

## **As transformações dos saberes a ensinar e dos saberes para ensinar na profissão docente**

The transformations of knowledge to teach and knowledge for teaching in the teaching profession

Las transformaciones del saber para enseñar y del saber para enseñar en la profesión docente

Jose Alberto Azevedo Vasconcelos Correia 

University of Porto, Porto, Portugal  
correia@fpce.up.pt

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### **RESUMO**

Neste trabalho analisamos desafios colocados à identidade e formação de professores pelas transformações epistemológicas produzidas no campo dos saberes a ensinar e no domínio dos saberes necessários para ensinar. Admitimos que o professor é um trabalhador cognitivo que mobiliza saberes oriundos do campo dos saberes a ensinar e no campo dos saberes para ensinar, admitindo que a sua ação não se limita a transpor estes dois tipos de saber. Assim num primeiro momento refletimos sobre as transformações da estrutura epistemológica dos saberes a ensinar tendo por base um conjunto de trabalhos que refletem sobre os desafios colocados pelas “Ciências de Ponta”. Num segundo momento propomos uma análise sucinta da evolução que se produziu nas estruturas de investigação das Ciências da Educação e da sua relação com as práticas e narrativas profissionais. Antes de sintetizarmos a nossa reflexão propomos uma deambulação sobre os saberes da ação e o seu modo discreto de existência.

**Palavras-chave:** Ciências da Educação; Investigação; Identidade; Formação de professores.

### **ABSTRACT**

In this work we analyze the challenges posed to teacher identity and training by the epistemological transformations occurring in the field of knowledge to teach and in the domain of knowledge necessary for teaching. We posit that the teacher is a cognitive worker who mobilizes knowledge originating from both the field of knowledge to teach

and the field of knowledge for teaching, admitting that his action is not limited to transpose these two types of knowledge. Thus, we first reflect on the transformations in the epistemological structure of knowledge to teach, based on a body of work that reflects on the challenges posed by "Cutting-Edge Sciences". Secondly, we propose a succinct analysis of the evolution that has occurred in the research structures of Educational Sciences and their relationship with professional practices and narratives. Before summarizing our reflection, we offer a brief exploration of the knowledge of action and its discrete mode of existence.

**Keywords:** Education Sciences; Research; Identity; Teacher Training.

## RESUMEN

En este trabajo analizamos los desafíos planteados a la identidad y formación de docentes por las transformaciones epistemológicas producidas en el campo del conocimiento para enseñar y para el dominio de los conocimientos necesarios para enseñar. Admitimos que el docente es un trabajador cognitivo que moviliza saberes provenientes del campo de los saberes a enseñar y del campo de los saberes para enseñar, admitiendo que su acción no se limita a transponer estos dos tipos de saberes. Así, en un primer momento reflexionamos sobre las transformaciones de estructura epistemológica dos saberes a enseñar a partir de un conjunto de obras. que reflexionan sobre los desafíos que plantean las "Ciencias de Vanguardia". En segundo lugar, proponemos un análisis sucinto de la evolución que se ha producido en las estructuras de investigación de las Ciencias de la Educación y su relación con prácticas y narrativas profesionales. Antes de resumir nuestra reflexión, proponemos un paseo por el conocimiento de la acción y su modo discreto de existencia.

**Palabras clave:** Ciencias de la Educación; Investigación; Identidad; Formación de profesores.

## Introduction

This text constitutes the written and formatted version of the closing conference of the IV Luso-Brazilian Meeting on Teaching Work and Teacher Training, held in Lisbon at the Institute of Education on June 5, 2019. In developing this conference, we started from two basic assumptions:

- 1) the recognition that the teacher is fundamentally a cognitive worker and, therefore, deals with cognitions that are more or less structured and established, and produces situated and contextualized cognitions;

- 2) the recognition that all this cognitive work is associated with relational work that develops, in part, within an established institutional context, but is not limited to reproducing this context, being, rather, also a producer of unprecedented contexts and relationships.

I begin by paying particular attention to the first assumption. This assumption presupposes that, in carrying out their cognitive work, the teacher mobilizes fundamentally two types of knowledge: knowledge to teach and knowledge for teaching. Both produce two specific and relatively codified cognitive orders, and the relationships between these two cognitive orders are not necessarily continuous.

In reality, their articulation generates cognitive conflicts whose management is neither pre-assured nor pre-configured, nor does it derive directly from either of these cognitive orders. On the contrary, these cognitive conflicts are always the object of contextualized management, within the scope of proximal action, of an action that mobilizes cognitions and procedures that are not inscribed in either the universe of knowledge to teach or knowledge for teaching.

The teacher is, therefore, a cognitive worker who is not limited to applying (cognitively or instrumentally) knowledge produced in fields external to their sensitive professional experience. They are also a producer of contextualized knowledge; this latter knowledge is not always codified, nor is it easily expressed or deducible from the spheres of knowledge to teach and knowledge for teaching. They are integrated, in turn, into the diffuse domain of the "tricks of the trade," lacking recognized epistemological status and disqualified in the face of "noble knowledge." Teachers are thus involved in complex processes of particularly complex situated cognitions. These cognitions are neither comprehensible nor intelligible by reference to the contributions and dispositions originating from the cognitive orders in which knowledge is produced and which the teacher is supposed to mobilize.

On the other hand, the recognition that the three cognitive orders that give meaning to teaching work – knowledge to teach, knowledge for teaching, and contextualized and situated knowledge – maintain tense relationships that always

oscillate between continuity and disruption, implies that, in the always unfinished process of constructing the profession, the ideology of deficit should be abandoned in order to emphasize the importance of devices and dispositions relevant to the wise management of conflicts.

Alternative processes for producing an emancipatory construction of the profession are therefore based on devices and dispositions relevant to the management of heterogeneous knowledge, both in terms of their substance and their production processes. These processes therefore contrast with logics that, by relying on the notion of "need for training," induce and legitimize a bleak and deficient definition of the profession.

The second assumption – the assumption that cognitive work is peninsular and not insular – and that, therefore, this work is associated with the work of relational and organizational production, can have strong implications for the ways of thinking about and practicing educational management and administration. I will not dwell on this topic, since it does not constitute the structuring dimension of my reflection. However, I cannot leave without making a three-point note.

The first point aims to emphasize that educational administration and management cannot be thought of as the application to the field of education of general and more or less decontextualized administrative theories and practices, which, as is known, owe this decontextualization to the fact that they have been recognized as relevant in their application to various fields of economic activity. What is important to emphasize in this domain is that cognitive work, as a structuring dimension of the problem of educational management, is a work with specific demands, and its products are not objectifiable nor are they produced within a productive cycle in which action would be susceptible to direct articulation with its products.

The second point is to highlight the idea that it is desirable to choose, in the management of cognitive work, to give greater importance to its communication dimensions to the detriment of its instrumental aspects. In this context, the work to be developed in the management and administration of educational contexts is a work of organizational mediation in which we seek to articulate and facilitate interaction between different contexts and structures, on the assumption that the latter are

transformed in the course of this process.

The third and final point aims to draw attention to the importance of thinking about educational management and organization not so much as an organization of functionalities and skills that pre-exist its organization, but as a producer of more or less invisible qualities that are not always incorporated into "organizational calculations." In this case, democracy, interference, and participation do not constitute luxuries or "losses of time" that could be dispensed with in the name of effectiveness, efficiency, and the quality of decisions, but rather constitute important guarantors of quality and the appropriation and production of the dynamics of qualifying organizations.

### **The transformations in the epistemological structure of knowledge to teach**

The existence of a tension between science-in-the-making and established science forms the backdrop for an analysis of the transformations of modern science. We know that teachers are fundamentally called upon to deal with the contributions of established science, on the assumption that the appropriation of some of these contributions will develop students' critical and scientific thinking, creating predispositions to question reality.

The works of Thomas Kuhn (1998) and Paul Feyerabend (1993), among others, have been particularly eloquent in questioning the representation of science as being occupied with the cumulative production of knowledge contributing to a deeper understanding of the Universe. In *The Structure of Scientific Revolutions* (2009), Thomas Kuhn shows precisely that science is not produced exclusively by the accumulation of knowledge, but incorporates paradigmatic revolutions, which do not occur exclusively for cognitive reasons, but are interpretable by resorting to psychosocial, sociological, and cultural dimensions. Paul Feyerabend (1993), for his part, authored a series of studies that highlighted the arbitrary nature of the so-called scientific method and the limits of its procedures in the search for truth and objectivity.

Callon (2011) and Latour (1994, 1999, 2019) account for various epistemologically acceptable and useful procedures for the production of truths, and

these procedures are developed in "hybrid forums" that do not include only researchers, but also various protagonists competent in the concerted production of objectification procedures.

But, while these and other authors question the dominant model of scientific knowledge production, emphasizing the relative epistemological and cognitive arbitrariness of its procedures, others, more recent and based on cutting-edge research, focus primarily on the relative arbitrariness of the cognitive foundations of the structure of produced knowledge, which, as is known, constitute the foundation of teachable science.

## **The modes of existence of knowledge to teach**

1.1. In a work published at the end of the 1980s entitled Order Out of Chaos, Prigogine and Stengers (1986) propose an important reflection on the meaning of time and temporality in physics and in the description of the natural world. In the opinion of these authors, the study of unstable systems far from equilibrium "marked the transition from determinism to probabilities, from reversibility to irreversibility" (p. 22), and these transitions are no longer epiphenomena or momentary disturbances, but are now accepted by a growing number of physicists. The question of the meaning of time and its irreversibility challenges the model of intelligibility considered unquestionable in classical dynamics and physics.

Indeed, from its origin, "physics was divided by the opposition between time and eternity: between the irreversible time of phenomenological descriptions and the intelligible eternity of the laws that should allow the interpretation of these phenomenological descriptions" (p. 23)<sup>1</sup>, that is, the phenomenological interpretations would be subordinate to the general laws and constitute a contextualized manifestation of these general laws. In the work of these two authors, we thus find some references to the implications resulting from the introduction of the arrow of time in the

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<sup>1</sup> Original: "a física estava dividida pela oposição entre tempo e eternidade: entre o tempo irreversível das descrições fenomenológicas e a eternidade inteligível das leis que deveriam permitir a interpretação destas descrições fenomenológicas" (p.23).

interpretation and explanation of physical phenomena. Let us then examine some of these implications, paying particular attention to those that weaken the assumptions of science taught in school and the scientific culture it aims to promote.

The first concerns the announcement of a new reorganization of the sciences built on dialogue and interpellation and no longer on an epistemological hierarchy, whose structuring role was attributed to the Natural Sciences; the status of the development of the different sciences was defined by their degree of approximation to the Natural Sciences. The authors, who had already debated this question in *Order Out of Chaos*, affirm in the work *Between Time and Eternity* (1990) the importance of recognizing that the time that separates man from nature requires a reorganization and a model of intelligibility "that opens up to the idea of human time as an exacerbated expression of a future that it shares with the universe" (p. 21), adding that, in the dialogue thus established, what is at stake "is not a 'worldview' that we want to share, but rather a vision of science."

Thus, for the authors we follow, like Art and Philosophy, Science is, above all, a creative experimentation with questions and meanings. Like Philosophy, it cannot tell us what time is, but like Philosophy, Science has time as its problem, the creation of a coherence between our most intimate experience, which is that of time, and our ways of describing the world and ourselves, who emerge from this world.

The second implication directly questions "scientific rationality" and the principle of causality that sustains it. Causality in physics has been legitimized by the acceptance of the principle of sufficient reason: "the equivalence between cause and effect, affirmed by the principle of sufficient reason, implies (...) the reversibility of the relations between what is lost and what is created" (p. 36). Now, as the authors show, for "sufficiently unstable systems (there exists) a temporal horizon beyond which it is not possible to associate the evolution of the system with any determined trajectory. (In these cases) we can only speak of the system in terms of probabilities (...) (and we can) define the intrinsic difference (...) between evolutions that lead the system towards

equilibrium and those that move away from it" (p. 38)<sup>2</sup>; that is, "the possibility of defining a difference between before and after" emerges, and it is not possible to predict with certainty the after from the before.

The notion of event, the attribution of a cognitive status that no longer considers it an epiphenomenon that disturbs the "natural state of equilibrium," leads to it no longer being deducible from a deterministic law. On the contrary, it is a matter of recognizing in one way or another that what occurred "could" not have occurred, thus referring us to possibilities that no knowledge can reduce. Events are thus potentially bearers of meaning, insofar as they are capable of "modifying the meaning of evolution (...) and producing new coherences" (1990, p. 61).

In this domain, physics has been using notions and problematics that, having been specific to the Social Sciences and Humanities and considered manifestations of their scientific backwardness, are today frequently used in cutting-edge research in the Natural Sciences. Let's look at some examples.

First of all, the notions of instability and uncertainty; no longer considered a narrative resource resulting from a possible lack of knowledge, but as intrinsic to the qualities of the systems studied. In this field, the valued scientific posture is no longer an attitude of "exteriority" of the researcher in relation to the investigated systems, but rather an attitude centered on the intrinsic activity of the systems, their relationship with the environment, recognizing that only this attitude generates the type of intelligibility relevant to understanding the histories and vicissitudes of the evolution of systems.

Secondly, the notion of sensitivity, once considered a notion usable only in the understanding of human behavior, now extends to the natural world. As Prigogine and Stengers (1990) point out, a "physico-chemical system can (...) become sensitive, far from equilibrium, to factors negligible near equilibrium. Using a term like 'sensitivity' in this context does not imply anthropomorphic projection, but signifies an enrichment of the notion of causality" (1990, p. 76). It is therefore understandable that the principle

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<sup>2</sup> Original: "sistemas suficientemente instáveis (existe) um horizonte temporal além do qual não é possível associar a evolução do sistema a nenhuma trajetória determinada. (Nestes casos) só podemos falar do sistema em termos de probabilidades (...) (e podemos) definir a diferença intrínseca (...) entre as evoluções que levam o sistema para o equilíbrio e as que dele se afastam" (p.38).

of objectivity is weakened, that is, that it is problematic and can no longer constitute the founding principle of the possibility of constructing scientific truths and knowledge. In other words, in their words: the "face-to-face between the object subject to timeless laws and the free subject, dominating the world, but stripped of the multiple relationships it weaves with it, can no longer be said to be 'rational' in the sense that it would be rational to oppose the 'true,' 'legal' world deciphered by science, to the confused world where the scientist lives" (p. 84).

Finally, consider the notion of bifurcation. In *Order Out of Chaos*, the authors use the notion of "choice of the system" to emphasize that, in systems far from equilibrium, it becomes possible for fluctuations to exist resulting from the intrinsic activity of a system which, under certain circumstances, are not necessarily described beforehand, but are discernible through micro approaches, and which produce a macroscopic transformation. The place where this new state occurs is a bifurcation point, that is, the "points of instability around which an infinitesimal perturbation is sufficient to determine the macroscopic operating regime of a system are bifurcation points" (1987, p. 234). The study of order by fluctuation, allowing the historicity of bifurcations to be reconstructed, leads to the postulate that the

universal law (...) (must give way) to the exploration of singular stabilities and instabilities and (to the recognition that) the opposition between the chance of particular initial configurations and the predictable generality of the evolution they determine, (is subordinate to the study of) the coexistence of bifurcation zones and stability zones, to the dialectic of unavoidable fluctuations and deterministic average laws (1987, p. 268).<sup>3</sup>

1.2. After this problematization of scientific rationality, I will now offer some considerations on the emergence of complexity in the description of the so-called "natural world." The authors and works that have served as references in this reflection question the difference between the simple and the complex. The traditional answer, as is known, rests on the notion of hierarchy. At one extreme would be deterministic

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<sup>3</sup> Original: "lei universal (...) (deve ceder) lugar à exploração de estabilidades e instabilidades singulares e (ao reconhecimento de que) a oposição entre o acaso das configurações iniciais particulares e a generalidade previsível da evolução que elas determinam, (se subordine ao estudo da) coexistência de zonas de bifurcação e de zonas de estabilidade, à dialética das flutuações incontornáveis e das leis médias deterministas" (1987, p. 268).

and perfectly intelligible objects, belonging to the natural world, of which the pendulum constituted the most finished example. At the other extreme would be the social world, largely unpredictable.

Now, "one of the most interesting lessons from the discovery of complexity is the one that teaches us to decipher the world we live in without subjecting it to the idea of a hierarchical difference between levels" (1990, p. 87). Thus, unpredictability and complexity, with the discovery of chaotic systems, are freed from the idea of contingent ignorance that could be overcome by better knowledge, attributing to them an intrinsic meaning. They further emphasize that "from now on it can be stated that the message of entropy is not about the limits of our knowledge or practical imperatives. Rather, it is a message that calls for a renewal of the meaning and scope of the questions that this world allows us to ask" (1988, p. 117). Thus, from now on, "deciphering the world is like solving a detective story: an intellectual game in which we only have clues, and never the totality of events" (p. 127).

Closely associated with the emergence of the notion of complexity, the authors discuss the concept of scientific objectivity. The current state of physics has led to the introduction of a subjective dimension and a possible renunciation of a realist type of description, or, if we prefer, to a new form of realism. Based on Niels Bohr – Nobel Prize winner in Physics in 1922 – the authors emphasize that this new form of realism must integrate the definition of the experimental device into the definition of the systems, that is, integrate into the observation the consciousness of the observer, in a contingent dynamic not reducible with arbitrariness. The objectivist model that limits itself "to judging the world of phenomena according to a mathematical ideal, to opposing intellectual knowledge to sensory knowledge," is therefore no longer relevant: it confers on most of the laws of physics the inferior status of sensory knowledge" (1990, p. 206). Thus, the ideal of objectivity, originating from physics, which dominated and hierarchized the sciences, is weakened, tending to define

a new conception of scientific objectivity that seeks to clarify the complementary and non-contradictory character of the experimental sciences, which create and manipulate their objects, and of the narrative sciences, which have as their problem the stories that construct their own meaning

(1990, p. 215).<sup>4</sup>

1.3. All the profound changes in the way science is done—in the procedures of objectification, in the principles of causality, and in the structure of scientific language—have been accompanied by important transformations in its internal organization, thus increasingly distancing the science-in-the-making from that of curricularized and schooled science.

Published some years ago, the work of the Massachusetts Institute of Technology (hereinafter MIT) (2010) on the evolution of scientific research, with the suggestive title "The Third Revolution: The Convergence of the Life Sciences, Physical Sciences, and Engineering," focuses on the current evolution of science, emphasizing that we are living in a context of a profound scientific revolution. In the authors' opinion, this revolution even shakes the foundations of the representations of science. This revolution results from the convergence of various branches of knowledge; it is tense and does not derive directly from the work carried out in each of the disciplinary territories. It involves the work developed at the interfaces of different disciplinary territories and results from the transgression of established boundaries. It is, therefore, a revolution of interfaces that does not necessarily lead to increases in interdisciplinarity, but multiplies the procedures and processes of "knowledge pollination." It is, therefore, an erratic, tendentially unstructured and destructuring revolution. This revolution, finally, privileges creative work, at the level of defining problems and producing procedures, relying on work collectives whose organization does not derive from the logic inherent in hierarchical functional dynamics, but are tendentially trans-hierarchical collectives. It is, therefore, a creative science that assumes a sense of risk that was at the origin of Modern Science and that the latter seems to have abandoned in order to transform itself into a dreary science occupied fundamentally with the fulfillment and ritualization of objectification procedures.

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<sup>4</sup> Original: "uma nova concepção de objetividade científica que procura esclarecer o carácter complementar e não contraditório das ciências experimentais, que criam e manipulam os seus objetos, e das ciências narrativas que têm como problema as histórias que constroem o seu próprio sentido" (1990, p. 215).

## **The modes of existence of knowledge for teaching**

2.1 Having alluded to one of the main trends that distinguish current cutting-edge science, it is now important to highlight some of its most relevant aspects, so that it may be possible to recontextualize the school and the teaching profession.

Firstly, the contrast between this science-in-practice and the science that is worked on in school in the name of promoting scientific culture, critical thinking, and rigorous questioning is unquestionable. The undeniable dissociation between these two sciences immediately poses an imperative for the school—the production of didactics more permeable to the science that is actually being done than to that which is believed to have been done. Thus, without denying the relevance of the cognitive heritage of science and without failing to recognize its importance in promoting culture and in the formation of the scientific spirit, namely the components that contribute to the development of a problematizing spirit, it is also important to relativize this heritage, especially considering the trends described above.

Pedagogical work cannot fail to be undisciplinatory and undisciplined, not anchoring itself only within the limits defined by the institutionalized boundaries of established science. This work is not, therefore, solitary work, but collaborative work, consistently invoking the historicity of science, its dilemmas, its tensions, and its unpredictability.

A second point serves to highlight the increasing permeability of science to sensory experience. As I have already had the opportunity to say, this permeability seems to be unquestionable and responsible for us admitting that Science does not belong only to the world of scientists, but to the world we all inhabit and build. The authors I have been following place particular emphasis on the New Alliance that has been regulating the relationship between the Social Sciences and Humanities and the Natural Sciences. An alliance that has been built both in the procedures and in the languages and concepts used. It could be said that, in this context, the knowledge that would desirably constitute the knowledge to teach is constructed in a language, in a structure of problematization and questioning, similar to those that structure, legitimize, and value the sensory experiences and narratives of education professionals.

We also know that these experiences and these professional narratives, while considered expressions of "professional subjectivities," are generally confined to the private spaces of interprofessional communication, because they are not recognized as having a scientific legitimacy that authorizes them to inhabit the "public spaces" of the profession and to be integrated into the so-called scientific descriptions of the profession and professional practices. We also know, from our own experience, that these scientific descriptions are simplified descriptions of a profession that, although appearing simple when viewed from the outside, is particularly complex when listened to and experienced from within. The challenge in this area, therefore, is to reconstruct an educational scientificity committed to educational actors and that can contribute to the production and legitimization of frameworks that qualify the desirable debate of the sensory experiences of education professionals, reviving a debate that seems to have been suspended for several years between educational scientificity and the professional practices of educators.

2.2 To better explain the transformations in the space where the legitimacy of knowledge for teaching is constructed, I now propose a digression on the socio-epistemological construction of educational scientificity, placing greater emphasis on the configuration of the spaces of production of this knowledge to the detriment of its content. To this end, it seems heuristically pertinent to revisit an interpretive model of the processes of production and circulation of the products of educational research already proposed by me during a conference at the 1st Congress, promoted by the Research Centers in Education and subsequently published in the journal *Sísifo* (Correia; Caramelo, 2010).

This heuristic model proposes an interactive definition of Educational Research (hereinafter ER), admitting that it maintains relationships of complementarity and tension with three more or less structured spaces in which regimes of truth about education are produced and circulated. These regimes of truth interact with each other and with the regimes of truth produced in the field of research.

I thus admit that hybridity constitutes the most relevant characteristic of the epistemological field of Educational Sciences (hereinafter ES). This hybridity is always the provisional and unstable result of its insertion into a heterogeneous discursive

space, and scientific procedures do not guarantee discourses with a claim to scientificity an a priori assured cognitive superiority; these discourses are involved in complex processes of legitimization in interaction with other regimes of truth produced in other narrative spaces.

Considering this context, it is analytically pertinent to abandon essentialist conceptions of Science—as has been recognized in the domain of knowledge to teach—in order to value, above all, a more reticular and interactive conception of educational scientificity. Only this conception will be able to incorporate into the field of analysis the determinants and logic of the links between scientificity and the fields with which it maintains privileged relationships, simultaneously contributing to structuring these fields and being structured by them. In other words, the application of ES to the educational field is not basically an instrumental application, nor a cognitive one, but a communicational application where the former constitute particular cases of the latter. Manuel Matos (2019), in a recent conference, highlights that entry through objective knowledge is isomorphic to the socio-institutional and political interests represented in the State (Wallerstein, 1996). As such, this entry is a

condition of production and regulation of action, both practical-moral and technical-instrumental (...) constituting the foundation of the instructionist model, that is, of a model for which valid knowledge is knowledge constructed in the exteriority and extra-territoriality of its recipients, considered, from the outset, as a blank slate, a formal condition for the universality of knowledge and its unconditional application, according to the principle of the common good (p. 35).<sup>5</sup>

Manuel Matos (2019) associates with the instructionist model a conception of practice that is subject to "a cosmic concept of time, where movement remains in solidarity with a vision of life guided by biological rhythms, defined according to the parameters of nature, in which the succession of phenomena does not give rise to essential changes, but only to conjunctural and phenomenal variations that needed to

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<sup>5</sup> Original: “condição de produção e de regulação da ação, tanto prático-moral, como técnico-instrumental (...) constituindo o fundamento do modelo instrucionista, isto é, de um modelo para o qual o conhecimento válido é o conhecimento construído na exterioridade e na extra-territorialidade dos seus destinatários, considerados, à partida como tábua rasa, condição formal para a universalidade do conhecimento e sua aplicação incondicional, segundo o princípio do bem comum” (p. 35).

be corrected so that they became consistent with the 'natural' model (biologically, the adult state; epistemologically, the rational and non-contradictory; socio-politically, the instituted/normative). We are thus faced with a concept of time that is strongly questioned in the interpretive and explanatory space from which it emerged.

The adoption of this model does not mean, however, that the autonomy of research in relation to its political determinants is not recognized. This adoption implies, however, that such autonomy is not a stage, but a process, a heterodetermined autonomy, acquiring specific configurations depending on the management of its links, both in the area of pedagogical activism and in the area of politics—largely structured around the figure of technocratic expertise—as well as with the set of devices that ensure a wide dissemination of its processes and products. The first two fields (the field of activism and the political field) maintain tense relationships with educational scientificity and with the cognitions produced, while the devices for widespread dissemination play an important role in structuring the target audiences of research, that is, in the construction of its public space, strongly influencing the supports and narrative structure of the privileged texts.

Ideally, these fields structure their narratives and activate specific legitimization logics which, while appearing to be incompatible with each other, do not prevent the development of interactions and dynamics of reciprocal contamination. Thus, the argumentative logic that predominates in the political sphere is that of persuasive and normative argumentation, and this persuasion is at the origin of curvilinear discursive productions marked by redundancy. This regime of enunciation ensures, on the other hand, a work of simplification of the educational, attributing to educational entities and their relationships qualities that allow them to be represented as manageable beings.

The sphere of educational utopia and activism, which, as we know, had great symbolic importance in Portugal in the 1990s in the political sphere, elaborates a regime of enunciation related to the expression of convictions, and an argumentative logic predominates there that frequently uses figures originating from authenticity, from civic and ethically authentic discourse. In this enunciative regime, recourse to the figure of example plays a central role. In the cognitive sphere, in turn, a regime of enunciation structured by concerns related to the adjustment between the discourses produced

and reality is privileged. In seeking to be congruent with reality, the cognitive sphere frequently uses arguments of an explanatory or interpretive type. Both seek coherence and, in order to disseminate it, they seek to develop clarifying arguments, which distinguishes them from political discourse, which, as I pointed out, is marked by redundancy.

2.3. The management of interactions with these three narrative orders, sometimes incompatible with each other, constitutes the core of a genealogy of educational scientificity, constructed in the register of complexification.

In the last twenty years, however, this complex mode of existence has undergone a particularly intense process of simplification, without these complex modes of existence disappearing from the field, particularly on its periphery.

In this simplification process, it is possible to identify two moments. The first can be characterized by a strengthening of the links between the activist sphere and the political sphere, to which I have already referred, and resulted in a profound transformation of the research space through its progressive dilution in the space where the narratives claiming to stabilize the definition of the criteria that define educational justice were produced. The tendency to make just and adjusted descriptions compatible and to reinforce their coherence with narratives concerned with authenticity had important implications for the structuring of the cognitive space, that is, in the definition of the target audiences privileged by research and in the stabilization of the narrative structure of the texts produced.

This simplification process was responsible for a dilution of the critical dimensions of research, for its transformation into a kind of technical accessory, for the reinforcement of its pragmatic and instrumental dimensions, and for the tendency for its legitimization processes to have been transformed into dynamics of evaluation and verification of political decisions. About 50 years ago, Jürgen Habermas (1968, pp. 123-124), in the book *Technology and Science as Ideology*, anticipated this situation in the following terms: "the public to whom research is addressed and to whom scientific information is addressed is no longer, or at least no longer immediately, a public opinion that engages in discussion, but a client who is interested in the research process by virtue of its technical application."

The format of scientific texts valued in this context follows a narrative style similar to that adopted by the research report focused on technical recommendations, and this style coexists with another style of text, aimed at a wider audience, materialized in some books promoted by school publishers, consisting of a theoretical part and a practical part, and which suggest that the only mode of existence of educational research is defined by its technical application, whether this application is carried out by education professionals or by political decision-making experts. Therefore, the model of communicational application is disqualified, involving the main protagonists of educational action in the field, who are seen as recipients and not as democratically organized actors involved in both the production and dissemination processes of educational scientificity.

The closure of the field of research on itself and the production and reproduction of the illusion that, in this way, increases in scientificity would be ensured, has been the dominant feature of the second moment of the simplification process. Now, these increases in scientificity came at the expense of an "epistemological irreverence" that founded educational scientificity, through the uncritical adoption of a model imported from a certain representation of the Natural Sciences, in a context in which, as we have seen, this model was already strongly problematized. And they also came at the expense of a certain critical distance from political power, insofar as the latter, indirectly, plays a structuring role in the field, through science evaluation and funding policies. It should be emphasized, finally, that this process of autonomization had important impoverishing effects on the relationships maintained with educational actors in the field. In reality, the closure of the field on itself instrumentalizes the field of research by imposing as the only model for its social valorization the one that results from the valorization of its products in a market of notoriety built exclusively within the scientific community. Transformed into a commodity that seeks its notoriety through its circulation in the hierarchical space of scientific journals, whose reputation depends, in part, on their ability to impose styles of scientific writing (more or less homogeneous and close to positivist models of thinking about and practicing science), research, as André Gorz (2003, p. 85) highlights, contributes to the "destruction of meaning, to the impoverishment of social relations (...) producing negative externalities," namely the

reinforcement of its own Taylorization and hyper-specialization. The profession of researcher, in this context, tends to become a disabling profession, a profession where

the vast majority gets to know more and more things, but know and understand less and less (...) given that fragments of specialized knowledge are apprehended by specialists who ignore the context and the device that produced them, just as they ignore their potential to be inscribed in dynamics of meaning production (Gorz, 2003, p. 111).<sup>6</sup>

On the other hand, the current dominant mode of producing science in the educational field has led to the valorization of a public opinion internal to science, in which experts exchange information with each other through journals or congresses to which the problems related to the production of meanings, relevance, and coherence within the field it has chosen as its object are subordinated.

Now, if this is the "natural" model for structuring the field of educational research, cognitive and instrumental rationalities also become the "natural" models for the application of knowledge. In other words, the only legitimate way to relate scientific knowledge to professional practices is to make this knowledge "insensitive" to sensory experiences, reinforcing the dissociation between lived experiences and their theoretical description.

I emphasize that, despite this being the legitimate and dominant model, the truth is that research dynamics that enhance the development of communicational and hermeneutical rationalities are still developing in the field. Without being homogeneous, these dynamics share a set of common concerns. Let's look at some of the most important concerns, already identified in other works.

2.4. From an institutional and political point of view, it would be relevant to highlight three aspects:

2.4.1 From an institutional point of view, the emphasis to be placed on a scientificity concerned with qualifying reasoned debate in the educational field implies recognizing strong autonomy for the field of research, without this autonomy being

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<sup>6</sup> Original: "a grande maioria conhece cada vez mais coisas, mas sabe e compreende cada vez menos (...) dado que os fragmentos de conhecimentos especializados são apreendidos pelos especialistas que ignoram o contexto e o dispositivo que os produziu, como ignoram as suas potencialidades de se inscreverem em dinâmicas de produção de sentido" (Gorz, 2003, p. 111).

seen as independence, but rather as a diversification of dependencies. This results in the need to consider a multipolar regulation of the field, capable of mitigating its excessive dependence on funding institutions and dominant models of knowledge production, in order to emphasize the establishment of citizen relationships with the products and processes of educational research.

In short, it is important to deepen regulatory models that make it possible to coordinate the heterogeneous injunctions resulting from instrumental rationality, cognitive rationality, and utopian rationality; the development of citizen research does not, however, only have implications for the definition of the interfaces that the field maintains with other domains of social life.

From the point of view of cognitive policies, it is important to recognize that regimes of truth always involve regimes of ignorance and produce a hierarchizing effect on different knowledges in the field. Admitting that the modes of production of truths and ignorances are not independent of the social importance attributed to different subjects and socio-educational dynamics, citizen research can play an important role in making visible modes of existence ignored by the political definition of education and the processes of constructing new educational subjects that generally emerge on the peripheries of the system.

Thus, educational scientificity is not just a process of knowing or recognizing phenomena that occur in the field, but rather is decisively inscribed in the very process of producing the field, in a dynamic in which the cognitive and epistemological determinants of science are articulated with the social uses of the knowledge produced.

2.4.2 From the point of view of scientific policies, these alternatives are based on the recognition that education is situated not in the realm of things, but in the human city, that it is structured through argumentation, rather than deduction or induction, which is why the privileged research models are situated in a register of long temporality. These models, largely derived from the specific characteristics of education, only seem to be compatible with the definition of long-term research policies, and these policies are instituted more as regulatory frameworks for research than as a more or less structured set of goals to be achieved.

The challenge that educational research faces in this context focuses on managing the tense relationships that are established between the short timeframes for realizing the exchange value of research products in the market of scientific productions and the long temporalities that mark research in the field of Educational Sciences and the very modes of existence of educational subjects.

2.4.3 In the third point, I intend to make some notes on the epistemological alternatives in the field, or rather on the alternative dynamics in the production and distribution of knowledge that maintains a closer relationship with knowledge to teach. Firstly, this knowledge, susceptible to being integrated into the heritage of educational sciences, is not intrinsically positive and normative knowledge, but critical and polemical knowledge that contributes to structuring a pluriparadigmatic and controversial scientificity that induces alternative ways of defining educational problems and research problems. They are not congruent with the current dominant models of thinking about research since, by implying and postulating that research practices must be preceded by the so-called "literature review" or "state of the art," they naturalize an epistemic unconscious where the scientific heritage would be declined in the register of the accumulation of scientific knowledge.

This cognitive space is also not compatible with a conception of scientific production that, by regularly establishing "ruptures with common sense," would have the ambition of constructing an "enlightened common sense" in which, tendentially, controversies would be absent, or would be epiphenomena resulting from possible ignorance about the field.

2.5. Although the knowledge that circulates in the field of training obeys a rationale that organizes it around disciplines with distinct designations and that in their articulation configure the curriculum (or structure), the truth is that the dynamics of curricular work did not necessarily consider these designations as established boundaries, not being incompatible with the development of an integrated curriculum as an alternative to the dominant collection curricula. The integrated curriculum therefore presupposes the development of border work, the valorization of a border epistemology.

We know that, in Science as in Social Life, the border can be intended to

separate or, on the contrary, it can contribute to articulating and complexifying. From the point of view of the border guard and the established territories, the border separates and distinguishes, establishes limits that must be preserved. The integrated curriculum and alternative scientificity are placed from the point of view of the smuggler, from the point of view of those who understand the border as a line to be transgressed, a line to be crossed, as a possibility of promoting unprecedented relationships that complexify instead of simplifying. Only the smuggler's epistemology can coexist with the epistemology of controversy.

Another dimension of the epistemological and formative work that I wanted to highlight concerns the reconceptualization of training work and scientific knowledge in the restructuring of professional action. It is a matter of emphasizing the idea that the knowledge that circulates in the field of training owes its coherence to its ability to enhance the conditions for the development of pedagogical and cognitive work structured around the concern to provide cognitive and methodological instruments that revalue these social and professional experiences, requalifying them and enabling their integration into a process of identity recomposition.

It is cognitive work more focused on experiences than on deficiencies, work that is more concerned with transforming relationships with experiences than with overcoming deficits in professional performance. The knowledge of training does not owe its relevance to the fact that it adds to or replaces existing knowledge, but to its potential in producing narrative mediation, facilitating the processes through which subjects construct themselves narratively, appropriating their history and their project. Scientific knowledge will therefore have to coexist with profane knowledge in a communicational dynamic of miscegenation between the pure, the applied, and the experienced.

This emphasis on the narrative construction of the subject is particularly relevant when we situate it in the domain of an epistemological reflection that debates the role of narrativity in the production of scientific knowledge in the field of educational sciences.

To facilitate the exposition in this domain, I will contrast the status attributed to testimony and to the witness. This contraposition does not only refer us to gender

issues. It places us in an epistemological debate that contrasts the differences between Explanatory Sciences and Interpretive Sciences, or more clearly, the comprehensive or hermeneutic Sciences, of which Freudian Psychoanalysis constitutes the most finished and elaborated example of the revaluation of the witness. As we know, the Social Sciences and Humanities, in general, and Educational Sciences, in particular, cannot do without the narratives of subjects to develop their research work. From an epistemological and methodological point of view, these narratives can be seen as testimonies of phenomena that transcend the one who testifies, and this testimony, similar to what happens in the legal field, constitutes an incomplete or distorted expression of the phenomena to which they refer.

In this cognitive context, it is important to multiply the testimonies and submit them to a set of more or less sophisticated technical processes to purify them of the untruths they always carry. The epistemology of testimony is always situated in a regime of truth and objectivity. The epistemology of the witness, on the contrary, is situated in a register of authenticity, assuming that the one who testifies is a communicational subject who is constructed in the exchange of testimonies and witnesses. The narrative of the witness is neither more nor less true, but constitutes a more or less distorted expression of a subject who seeks to narrate himself as a story. The researcher and educational scientificity are facilitators of this process of producing educational stories, whose plot is essential for the production of a consented meaning for educational dynamics and phenomena. Controversy, miscegenation, and the border are therefore integral parts of the epistemology of the witness.

2.6. I would say, in short, that the formulations of alternatives are made against the current of the destructive redefinition of Science that structures the field today. This redefinition has been accompanied by the production of a scientific culture structured by an ethos of the predator and an ethos of conspiracy.

This context of bustle and predation presupposes speed in the circulation and production of products aimed at specialized audiences who rarely have time to read and incorporate them into their questions, which means that the sciences that acquire power are the fast sciences. It is therefore important, in this domain, to rehabilitate the sciences of the field, the ecological sciences, in order to institutionalize a true political

project of the ecologization of knowledge and wisdom, a project of temporalization of research essential to the production of critical thought and a self-reflexive and contemplative science.

It is not within the scope of this reflection to draw conclusions, much less recommendations for the rehabilitation of a citizen educational scientificity. However, to conclude, I would like to share three lines of force.

The first serves to highlight the importance of thinking about the future, in the domain of educational scientificity, by rehabilitating memories and the past, namely, in the message it has bequeathed to us to think about this scientificity in the register of wisdom, that is, in a register in which the centrality of reflection on the meaning of the cognitive work carried out is assumed. In this domain, as I suggested, the inscription of research in the human city is closely associated with the reevaluation of an epistemology of listening and of the witness.

In the second line of force, I would like to emphasize that, in the interpretation of these memories, it is important to pay particular attention to the modalities of wise and prudent management of the instabilities and disturbances they caused, understanding these instabilities as mediations between research and its social destiny. In other words, it becomes relevant to highlight the border work that is developed in this articulation between research and its social destiny in order to promote an epistemology where the border does not separate, but (re)articulates and complexifies.

Finally, I would like to highlight the centrality that I think it is desirable to attribute to miscegenation or to the epistemology of miscegenation as a way of doing science in the educational field. This epistemology of miscegenation, in addition to highlighting the importance of paradigmatic pluralism, also emphasizes that, in the educational field, "scientific texts" are preferably addressed to a public opinion that tends to practice democratic dialogue, in a space where science is not intended to put an end to controversy, but contributes to its qualification.

## The discreet mode of existence of knowledge of action

It is not my intention to make a detailed reference here to the contextualized knowledge that teachers deal with and produce. As I had the opportunity to say, this knowledge has a discreet mode of existence because it is difficult to curricularize and escapes established scientific rationalities.

Despite having a discreet existence, this knowledge constitutes knowledge that inhabits the private world of teachers and does not have an epistemological status that authorizes them to express themselves in the public sphere. It can also be admitted that it would be desirable for educational scientificity to contribute to the production of frameworks capable of mitigating the gap between the symbolic and subjective importance of these and their irrelevance in the space where scientifically instrumented professional narratives are publicly constructed.

Laurent Thevenot (1994) draws attention to the fact that the difference between the public description and the private experience of action is not a difference between "different spheres of activity, or between a collective and individuals, but constitutes the expression of the existence of a tension between distinct pragmatic regimes." From this perspective, it can be considered that the rehabilitation of private narratives by the sphere of research requires that we be able to

methodically explore the different ways in which human beings regulate their adjustment to the context, (...), that is, the development of an approach attentive to the dynamics of coordination and the frameworks on which the evaluation and readjustment of acts are based, an approach that allows clarifying, simultaneously, the modes of construction of reality and the figures of collective integration (Thevenot, 1994, p. 89).<sup>7</sup>

In the field of research, the epistemological challenges that this approach entails are, in any case, carried out by the peripheral currents of educational scientificity and, in a relatively consistent way, by cutting-edge research in the natural sciences, as

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<sup>7</sup> Original: "explorar metodicamente as diferentes maneiras como os seres humanos regulam o seu ajustamento com o contexto, (...), ou seja, o desenvolvimento de uma abordagem atenta às dinâmicas de coordenação e aos referenciais onde se apoia a avaliação e o reajustamento dos atos, uma abordagem que permita esclarecer, simultaneamente, os modos de construção da realidade e as figuras de integração coletivas" (Thevenot, 1994, p.89).

characterized by Prigogine and Stengers (1986; 1999). These epistemological precautions are relatively absent in the current dominant core of Educational Sciences and in the epistemological representation of established Science and, therefore, in the sphere of knowledge to teach.

From a praxeological point of view, and with a view to its contribution to professional emancipation, the challenges that arise involve more participatory dynamics in the sphere of knowledge production (such as the hybrid forums I have already mentioned), and simultaneously, the development of devices and provisions to reduce the distance between the production of knowledge and its application, valuing above all its hermeneutical and communicational application. In addition to hybrid forums, it is also important to pay particular attention to the contributions of Freudian Psychoanalysis, namely the rehabilitation of the clinic as a space for the production and application of knowledge, which Habermas (1976; p. 245) considers one of the most emblematic indications of the possibility of producing an emancipatory Science "interested" in the production of an emancipated profession. As the author says, "psychoanalysis is (...) significant as the tangible model of a science that methodically uses self-reflection." A self-reflection intersubjectively shared between the analyst and the analysand, in which the validity of the knowledge produced depends essentially on the fact that it can be accepted by the analysand himself as knowledge of himself; in this logic, the empirical solidity of knowledge "does not depend on controlled observation followed by communication between researchers, but solely on the realization of self-reflection followed by communication between the researcher and his object" (p. 292). In Emancipatory Science, according to Habermas, "the subject cannot acquire knowledge of the object without it having become knowledge for the object and without, therefore, the object having become a subject" (p. 293).

## Synthesizing

While preparing this presentation, I regularly found myself confronted with a song by Sérgio Godinho sung in several voices. The singer, poet, and citizen says:

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*“Eu vi quatro quadras soltas  
À solta lá numa herdade  
amarrei-as com uma corda  
e carreguei-as p’rá cidade  
Cheguei com elas a um largo  
e logo ao largo se puseram  
foram ter com a família  
e com os amigos que ainda o eram  
Viram fados, viram viras  
viram canções de revolta  
e encontraram bons amigos  
em mais que uma quadra solta  
Uma viu um livro chamado  
'Este livro que vos deixo'  
e reviu velhas amizades  
eram quadras do Aleixo”.<sup>8</sup>*

In my reflection, I also glimpsed some loose stanzas (i.e., popular poetry verses that serve as the basis for songs) and tried to articulate them and transfer them to the city, to this space of reflection that I would like to share with you. I tried to respect their freedom and put them in conversation with the friends who are still and who still inhabit more than a loose stanza.

The first loose stanza is narrated by Prigogine and Stengers (1987; 1990) and has as its authors a growing number of researchers in the field of Natural Sciences;

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8 English translation:

I saw four stray stanzas  
Wandering lost on a farm  
I tied them with a rope  
And carried them to town

I arrived with them at a square  
And soon they set themselves free  
They went to be with family  
And with the friends who still remained

They saw fados, they saw ballads  
They saw songs of revolt  
And they found good friends  
In more than one stray stanza

One saw a book called  
'This book I leave you'  
And revisited old friendships  
They were stanzas by Aleixo.

they are in the habit of debating the problems they face in these Sciences. They do not accept established dogmas and give crucial importance to the dynamics that are hidden by these dogmas. They are, therefore, scientists who affirm their status as citizens within the scientific field, irreverent scientists.

This is a stanza that has broken free from a normative description of the ways of doing and narrating science. This stanza does not tire of questioning some of the normative principles of Science. Let's see, in a summarized way, those that are most relevant to questioning the science to be taught.

First, these authors problematize a hierarchical ordering of scientific discourses, with the Natural Sciences at the top of the pyramid. Second, the notion of scientific rationality occupied in establishing relationships between causes and effects coexists with another in which one seeks to produce coherence and meaning. Third, the "externality of observation," as an unquestionable disposition in the objective description of nature, coexists with another realistic description in which the observation system is integrated into the interiority of the observed object. Finally, to be brief, the notion of a general law of science that would constitute the interpretive and explanatory framework of phenomenological observations, in which these would be a miniaturization of the former, tends to be, in the study of certain phenomena, inverted, admitting that general laws and observations are particular cases of contextualized dynamics.

The second loose stanza enjoys a negative freedom relative to the Science that is done. It has broken free from the Science that is done to highlight the normative dimensions of Science and, when scholarized, does so in the name of the practiced principles of the science that is done: critical spirit, scientific curiosity, and the promotion of skills to formulate pertinent questions. It establishes a tension both with some dynamics produced in the field from which it emerges and with the school daily life, given its inability to unconditionally mobilize both students and teachers. "Made Science" also does not contribute to the positive overcoming of the crisis of school knowledge, for whose consolidation it had contributed. According to Manuel Matos, in the conference I mentioned earlier, while "objectivity could be thought of as a constitutive property of social reality, by assimilation of what was attributed to the

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natural world, 'natural,' the evolution of social practice in the school world, given its reference to institutional life, tutored by a naturalized political relation in the power of the State, had no difficulty in submitting to the principle of identity"<sup>9</sup> and the instructional model that sustains it. As the same author points out, currently,

this principle is radically challenged by the massive presence of the "other," the stranger who tends to occupy the entire school space and represents the unpredictable and the unthought in the logic of the school. This is the contradiction that the school must confront. The principle of identity will have to be conjugated with the principle of contradiction, something that translates into its permanent questionability and subjects the teaching profession to a condition of perpetual precariousness (Matos, 2019, p. 37).<sup>10</sup>

The third loose stanza is that of educational scientificity. It seems to have broken free from its interdeterminations with other spaces where legitimate narratives about and in education are produced. This "liberation" led to its dependence on research and funding policies, as well as its dependence on the publication market and the abandonment of the problem of constructing meaning and its social relevance. On its peripheries, other loose stanzas live, tendentially silenced, which refer to the principles of the Science that is done and that recreate and update the "memories" of the Educational Sciences and the sense of risk that they had abundantly practiced.

The fourth and final loose stanza involves educational action as it is practiced and narrated by teachers. It is a loose stanza that maintains relations of friendship and imagined dialogue with the first loose stanza; in this last one, contextualized knowledge, emotions, reasons, and invention of useful devices in solving problems and challenges that would be irresolvable when observed from outside swarm. It is a disqualified loose stanza that rarely inhabits the city and public space, but it is within it that the fight for justice and professional recognition is fought. As Christian Lazzeri and

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<sup>9</sup> Original: "a objetividade pôde ser pensada como uma propriedade constitutiva da realidade social, por assimilação do que era atribuído ao mundo da natureza, "natural", a evolução da prática social no mundo escolar, dada a sua referencialização à vida institucional, tutelada por uma relação política naturalizada no poder do Estado, não tinha dificuldade em submeter-se ao princípio da identidade".

<sup>10</sup> Original: "este princípio está radicalmente posto em causa pela presença maciça do "outro", do estranho que tende a ocupar agora todo o espaço escolar e que representa o imprevisível e o impensado na lógica da escola. Esta é a contradição com que a escola tem de se confrontar. O princípio da identidade terá de se conjugar com o princípio da contradição, algo que se traduz na sua questionabilidade permanente e sujeita a profissionalidade docente à condição de precariedade perpétua" (Matos, 2019, p. 37).

Alain Caillé (2014, p. 35) point out:

the principles of justice play an essential role in the distribution and reproduction of recognition and respect. For agents to continue to pursue their interests and higher interests, it is necessary that they preserve self-respect (and it is necessary) that a complementary relationship be established between social recognition and informal recognition,<sup>11</sup>

this complementarity can only be managed in respect of a communicational ethics based on inter-subjective exchanges.

Paraphrasing Habermas, I affirm, to conclude, that in the emancipated production of the profession, intersubjectivity and cooperation are unavoidable: it is essential that teachers cooperate, as they already do, in action, but also in the explanation of the references of this action. It is a matter of living the profession with honor and happiness, not only referencing professional action to great social and educational principles but also ensuring the coordination of the action of education professionals. A coordination that is not imposed from the outside but that can count on their collaboration if this outside asserts itself not as an objective observer but as a partner.

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<sup>11</sup> Original: "os princípios da justiça desempenham um papel essencial na distribuição e reprodução do reconhecimento e do respeito. Para que os agentes continuem a realizar os seus interesses e os interesses superiores é necessário que eles preservem o respeito por si próprios (e é necessário) que se estabeleça uma relação de complementaridade entre o reconhecimento social e o reconhecimento informal".

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