to school and formal education, because what is implicit in this author's thought is that education and its teaching and learning processes are, before anything else, a wide human formation that will enable the formation of the typically human psychological processes: the higher psychological processes.

In other words, it is the route itself that enables the humanization of our species through the access to culture and its tools. In this sense, culture could be defined as the group of all the artifacts produced by humans whose access cannot happen through the genetic code, but through the cultural programming and its immanent plasticity, as highlighted by Pozo (2005).

Based on this point, it is possible to view that education is everywhere. Before going to school, the child receives education in their primary group, in family or social group that takes care of them, primary condition for their own survival (Portugal, 1998). We have the longest childhood, about twelve years, and the greatest dependency of the other for more time; but what is apparently our biggest weakness is also our highest virtue, for this is the period in which education will act more intensely and determining. In the first years of our lives we insert in culture and acquire the tool and basic products of cultural formation, which are necessary for our development and humanization. Becoming a human being implies "progressively" accessing the different levels of culture complexity, from the primary to the widest social groups, from the intersubjectivity to the intrasubjectivity or culture interiorization and formation of the individual subjectivity, as Vygotski (2000) and Vygotski & Luria (1997) claim.

How can we enable the individual's insertion in culture, allowing the access to cultural goods and its tools, a condition for human development? In fact, human development is not limited to its biological development, neither to its primary social condition. It is not an easy question to be answered, but there is some agreement in the different chains of

psychological thought that the explanation is related to the changes which happened throughout history in the process of human socialization that determined the appearance of work, affective and symbolic language and conscience of human beings. Work, as highlighted by Lima & Jimenez (2011), is pointed by Lukács as 'protoform' of social being just because it produces a new system of intentionality when it also configures as a system of symbolic and conscious representation, and not only as mere action upon the world.

Nevertheless, the human subject is not born working, with an innate system of language or previous conscience. They need to learn how to work, to become a subject of language and with an own identity when relating to the other in culture, and it is a consequence of these human specificities. According to Farr (2004, p. 100), "[...] for Wundt, the language was a product of mind, for Mead, mind was a product of language". In this sense, as Maia Filho (2011) claims, as the human being progressively became a being of learning and culture, the educational processes became an imperative for the development itself.

The educational course is a double sided process: the act of teaching does not ensure the act of learning by itself; one can only teach if they were once learners. In order to complete the complexity of the problem: learning is, at the same time, a social act, because it needs, at least initially in an explicit way, the mediation of the other, and at the same time, a singular act, because nobody can learn for the other, as pointed by Nunes & Silveira (2008); it is therefore about an interactive process, because teaching presupposes putting yourself on the other's place; learning also means detachment, as one needs to react to the other, believe in the other, identify with the other and their truth. Then the new is produced, the fundamental otherness so that the teacher and learner are constituted; so that one and the other can truly emerge.

That is why the education act is doubly constitutive; it is never a mere transmission of accumulated knowledge and the cultural products, once it presupposes the active and meaningful apprehension of the learner who, from their point of view, is already modified by this process. The one who teaches is also modified in this process; as they need to put themselves on the other's place, presuppose the other, so that the communicative and affective interaction may intentionally occur. This fact derives from the nature of culture, because it is an open system. It presupposes this plasticity in which the previous experiences from one and the other can be contemplated by the marks and cultural

products. It happens exactly because it is in culture that a new intention (work) can be named (language) and represented (conscience), constituting new subjectivities and subjects, also producers of culture.

Psychology and education as sciences and scientific subjects: historical notes

Claiming that knowledge, such as education and psychology, emerged as subjects and social practices only recently acknowledged is a highly controversial thesis, as well as claiming a recognition of a supposed scientism of both knowledge only in the twentieth century. In favor of the first thesis, we could support on historical data, as the professionalization of these crafts, with disciples, masters, laws and hierarchies, seem to tributary of the nineteenth century (Gal, 1989; Gundlach, 2007). In favor of psychology, we could mention the emergency of scientific research in that century and its apparent social acknowledge (Shultz & Shultz, 2013); in pedagogical sciences, the transition of traditional teaching, from especially religious and humanistic nature, to teaching based on the emerging researches and conceptions of modern science and its applications to the school universe (Gilly, 1981).

The context is compelling and allows several interpretations. If we consider the second half of the eighteenth century and its "continuities", the nineteenth century and its configurations in the twentieth and twenty-first centuries, it is possible to consider several possibilities, especially regarding this discussion. As Hobsbawm (2013) mentions, it is about a period which included the two great revolutions of contemporaneity and their determinations in current sociability: the politics represented by the French revolution and the economic one, represented by the English industrial revolution. It corresponds, actually, to the context in which the capitalism and its consequent bourgeoisie governability were consolidated (Ponce, 2001).

It is clear that such context promoted deep changes in the society organization with great repercussions on economy, culture, politics, social relations and education. Mészáros (1996) describes that moment as the revolutionary intervention of bourgeoisie in modern society formation. Its insertion in the widest organization of social life demanded double combat. First, to *Ancien Régime* and their representatives, the aristocracy inheritor of goods and medieval culture; second, to church and its spiritual, cultural and earth power, as a great owner of land and goods.

In the political world, it regards the king and his representatives' substitution of power, the monarchic systems by the republic (*res publica* or public thing); by the equal division of this power into three interdependent instances (executive, legislative and judiciary), from the free election, base of the contemporary liberal democracy.

In the productive world, it regards the substitution of work remains and art corporations and crafts for free and paid work. It meant a deep cultural change, as work is not sacrifice, pain, *tripalium*, labor anymore, but it is a free activity, worthy and responsible for social mobility. In other words, it is a freely interchangeable activity, subject to buying and selling, as highlighted by Marx (1890/1994). It could not be more frightening because differently from the aristocrats, the bourgeois claim to be "workers".

In the world of ideas and culture, what is at stake is questioning the knowledge monopoly represented by church and elite. It is necessary to struggle the darkness of ignorance through the lights of education, as illuminists said. In fact, the emerging modern science starts to explain the world phenomena more and more naturally and secularly, for beyond the supernatural and absolute truths, supported by faith (Hergenhahn, 2004). Science is, above all, experimental, intersubjective and public; it is not a monopoly of a group and their secret and esoteric knowledge.

Such assumptions fit, perfectly, the new school proposed by the French encyclopaedists: secular, public, universal and free. Secular or lay because it is not limited to religious dogmas and its metaphysical-philosophical humanism. Public, first because it could not be a hostage to the private and assistant initiative anymore; secondly, because based on the publicity of the new science and its humanism endorsed on the ability of human reasoning to catch, experimentally, the laws of nature functioning. Universal, because it is open to all social classes; and free, because it starts to be an inalienable right of citizens to be granted as a State duty which may fund, although it happens through the indirect financing of the worker, as they are subjected to the compulsory logic of taxes payment and surplus value production (Marx, 1994).

It is not about any kindness of the new lords of economy and politics, the bourgeois, but it is about new times: the field workers migrate to the city to compose the lines of factory proletariat. As pointed by Thompson (1987), the field is emptied and the properties acquired by the new bourgeois capital in the sequence of the aristocracy bankruptcy, and the city (boroughs) starts to be invaded by peasants in

search of better life conditions. Learning new qualifications compatible with the emerging industry and its modern techniques of production is necessary. It is the slow and continuous substitution of the agrarian and handmade base of economy by the structure based on the commerce and industry force together with the expansion of capital to unexplored and distant areas.

It is in this context that, obviously, the pressure of the working class for new opportunities is enhanced. Then we have the beginning of what will be later the education systems and mass education, whose final aim will be to allow the progressive access of all citizens to the school system (Gal, 1989). This demand is stimulated by the increase of life expectation of the population that will imply in two highly interesting consequences for this new economic configuration: the increase of productive time, of the school formation time and for work, as well as the productivity of labor processes.

Therefore, it would not be casual that this new context brought a crisis in education; to answer this new reality, the school would need to be reformulated. The school cannot be secular anymore; it needs to be a scientific subject, pedagogy. This is the scenario, although each people have acted towards this crisis their way and their time.

The scientific education was not the only one to emerge as a result of both revolutions, however. The psychology as a subject also seems to be a reply to this new moment of human sociability, western. Taking the German case as a reference, Gundlach (2007) points that psychology, as a scientific subject, was only constituted in the beginning of the nineteenth century. It becomes a subject, a prerequisite to be a teacher at the newly founded German *gymnasium* of that time, which, like the French lyceums, came to substitute the old schools, under the protection of church and its power, by a new high school, under the State power. This new school becomes a previous condition for the insertion, with high quality, in the rigorous German university system.

Gal (1989) notes that the world school system was formed “backwards”, as a house that starts to be built by the roof. First, the colleges and universities appeared, then the high school, afterwards primary and elementary education, and only in the end, and very recently, kindergarten.

Psychology is also asked to contribute towards the new revolutionary moment. As a direct inheritor of the philosophical and medical thought, the emerging psychology aims at finding the natural laws that explain the functioning of the human

mind, its ability to learn and know the world, as well as the dilemmas and implications of mental pathologies (Hergenhahn, 2004; Shultz & Shultz, 2013). Nevertheless, when investigating and answering for the constitution of the psychic and laws which regulate the mind functioning and human behavior, the psychology emerges as an interface of education.

It is not, therefore, casual that one of the main founders of the new school in the world, the American John Dewey, is, at the same time, a psychologist and an educator. On the track of Comenius, Herbart and Pestalozzi, Dewey points, exactly, to a school supported on teaching methodologies, compatible with scientific knowledge, which is emerging and at stage of consolidation: the experiential teaching, problematizing of reality and more compatible with a school institution that wants to produce the new, and not only repeat knowledge, accumulated by tradition. Dewey not only represents the emerging consolidation of the American industrialism, but also the anteroom of what was on the way: the growing application of science to the productive process and its psychological and educational techniques of control, selection and adequacy of behavior towards the new world of work that was being configured.

From the educational psychology to psychology and education: transitions

It was observed up to the moment, that the interface between psychology and education happened through the bias of meeting demands from the society's configuration based on industrial production. This interdisciplinarity represented the apogee of humanistic culture seeking for the state of social well being and which viewed in science, since the scientific method developed by Galileu Galilei, in the seventeenth century, the possibility to find answers for daily problems (Koyrè, 1991). In this conception, the psychology science emerged with the purpose of investigating the universal laws of human intellectual abilities development (Legrenzi, 1997). The summary discovery of the psychic functioning was believed to enable its use in the education field, especially concerning the supply of subsidies that guided the pedagogic practices.

Francis Galton, in England in the end of the nineteenth century, was one of the precursors on the study of intelligence. Strongly influenced by Charles Darwin's ideas, Galton used to attribute some biological traits to intellectual abilities (Almeida, 1998). He would limit them to the field of

sensory performance and the possibility of discriminating external stimuli, i.e., the more precise the perception ability of sensory differences, the greater the intelligence reach, according to Galton.

However, it is only from genuine programs, such as the ones created by Alfred Binet in France, Stanley Hall in the United States and Édouard Claparède in Switzerland that we can highlight applications of systematic studies about children development to education. Gilly (1981) claims that, in all these proposals of investigation, at least three primary conceptions were found. The first one is the concern with the development of a psychology different from psychological traits. In addition to the study of the general laws of development, the investigation of psychological characteristics that would differentiate the individuals was at issue.

The second conception is more consonant with the pedagogic agenda, as researchers studied school specific problems. Differently from Jean Piaget, who proposed to award scientific character to the epistemology through genetic conception, not explicitly applying his findings to school, Alfred Binet, for instance, through the metric of intelligence as a tool designed for differentiating the school sayings. This allowed classifying them due to intelligence, creating a new order for learning, different from before.

This movement was also expressive in Brazil, and Lourenço Filho was one of its main exponents. One of his initiatives was the foundation of psychology laboratories connected with schools of teachers' formation for primary school, the so called ordinary schools (Monarcha, 2001). The prerogative was that the schoolchildren classification would serve to formal education and the field of work as well. Thus, since the beginning of the twentieth century, in Brazil the relation between education and work, or education for work, is evident, according to a more pragmatic reading of this combination. According to Azevedo observations (1963) and Romanelli's (1996), the dyad education and work is really complex. Any reformist action in education aims to fit the economic constituent that rule the world of work.

Finally, according to Gilly (1989), researchers shared the idea that the application of psychology to education must focus not only on the 'abnormal' ones, but also develop programs of performance designed for the so called 'normal' ones. The several psychological theories were capable of working as a support for the formation of a culture of assisted performance in education (Gallimore & Tharp, 1996).

The later advance of the relation between psychology and education happens according to the increase of the industrialization process, according to the mode of capitalist production. Some needs emerge due to the labor transformations of industry and the appearance of a service sector which is more emerging and complex. Psychology will not escape the several converging ideological dictates of the Brazilian society due to the economic and social transformations.

In this configuration the new technologies of school organization, supported by psychology, are present in the educational spaces, in order to assure the order and progress, positivist slogan of our national flag. The psychometric practices derived from the experimental psychology labs, since their first unit, still in 1906, are gradually added to other strategies of the school space sanitation (Antunes, 2012). In this context the clinical practice is inserted by school as a possible tool to saturate the schoolchildren's learning problems, especially the ones coming from the so called 'bad behavior'.

Patto (1984) lucidity reports the non-critical way the behavior engineering was applied to education (Skinner, 1972), and something similar was done regarding humanistic psychology (Rogers, 1977). What is more perplexing is that any psychological theory, including psychoanalyses, can work as strategies of human behavior control aiming to organize the school order.

The relation between the words and the phenomenological world is not casual. It is an alert, because the articulation of psychology with school education is based on the several technologies of behavior (psychometric, psychological theories, etc) in such a way it was entitled as a subject, in mid-sixties, 'Psychology of Schoolchildren and Learning Problems'. It is seen that the focus of the psychologist performance was the so called 'schoolchild' and their 'learning problems'. The entire dynamic from the school learning is ignored and, when it is not, it takes on the role of dependent variable, subject to control.

The confrontation towards the 'Psychology of the Schoolchildren', especially represented by Patto's assumptions (1984), is associated with a more critical pedagogy of the daily practices (Freire, 2011). It led the relations between psychology and education to reconfigure from new outlines. In this moment, the critical theories of education which would enable the reading of reality beyond its appearance would raise, aiming to unveil the ideological content of the sciences at stake, considering the social, economic and political emergency of that time.

Meaningful transformations start to happen in the beginning of the 1980's, especially in Latin America, with the apparent decay of the totalitarian systems. The reality would not be able to be read through myopic lens; lucidity would be imperative. Thus, psychology breaks the idea of the 'Schoolchildren' and starts to view the institution as a system located in a historical context and moment; then it is more consistent to entitle it as 'School Psychology'.

Some advances happen with this new configuration. It is interesting to observe that it is not about a mere nomenclature, but it is about taking on different positions from other times. It is expressed in a classic text of Andaló (1984), 'The role of the school psychologist', in which the author invites the psychologist to become agents of changes. She emphasizes the need to change school space to beyond the psychometric and the clinical theories in psychology. Disruption is the word of order. The critical and systemic position of education will not ask why students do not learn, but it will inquire about the learning conditions, which involve the political, economic and cultural realities subjacent to school education.

If, on one hand, the schoolchild and their problems lose the focus, the social conditions of learning are much more highlighted, something which would be expensive for the relation between psychology and education itself. It is from this logic that the critical school psychologist will prescind their competence regarding the study of the human psyche, in order to demarcate the rupture with a school psychology, and it will be closer to an analyzes of the school institution.

This way, what would the psychological knowledge be useful for? What are the learning theories useful for? The pursue of a necessary rupture with the schoolchildren psychology and the enhancement of a school psychology was also proved to be problematic due to two reasons: based on the school institution groundwork, psychology withdraws from the education phenomena as schooling, as it goes over the 'walls of school'; it goes over the logic of community closer to school; secondly, because the school psychologist, in their strand of institutional analyst, almost quit all the theoretical construct about human psyche in their relation with education and starts to work, many times, as a 'pseudo sociologist'.

Finally, the demands of contemporary education are marked by intense and worrying circularity of information, in such a way psychology needs to carry one more transition – the passage of a school psychology to a perspective which evidences a more

dense relation between psychology and education or psychology and educational processes and all it is about: family, media, society, psychic suffering, knowledge construction, etc. (Setton, 2002).

It is about the several educational ways which are present and that psychology would have a necessary role in order to understand and intervene in the educational processes, no matter where they are present. Not limited to the schoolchildren or the school institution, psychology is offered to collaborate with what its history as a craft and science, according to Gundlach (2007), was configured to it: to use its competence (theoretical knowledge, technical abilities, existential experiences, etc) on human formation, as seen before, the human psyche development, if not confused, is closely interlaced with education.

Final considerations

Along the discussion, in which we described interdependencies and interlacing between both jobs, their origins and configurations, we attempted to make it evident the thesis that the source of a so narrow relation between this knowledge replies not only to a human requirement more or less universal and synchronic, but that, paradoxically, were certain condition of the historical development of human sociability, economy and culture, modern, especially in the capitalist societies, western, which favored such approximation.

We can claim that the formalization of the spaces designed to education allowed the closer relation of sciences under the pedagogic denomination. Psychology is, undoubtedly, a pedagogic science, as it makes applied science. The educational pedagogy is psychology when it recognizes that the teaching and learning process is, actually, the result of a human relation, to beyond a merely cognitive process. Classic issues derived from the more philosophical discussions went through the field of psychology investigation and its several methods. Education, on the other hand, stops being a mere instruction, transmission or modeling, when it proposes to be scientific. Human learning seems to be one of the philosophical assets shared by psychology and education, maybe the most pungent contribution from both fields.

When discussing the human learning thematic, researches from this field try to cover this issue in several ways. The first one, as seen before, deals with the narrow relation between learning and human development. Efforts are made in order to identify the true role of learning in the human constitution. Such discussion can happen given a

diachronic perspective, or simply ignore the order of the events and dedicate to an effective and synchronic analysis of them in more immediate situations.

This process also comes at issue when we attempt to identify its role in the formation of learning agents in their social constituents. This relates to social groups, domination functions, exercise of power and the way of forces confrontations through the reality appropriation contrasting the levels of conscience that education might promote. In the background perspective, the role of the wider social context.

The third and last mode corresponds to the historical and ideological path tracked by psychology in the field of education, as it denotes attitudes of identity references regarding the education subjects. All this analysis leads us to think about the ideas currently shared concerning education and due diligence, otherness recognition, a contribution that psychology has particularly highlighted.

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