

OUT-OF-PLACE LEARNING AS A PRAGMATIST CRITIQUE OF THE COGNITIVE SCIENCES

El aprendizaje fuera de lugar como una crítica pragmatista de las ciencias cognitivas

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Abstract

The relationship between cognitive sciences and philosophy is fruitful and diverse. Nevertheless, there are few philosophical attempts to analyze the concept of learning regarding its link to applications in the education field. The philosophical pragmatism provides a sustainable theoretical framework to complete this task. The aim of this study is to offer an approximation to the concept of learning from the perspective of Robert Brandom's contemporary pragmatism (1994, 2001). Specifically, it analyzes this concept as an instance of the 'social practices' idea based on the normativity conception proposed by Brandom, evaluating the epistemological advantages of this stance. At the same time, it warns about the consequences of limiting learning to causal and natural regularities, as it is the case of the cognitive approach in education. To this end, this work determines the traditional and conceptual affiliations of the idea of 'social practices' in recent philosophy, and based on such reconstruction it shows that a learning approach beyond cognitivism is possible (without questioning its possible contributions). Additionally, it states the relationships between learning and rule, as well as between learning and language. As a result, this analysis enables to place formal learning within the framework of social practices, explain its normative nature and define how language is conditioned by it.

Keywords

Learning, cognitivism, Brandom, practices, social, education.

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Resumen

El vínculo entre ciencias cognitivas y filosofía es fructífero y diverso. Sin embargo, son pocas las tentativas filosóficas que examinan el concepto de aprendizaje en su relación con aplicaciones para el campo educativo. El pragmatismo filosófico ofrece un marco teórico sustentable para efectuar esta tarea. Este estudio se plantea como una aproximación al concepto de *aprendizaje* desde el pragmatismo contemporáneo de Robert Brandom (1994, 2001). Concretamente, analiza este concepto como una instancia de la idea de 'prácticas sociales', a partir de la concepción sobre normatividad que Brandom propone, evaluando las ventajas epistemológicas de esta postura. Al mismo tiempo, advierte las implicancias de reducir el aprendizaje a regularidades causales o naturales, tal como se desprende del abordaje cognitivista en educación. A tal fin, el artículo sitúa las filiaciones de tradición y conceptuales de la idea de 'prácticas sociales' en la filosofía reciente, y a partir de dicha reconstrucción muestra que es posible un abordaje del aprendizaje más allá del cognitvismo (sin cuestionar sus contribuciones posibles). Asimismo, señala los vínculos entre aprendizaje y norma, así como también entre aprendizaje y lenguaje. Como resultado, este análisis permite situar el *aprendizaje formal* en el marco de las prácticas sociales, explicar su naturaleza normativa y definir el tipo de condicionamiento que el lenguaje adquiere en él.

Palabras clave

Aprendizaje, cognitvismo, Brandom, prácticas, sociales, educación.

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Introduction

The relation between cognitive sciences and philosophy is fruitful and diverse. Fuentes, Umaña, Risso & Facal (2021) have recently demonstrated the importance of this relationship for configuring the field of educational psychology along the twentieth century, particularly in a regional (and specifically Ecuadorian) context. Nonetheless, there are few philosophical attempts that concretely examine the concept of learning and its relation to the educational field, which is strange and problematic. Strange, because the phenomenon of learning is studied thoroughly in the complex and wide field of cognitive sciences. On the other hand, as argued by José Luis Bermúdez (2014), even though the philosophy of education is an independent discipline, there are few crossovers between it and the philosophy of mind, where undoubtedly learning is important. Regarding its problematic nature, from a conceptual point of view and without a clear delimitation of learning, there is a risk of not providing strict application criteria to experimental approaches. Experimentally, the analysis of results could be vague if directions are not specified and contexts are not delimited. In particular, as pointed out by Terigi (2016) and Baquero (2017), this is probable thinking on the educational field and concretely dealing with formal learning.

This study is aimed at delimiting this deficit or vacuum in the path of a learning philosophy. For that purpose, the concept of 'learning' is examined as an instance of the idea of 'social practices' in a particular

approach, namely pragmatism, in the version of Robert Brandom (1994, 2001); his development has been called ‘semantic inferentialism’ because of the thesis that semantic content has an inferential nature. From the conception of normativity of such author, the work defends the normative nature of social practices and warns about the implications of reducing practices to casual or natural regularities. Finally, the viability of analyzing formal learning from this theoretical framework is discussed.

It is expected that this proposal has an impact on the debate, to the interior of the philosophy of English-speaking education, with respect to the importance of the theory in the configuration of the experimental research field in education. On this matter, Siegel (2018) has pointed out the relevance of addressing this point. More broadly, it is expected that it affects the current discussion in the region regarding the foundation of educational policies about academic performance. Although the concept of ‘learning’ is complex and lacks a unique approach, it is clear that the teaching-learning processes have been object of distrust and scrutiny across Latin America since the middle or end of the past century. According to Tenti Fanfani and Grimson (2015), this phenomenon of ‘suspicion regarding school’, very much alive at present, has been key in a certain concrete demand from educators, who demand to rethink the structures and traditional processes to create new ways of teaching and, above all, new ‘foundations’ for learning. On this matter, for example, the data provided by neuroeducation related to how the brain learns, starts to have a noticeable validity for educators. In the same way, the link between cognitive neuroscience and education has been acquiring an increasing spot in the public agenda of our time.

Taking this into account, through the delimitation of learning from the theory of Brandom, it is intended to indicate the importance of understanding this phenomenon in another comprehensive framework, in line with what Bakhurst (2011) calls a process of ‘formation of reason’. This fundamentally involves questioning and limiting —not censoring— any scientific-naturalist approach of educational practices. As a result of such interpretation, it is possible to establish dissent in different degrees with the conceptual framework of the neuro-educational project. Nevertheless, this polemic purpose is not a critical part of this work. To guide those who pretend to delve into this line of production, the neuro-educational project is an extreme version of what will be named ‘naturalist approach of social practices’. On the contrary, it is indeed part of the objectives of this work to present certain critics of any approach that understands that cognitive sciences ‘are enough’ to delimit learning as an

educational phenomenon. The impact of this conclusion in the debate about educational policies is relevant, in contrast with the little place currently assigned to philosophy and sciences of education.

This study is structured as follows: the first section makes a characterization of *pragmatism* to understand the background of the idea of social practices and its relation with the notion of *learning*. The central commitments of the methodology adopted are presented in this journey. The second and third sections describe the naturalist approach to social practices. The example of the anthropologist who arrives to a strange community is used for this purpose. In this way, it is attempted to highlight that social practices offer a specific type of normativity. Sections fourth and fifth present the reasons why certain variables around normativity should be discarded. Additionally, Brandom's argument around normativity is rebuilt, explaining his reasons for rejecting both 'regulism' and 'regularism' of social practices. As a corollary, the final section exposes the conception of normativity implicit in the practices and how learning is analyzed under this perspective. In this way, it is stated that Brandom's pragmatist approach enables to understand two central aspects of the phenomenon of learning: on one hand, its normative nature and, on the other hand, the concrete place that language plays in a teaching-learning process, aimed at intervening in social practices. However, a certain limitation in the brandonian approach may be pointed out (namely: it does not address the link between cognition and emotions), since it highlights the point at which the cognitivist approach still has a hardly questionable impact (specifically: it offers a cognitive development from early stages of understanding, necessary to account for formal learning).

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The idea of social practices and the pragmatic movement

The idea of social practices has started to play leading role in recent decades in the denominated *Philosophy of the social sciences* or *Social Ontology*, a specialization space belonging to contemporary philosophy where philosophy of mind, of language, metaphilosophy, epistemology and other disciplines come together. As Epstein (2018) summarizes, the *Philosophy of the social sciences* pursues to delimit the nature of social phenomena. Within the diverse conceptions in such field, a research program has been established whose objective is offering a social approximation of the mind. According to this approximation, endorsed by Haugeland (1990), Satne (2016), Rouse (2007) and Kiverstein (2016), the social practices

give content to mental states, such as belief, desire, intention and human action. Following this thesis, Satne (2016) also calls this position a “communitarianism of intentionality” (p. 528).

The impact of this approach on conceptual and empirical discussions in social sciences is undeniable. However, in the specification of these debates, two important aspects are often lost: there is a movement that places the conception of ‘social practice’ at the core of their interests; and given the place of such tradition in contemporary philosophy, any reference to these practices deserves—at least—to be taken into account as a precedent. The movement under consideration is North American pragmatism.

In fact, from their beginnings between the end of the nineteenth century and the start of the twentieth century, pragmatists¹ invoke the conception of practice to establish a contrast with mere theorizations that ignore their effective application in ordinary life². Under this view, the invocation to practices becomes a rule, both indicating the object of study as well as delimiting the intervention area for philosophical reflection.

Pragmatism is a philosophical ‘movement’ that first arose in informal meetings where William James (1842-1910), Charles Sanders Peirce (1839-1914) and the jurist Oliver Wendell Holmes (1809-1894), among others, took part. Later, these encounters impacted the way to teach philosophy in prestigious universities such as Chicago or Harvard. James (1907), one of the most important classic pragmatists, comments in the conferences *Pragmatism: A New Name for Some Old Ways of Thinking* (1907)—text that can be considered as a declaration of pragmatists principles—that among the main motivations of the movement, there was the need to get philosophy out of the university³. Precisely, he referred the field of practices, the grounds of the plain man, where what prevails are concrete actions in a framework of daily experience (in the history of the idea there is a clue to this respect: *tá prágmata* in Greek means ‘the things’ in the ordinary sense of the term, namely, the things of the ordinary or common world). In that sense, pragmatism proposes to address daily problems in contrast with the attitude of a certain way to do philosophy, strongly rooted on tradition, that touches topics in a grade of generality that hardly enables to think about some kind of social impact.

Even if certain philosophies do not intend to solve problems just as if they were providing solutions to public conflicts, Faerna (1996) explains that pragmatism knew how to condemn a gesture of excessive speculation typical of certain philosophical tendencies at the time, especially on the Hegelian realm. Nevertheless, the pragmatist critic to philosophies that do not intend to intervene in public affairs gained resignification in



Rorty's work (1979), who often simplified some traditional philosophical postures (not without previously recognizing it) to point out their lack of commitment with public affairs and, in many cases, their problematic nature, thinking about the implications for the present. Even recognizing that this pragmatist critic hardly will do justice to the richness of the philosophical tradition, the truth is that pragmatism found a distinctive characteristic in the need of directly addressing topics such as education, communication media, political parties, juridical rulings, topics that in other traditions were treated with a less 'interventionist' profile.

This contrast between a more interventionist philosophy and a less interventionist one, should not be associated to a moral normativity, under which being interventionist or pragmatist is fine and not being such is bad. Precisely, pragmatism has insisted in the need to tolerate diverse points of view at any investigation instance. Possibly, a more questionable gesture of pragmatism would be to show the implications that certain traditional philosophies (such as 'Platonism' or 'Cartesianism') would have nowadays. Implications that are often negative. It exceeds the interest of this paper to extend on that matter, but it is prudent to maintain this tension: the traditions that pragmatism criticizes, rarely point to a particular author, and recognized pragmatists such as Dewey (1921) or Rorty (1979) warn that the recovery of an author leaves aside contextual aspects with the purpose of 'setting to dialogue' certain ideas with current problems. This metaphilosophical decision with respect to not recognizing the importance of the context of an author is questionable, but it also questionable to consider that the context of an author defines his/her ideas and that it is not possible to translate them to conflicts of other eras. In any case, pragmatism justifies the choice using the first way.

Once these clarifications have been made, it is important to note that, for pragmatism, an indisputable priority at the time of thinking is that theory relates to social practices. This is not a mere dogmatic preference, but that it is founded on a critic to a knowledge model strategically referenced in 'Cartesianism'⁴. As held by the notable contemporary pragmatist Richard Bernstein (2013):

Pragmatism starts with a radical critic of what Peirce called "the Cartesianism spirit". That is how Peirce understood a system of thinking that dominated much of modern philosophy —where marked dichotomies are drawn between what is mental and physic, as well as between the subjective and the objective; where «genuine» knowledge presumably lies on indubitable foundations; and where we can put in parenthesis all prejudices with a methodical doubt (p. 23).



As it has been pointed out by Faerna (1996) and Malachowski (2013), among others, this criticism characteristic of classic pragmatism survives in its diverse contemporary ramifications. For example, Bernstein (2013) argues that such cartesian assumptions predispose certain interrelated philosophical problems: the problem of the outside world, the problem of our knowledge of other minds and the problem of how to correctly represent reality. In general, pragmatists show that such difficulties may appear very naturally, but are placed on dichotomies exposed in the 'spirit of Cartesianism'. By proposing this diagnosis around Cartesianism, beyond the conditions made, undoubtedly there is a reading that ignores the revolutionary aspects of Descartes' thinking. Among these aspects it should be highlighted, as demonstrated by Harfield (2007), the impact that Descartes had for the science of his time, concretely for mathematics and for the theory of vision, without also recognizing, by the way, his contributions to a mechanist psychology which is still valid. In a different note, Richard Popkin (1979) has pointed out Descartes' influence on the epistemological debates of his time related with skepticism, which had regained an enormous influence at the time through theological debates that led to the problem of the nature of truth⁵.

Leaving aside this important idea, the current relevance of the notion of social practices within pragmatism would not have been possible without the recovery that Richard Rorty made of the classic pragmatist tradition, in the tone of a response to the cartesian ideas. From his work, it is also understood the relevance of Brandom's theory in the current philosophical landscape and its possible and effective consequences for the study of education and learning.

Such contextualization is proposed at this point, because the recovery of the idea of social practices is more thoroughly established in recent decades, from a neo-pragmatist version originated from what Maher (2013) systematized as the 'School of Pittsburgh'. This school emerges, among other factors, from the influence of Wilfrid Sellars (professor and researcher at Pittsburgh) and Rorty himself, in the second half of the past century. Additionally, its main contemporary representatives are Brandom himself and John McDowell, both professors at the same university.

Rorty is one of the main contemporary exponents of pragmatism, and maybe the most influential and prolific. He acquired international reputation in specialized media after his famous essay *Philosophy and the Mirror of the Nature* (1979). Over his work he recovers and shows the originality of diverse aspects of classic pragmatism, referenced in three of its pioneering and main figures: Peirce, James, and Dewey (1859-1952). In

his greatest work as well as in his subsequent papers, Rorty (1979, 1997) revives different elements of these thinkers to suggest a radical critic of knowledge and culture, trusting—in line with classic pragmatism—in the fact that philosophy has a duty in the public agenda.

A fundamental attribute of the pragmatist rescue of Rorty is, precisely, his criticism to the cartesian spirit. Rorty (1979) put into perspective the scopes of this epistemological conception for western culture and highlighted its characteristics in two points: 1) the insistence that knowing is avoiding error, and 2) the obsession to accomplish a *representation* of the world from epistemological solipsism. In opposition to this model and following the critics of classic pragmatists⁶, Rorty redeems a way of researching that is based on a community of speakers that discuss and review certain problems presented by the coexistence in a particular environment. In such community of speakers, the skeptical radicalized doubts that obsessed Descartes do not appear to be serious problems; neither appear the disquisitions about how to link the private mind with the external world. The pragmatist terms of discussion break such difficulties in a radical manner.

On the other hand, when speaking about ‘revising’ knowledge, classical pragmatists put a specific weight. To delve into this aspect, two distinctive qualities that differentiate pragmatism, according to Putnam (1999), should be pointed out: (1) its distrust in the face of skepticism and (2) a fallibilist conception of truth. Distrust in the face of skepticism because, for pragmatists, doubt should have as much justification as belief. Regarding fallibilism, pragmatism states that even the most entrenched beliefs may be subject of revision, if the adequate context emerges; if experience demands a change in beliefs, then they should be revised.

What Kuhn (2006) calls “anomalies” (p. 92) in scientific theories are an example of this. Such anomalies force to modify certain beliefs, giving place to new theories. In line with this idea, Rorty (1997) argues that, in the moral plane, a principle could be inconvenient for a particular case; in some situations, it is better to ignore the principle, for example, that it is bad lying to avoid doubt and inaction. For both peculiarities, pragmatism was consolidated as the American contribution to contemporary philosophy.

In this sense, pragmatism vindicates the idea of purpose and interest as elements that articulate human beliefs and actions. For this reason, it usually criticizes any discourse around the idea of the ultimate representation of the world. Instead, pragmatists state that a theory should be limited to give solutions to certain problems. To justify this conception,



they claim scientific procedures as an exemplary way of thinking. Historically, pragmatism emerges when Darwin's evolutionism placed itself as a paradigm for the scientific method. As recently demonstrated by Cowles (2020), in Dewey's work, the notable impact of this conception is shown.

Anti-Cartesianism and fallibilism are two permanent elements in the pragmatist movement. With the advent of logical positivism, pragmatism stopped having—at least explicitly—the impact it used to have in the academic field, and went into a long sleep until, mainly, the appearance of Rorty in the contemporary philosophic scene. Rorty considered that pragmatism sufficed to declare the overcoming of epistemology as normative reflection independent of natural sciences. Even this project has not been strictly followed, as shown by Scotto's body of work (2017), epistemology is headed, in many of its central tendencies, in such naturalized direction.

On the other hand, the areas opened by Rorty were deepened by other neo pragmatists. One of his most prominent disciples is Brandom, who takes forward the development of pragmatism within the philosophy of language. Brandom (1994, 2001) addresses two fundamental points: first, he takes the practices as criterion for a sustainable reflection and, in second term, he rejects the priority of the concept of representation to elaborate a theory of the concepts and the meaning. For Brandom, such notion assumes certain commitments that lead to the acceptance that there is a world in itself, independently of social practices.

Brandom (1994) develops his own conception of the meaning from how speakers use his concepts in practice. By this commitment he can be considered a pragmatist, to the extent he put pragmatics before semantics when explaining meaning. On the other hand, like Rorty, he is very skilled in finding elements in authors very different between each other, to back up his theory. Precisely, one of his most distinctive findings is the way in which Wittgenstein—thinker that, as pointed out by Putnam (1999) does not consider himself as pragmatist, but has been placed or regarded as such—invokes the notion of practices in *Philosophical Investigations* (1953).

According to Brandom's semantic inferentialism (1994, 2001), the idea that practices provide a foundation to the notion of rule is a central element in Wittgenstein's philosophy. In other words, the appropriate way of substantiating normativity is found in Wittgenstein (1953). Specifically, his ideas regarding 'following a rule' offer an adequate hermeneutic framework to understand how speakers grasp the uses of a language and act correctly or not based on them. Brandom (2001) calls this a



“normative pragmatics” and indicates the reaches of the Wittgensteinian idea according to which following a rule is a “practice” that as such cannot be followed “privately” (but, by implication, communally). Wittgenstein wrote paragraphs (1953) that clearly support this interpretation⁷. It’s important to mention that Brandom (2011) himself believes that this contribution by Wittgenstein is not an independent attribute that he adds to his adherence to pragmatism. In contrast, the conception of Wittgenstein’s practices would place him between the fundamental commitments of the movement.

From Brandom’s work, the notion of ‘social practices’ starts to experience a broad development to the point of transcending the realm of philosophy of language. There are many expansions, and it should be highlighted, first, as done by Kiverstein (2016), the social theory of philosophical roots in the diverse spectrum of the *Social Ontology* or *Philosophy of Social Sciences*. On the other hand, Schauffhauser (2014) has shown how the idea of practices has led to talk about a ‘pragmatist turn’ in sociology, that can revitalize diverse methodological aspects of the study of social phenomena⁸. Finally, its application is included in the field of epistemology of education, especially of learning. In this case, Brandom’s contribution is explicitly recognized.

At least two reasons come together to enable different thinkers to translate specific theses of Brandom about the nature of language to educational practices: i) first, the vindication of the use of reasons as a tool necessary for the acquisition and ‘gradual’ command of concepts. ii) Its defense with respect to reasoning is a practice of social nature where the observance of rules plays a fundamental role. These two characteristics of his theory make possible to relate it to a conceptual delimitation of the notion of formal learning.

In this way, his pragmatist approach has been applied for diverse pedagogic purposes. Among the most prominent contributions there is undoubtedly Jan Derry’s project (2017) to found the didactics of mathematics on semantic inferentialism, and the questioning of the relation between answer and mastery of concepts in multiple choice tests in primary school by Marabini and Moretti (2017). Likewise, at a strictly conceptual level, Derry (2008, 2013) herself has invoked Brandom’s (1994, 2001) conception to examine and assess the epistemological practices that occur in the classroom. In such sense, it highlights her defense of an idea of rationality to account for learning facing a strong tendency to reduce the teaching-learning context to a practical response far from any instance of objectivity in knowledge.



Regarding the latter, the goal of this paper is to contribute to the viability of such application in a strictly conceptual sense. It is assumed that the Brandomian framework of social practices enables to situate learning in an unprecedented place for contemporary thinking, used to (due to the impact of cognitive sciences) associate learning with an analyzable faculty in terms of psychological functions. Thus, this study proposes to place learning 'out of place' (in a theoretical conceptualization sense) by relating it to a phenomenon conceivable from social practices. In the following we delve deeper on this spatial image used to explain the relevance of the present reflection.

The naturalist program and the cognitive sciences

The research program of cognitive sciences proposes to address the naturalist or materialist mind. According to the materialism⁹, the mind is or has a causal relationship with physical phenomena and specifically with the brain. As a general focus, its impact can be measured with the way Searle (2004) defines the most important portion of history of the philosophy of mind in the twentieth century, namely "a saga of materialism" (p. 49), with the computational functionalism linked to cognitive sciences undoubtedly being its highest point.

At the same time, cognitive sciences are unthinkable without the computational metaphor that is based on the analogy between the mind and a computer. According to this conception, the brain is a hardware and the mind a software. A key gear to understand this analogy is functionalism. Functionalism, in philosophy of mind, is based on the idea that the concept of function better captures the cognitive nature of mind. Computer sciences offer an appropriate model to characterize the functions. As a consequence, it is possible to talk about a 'computational functionalism'. A third element that is added to this general scheme is that mind, as such, can be conceived as a machine for processing information or calculations. Bermúdez (2014), the prestigious philosopher of cognitive sciences, states that this idea is precisely the general commitment that gathers cognitive sciences. In this materialist framework of approaching the mind, the concept of learning occupies a special place.

Bermúdez (2014) states that the experimental studies about learning have been a priority area of development in cognitive sciences. During recent decades, various technological and experimental extensions of cognitive neuroscience have placed it as something more, namely: a



promising area. In other words, results of notable impact are expected in coming years, along with this subdiscipline in the cognitivist program.

To strictly confirm this trend, the Swede Academy decided to award a Nobel prize to neuroscientist Eric Kandel in 2000, for his contributions mainly in the field of learning and memory. Based on this and due to other contextual factors, different neuroscientists and educators have attempted to recover an old theoretical proposal of consolidating a ‘neuro-education’. The objective of this proposition, as suggested by Bruer (1997), is to substantiate theoretical resources that can guarantee an improvement in educational practices, by giving them a genuine scientific foundation and creating a ‘bridge’ between neuroscience and education.

This study intends to be separated from this tendency that, starting with materialism in philosophy of mind, articulates the idea of learning as a conceptually psychological phenomenon—in the sense of psychological functions—and established in the brain. In other words, a phenomenon, ultimately, of a neuroscientific nature. This way of conceptualizing learning has consequences outside of the strict realm of philosophy of mind. Its impact in the ways of building subjectivity has been pointed out. For example, it has been stated that it fuels what Rodríguez et al. (2019) call a “neoliberal subjectivity”, characterized by a strong individualism that associates academic performance to an unrestricted effectiveness, where risk and failure have no place or are condemned within the educational process. In a similar line of argumentation, but from a focus that crosses philosophy and psychoanalysis, Cepeda (2021) has defended that without an interdisciplinary matrix different from the current one, cognitive sciences are at risk of promoting a “reductionist view of subjectivity” (p. 142), by disregarding aspects like history and subjective constitution of the students. Even if the critic proposed from this reflection is placed in the context of philosophy of mind and of learning, these approaches could be complementary to our goal of discussing the scopes of cognitive sciences for the educational field.

The aim is to achieve it through a ‘decentralization’ strategy, in a manner of speaking, which is part metaphilosophical and part pragmatist. On one hand, a concept of learning is invoked in the conviction that philosophy, by performing its task, can provide to the conceptual delimitation without being entirely conditioned by science (this is the metaphilosophical commitment of this paper). On the other hand, it is conceived that pragmatism helps to conceptually guide this general commitment, according to which thinking, in a fundamental sense, is a phenomenon that must be placed inside a social (or intersubjective) framework of so-



cial practices. This does not render pragmatism incompatible with the contribution of neuroscience in line with a brain science for education. It simply ‘proposes’ limits and dialogues with it in a manner similar to what was proposed by Bakhurst (2008), little more than a decade ago.

If it is taken into account the general framework of cognitive sciences and the pragmatist approach to learning, the focus proposed here can be presented as a form of philosophy ‘critical’ of cognitive sciences. This is not original either. Brandom (2009) himself assumes such commitment in papers where he discusses, for example, “how analytical philosophy failed to cognitive sciences” (p. 197). With this he states that the theoretical framework assumed by the functionalist analogy and the contribution of computational sciences include to previously discuss a central concept to understand mental states, namely, the concept of ‘normativity’. According to Brandom’s theory, cognitive sciences fail to explain the normative nature that the mind has in different cognitive tasks.

The naturalist focus of social practices

The mind represents the world. This phrase is not unquestionable, but it is quite intuitive. With the exception of frenzied critics—including Brandom himself (1994)— it can be stated almost unanimously that an important task for philosophy of mind is to explain how the mind makes representations. Cognitive sciences propose a way for explaining this phenomenon. As Skidelsky (2015) summarized it recently in the frame of his cognitivist approach, mental states are carriers of an attribute, which is representing the external world. It is estimated that this representation establishes causal links with cognitive functions that give rise to them. In this way, it is possible to explain the representation if both the causal links and their instantiation are considered.

In this general framework, there are many variants of naturalist explanation in the context of cognitivism. Nevertheless, the central element of this general framework, as stated by Putnam (1994), is that the representation is a phenomenon reducible to casual links. This thesis assumes a type of reductionism of the normative. To make this notion of mental states more understandable, it is necessary to address two topics. On one side, the exposition of the reductionist or naturalist vision of the normative, and for such purpose this paper is proposed as example. On the other hand, it is necessary to expose Brandom’s arguments omitting certain technical jargon that, to the specialized purposes of this paper

about learning, would hamper the feasibility of the conceptual delimitation that development demands. Both topics will enable to put into perspective the cognitivist vision on the mental, and in turn to comprehend the Brandomian critic to the cognitivist or naturalist framework of mind.

The attribution of normativity in human beings

The image of the anthropologist called to investigate a completely unknown community is famed in cinema and literature and, undoubtedly, it is rooted on real or at least credible events. The empathy that this situation generally brings is expressed in the thought of what would be the first steps to achieve a minimum understanding in this foreign community he faces. How could he start to comprehend their behavior? Where would he start to search for? Must the anthropologist use his language to relate it to the behavior of the natives? Or must he abstract himself from his language and judge their lifestyle in an independent manner? Or must understanding take into account both language and behavior? But how to start to translate this language if it is supposed that it is completely unknown?

Someone could reduce this to a disciplinary problem and argue that anthropology should have specialized tools to solve the issue and that, as a result, anthropologist themselves should tackle this challenge. However, as insisted by Geertz (2003), this question has not been foreign to anthropology itself nor to the rest of social sciences—because not only anthropology seeks to analyze or interpret foreign communities— and even more: for a long time, it has been considered as the most important question for social sciences.

However, for a particular tendency of thought, this is not a problem. It is about an approach of scientificist and naturalist type, to which investigating an unknown community and any human action in general is not very different from studying a natural phenomenon such as the photosynthesis, the solar constellations or the structure of atoms. There are many reasonings that lead to naturalism. The most prevalent takes for granted that natural sciences are the ones that describe the world, and that any object of investigative interest is a natural object. In turn, as it has been argued by philosopher Huw Price (2011), this ‘ontological naturalism’ is usually accompanied by an ‘epistemological naturalism’, namely: any valid form of knowledge comes from natural sciences.

From a ‘naturalist’ point of view there are certain ‘patterns’ or ‘regularities’ that may be extracted from the behavior of individuals. Here ‘behavior’ not only refers to the movement of the body of persons, but



also to their language, often considered as only a physical phenomenon or related to physical processes. In any case, this strategy vindicates as an advantage not invoking the mental or intentional states of the members of a community to explain their way of living (or at least only invoke them in a derived manner). This conviction is based on considering the nature of the mental states as natural phenomena.

The cognitivist approach to education

Since it is a way of thinking, naturalism reappears throughout history. Bruner (2005) states that naturalism is currently expressed in a clear way in cognitive sciences. For cognitive sciences, thinking is placed at a sub-intentional level, i.e., it is on a level 'behind' actions or intentional states and that, by general rule, it is an instance which is not accessible to the conscience of agents. Following Bermúdez (2014), it is this way of understanding the nature of the mind that enables to state that "the supposed fundamental orienting cognitive sciences is that minds are processors of information" (p. 37). In this regard, it is possible to point out a central premise that synthesizes the 'naturalist approach of social practices': in agreement with the naturalist approach, social practices are reducible to natural phenomena.

¿Are social practices possible because of explicit rules?

If the reductionism typical of the cognitivist approach is put in parenthesis, and even if it is temporarily rejected in a dogmatic manner, it is obtained as advantage to maintain the difference between social practices and behaviors of other species that lack discursive language; and even between them and certain objects in nature that respond to the stimuli of the environment and, hence, establish causal links with such stimuli. This does not imply that these differences are unsolvable, but it does mean that any analysis, even when it decides to further reject them, should not ignore them.

Now, this non-reductionist stance is often associated to an excessive rationalism (sometimes also called 'intellectualism') that, during recent decades, is suspected to have certain academic prejudice. According to Searle (2004), it is about a variant of anthropocentrism that assumes that human beings, by principle, are the model to qualify what thinking is without taking into account the behavior of other species. In this way, since no other species has the attributes of human beings, the rest of the

species are a priori left out of any possibility of being attributed concepts or beliefs.

On the other hand, a way of conceiving this ‘anthropocentrism’ is to offer an image in an implausible point of individuals as ideally rational. In this sense, the most important difficulty to gain some clarity with respect to social practices is to assume that any social practice is inevitably ‘putting into action a theory of one or more theoretical approaches’ in the sense of an explicit group of principles or rules.

However, this way of stating things leads rapidly to a conceptual confusion. Though it is true that social practices depend on rules, defining the nature of these rules is a point that opens very differing alternatives. If conceivable rules must be ‘explicit rules’ in practice, as assumed by this alternative, they set a condition that would turn out to be rather restrictive: anyone who carries out a social practice should adopt certain explicit principles as ‘condition’ to carry out his/her practice. In other words, explicit principles such as judgements or beliefs that an individual puts into action, prior to performing a specific action justified by these judgements. The philosopher Dreyfus (in Schear (ed.), 2013) states that, if this explicit conception of rules is assumed, it would follow that all human behaviors are saturated with “conceptuality” (p. 15) and there would not be the possibility of unreflective behaviors, at least in the case of discursive beings. This consequence seems difficult to adjust with everyday life, where unreflective actions are performed decidedly. Thus, the model of explicit rules does not seem to explain the nature of rules nor social practices.

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The pragmatist approach of social practices

The example of the anthropologist states the idea that there is a ‘normative specific nature’ that characterizes practices, and that it is important to delimit it to not lose sight of a certain image of the social that is distinctive (even when there are aspects that naturalism enables to elucidate inside this image). Now, it is necessary to relate these clarifications with Brandom’s theory. For that purpose, the following parallelisms are established.

1) Social practices are not reduced to natural regularities whose players cannot be conscious of the rules that govern their behavior.

When presenting his theory, Brandom (1994) holds that he will offer a point of view on “the nature of language, i.e., of the social practices that differentiate us as rational creatures, factual, logic and users of concept” (p. 10). A key requirement of this conception consists in giving a ‘normative

interpretation' to mental states. The link between language and rule comes from tying the meaning with the normative. For Brandom, this association is clearly expressed by Wittgenstein (1954) in his time: "Our ordinary understanding—he states— of states as acts of meaning, understanding, intending to or believe something is an understanding of them as acts that 'commit or obligate us' to act and think in certain ways" (Brandom, 1994, p. 13). In other words, understanding is something that is recorded in our behavior, because it can be right or wrong.

Now, at first glance the normative accepts multiple definitions. Brandom is aware of this and the first option he discards is the most recognized one and that can be attributed to what has been previously called 'cognitivist approach'. Almost any naturalist approach accepts this conception. It is about 'regularism' of social practices. Regularism states that practices are reducible to causal patterns of stimulus and response, in a way that being considered right is the same as being right (the consciousness of following a rule is left aside as an element that is relevant or worthy of consideration). It has already been argued previously that cognitivism is reductionist. Regularism enables to explain why.

This reduction causes to lose sight of the nature of the normative, because if a rule is reduced to something that can be considered correct without a conscience of rules, then it is possible to attribute normativity not only to non-linguistic beings but also to objects that respond to the medium or the environment. Brandom (1994) calls this consequence 'panpsychism'—the thesis that every object could have mind—and deems a price too high to include other creatures, apart from human beings, as users of concepts (pp. 26-30)

The next point of the summary states that:

2) Social practices can be neither identified with the execution of certain theoretical principles that precede the actuation of practice, as if individuals thought of principles that justified everything they do.

After discarding regularism, Brandom (1994) confronts the idea that following a rule means the application of certain explicit principles. This is what he calls 'regulism' of social practices (p. 20). The problem with this conception is that, if following rules requires explaining them, there is the risk of going back to infinity. Here, his rationale requires invoking a complex argument called 'skeptical', that is far from the objectives of this paper. Thereon, the scopes and complexities of the skeptical argument have been developed in a previous paper (see: Saharrea, 2014). In summary, any application of a rule accepts a possible interpretation. Fol-



lowing Kripke's (1981) argument, in a conventional universe it could occur that 3 plus 3 equals 7, since it is perfectly possible to expose a formula that offers this result¹⁰. There is not a semantic fact that avoids interpreting 3 plus 3 in that manner. From common sense it could be reasoned that the result is undeniably 6. Now, this result is correct conforming to the 'normal way of acting', in the common practice of mathematics.

Nonetheless, out of any practice, the free interpretation is possible from a skepticism of the rule. Wittgenstein challenged this objection arguing that, by principle, any rule is interpretable, and where there is interpretation there is never a rule. Relativism swallows any possible action thought a priori, i.e., without invoking a context of practices. This argument is retaken by Brandom to discard regulism (which deserves a more detailed description, but this exceeds the scopes of this paper). The moral of regulism is that, for right or wrong behaviors to exist, it is necessary to place mental states in a context of social practices.

In this way, we reach to a point where an alternative to both regulism and regularism is necessary. Because, on one side, even if regularism gives an objective explanation of rule-following, in its reductionism, it loses sight of the sense of such rule. Regulism, on the other hand, respects this sense but considers all practices to be founded on the ground of free interpretation. Then: what do we reduce the nature of practices to, if they are not regularities nor explicit rules?

It is at this point where Brandom offers a specific understanding about normativity as a solution to the problem. Thinking of language involves thinking of meaning; thinking of meaning leads to thinking on rules; the rules, in turn, are conceivable only in the framework of social practices. In social practices, rules are not natural regularities. Discursive beings can be conscious of the rules they follow. For example, they can explain why would it be correct to advance the car when the traffic light turns green. A dog, instead, would not be able to establish a reasoning for it, even though it could act in a similar manner to a linguistic creature (it could advance in a pedestrian crossing together with other people, when the sign indicates that passing is allowed). This could be attributed to a type of protoconsciousness typical of a case-by-case training, but never by the type of rational conscience that depends on the language understood as the use of reasons.

On the other hand, social practices do not offer explicit rules, but instead implicit rules that are instituted within that same community. This is how, to understand the whole mental life of beings that act correctly or incorrectly, it is necessary to think about mind in the framework of social



practices. According to Brandom (1994), only in this intersubjective framework, the life of linguistic beings is the life of beings capable of signification. Intersubjectivity is a fundamental element that guarantees that the actions of individuals have meaning. Definitely, the social is what guarantees that human beings can assign meaning. As stated by Brandom:

In this approach, it is considered that the key to the importance of the social resides on the possibility that the community to which an individual belongs evaluates, responds or tries in practice the actions produced by individual members of a community. It may be considered that an individual assumes or supports an action as correct simply by producing it. As opposed to the individual, the community does not need to be considered as having taken a practical attitude with respect to the property of action only in virtue that such action has been produced by one of its members. Instead, the type of actions produced by its members determines which fall within the scope of communal actions, that are susceptible to communal approval or rejection (1994, p. 37).

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The author defends that there is a specific sense of normativity that can only be explained invoking the nature of social practices. These lay the foundation for the life of linguistic beings, explain the functioning of their rationale. In light of this general commitment, he develops his thesis, in which he holds that what gives content to the concepts are the inferential networks derived from their use. Precisely, the centrality of this thesis enables calling Brandom's theory 'semantic inferentialism'.

The idea is putting into practice a pragmatist commitment at a methodological level: it is the use or practice of the concepts which consolidates their content. Brandom (2001) expresses this idea in the thesis that pragmatism precedes semantics and not the other way around, as it is usually stated by cognitivist points of view. Morabini and Moretti (2017) have demonstrated that this inferentialist approach is an adequate mold for pedagogic evaluations that have the intent of knowing if a student grasps a concept or not.

Besides this use of semantic inferentialism at a pedagogic level, at a general level, the framework of social practices enables to conceive learning in an appropriate manner for their educational approach. By placing learning inside this theoretical framework, two of its fundamental aspects may be explained: 1) the normative nature of learning (learning is being able to do or say something correctly or incorrectly in a very basic sense); and 2) the role that rationality and language acquire in the practice of learning, without relapsing in the idea that any learning is to memorize an explicit rule. For Brandom, there are rules that are implicit in practices.

In this article it is not stated that Brandom's view simply offers a philosophy of learning. On the contrary, an enormous challenge, that proposes this way of understanding the normativity of practices but is not addressed by Brandom, is the following: How can the incorporation of a completely new practice be explained (i.e., from scratch)? Even if the Pittsburgh philosopher gives a specific description of practices very convenient to think of learning, his development does not register an attempt in this sense. On the other hand, as warned by Bermúdez (2014), the cognitivist approach contemplates the development of cognitive functions as the axis of his explanatory models. This point favorable for cognitivism is added to the project—in recent years associated with Damasio (2003)— of linking emotions to cognition. However, this rather relevant articulation for the study of formal learning is not included in the agenda of semantic inferentialism. Nonetheless, Brandom's attention to practices as a type of behavior typical of rational beings in a communal context, rescues an intrinsic complexity of the context of teaching-learning, which is the scope where educational practices develop and are possible.

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Formal learning from a pragmatist approach

The application of the pragmatist approach turns out to be plausible with a greater specification in analysis. The pedagogical practices that constitute learning can be judged, on the pragmatist background, as a subgroup of social practices. This point deserves certain precisions and resources.

Does this mean that unique features occur in learning and not in other social practices? In this sense, the answer is negative. However, greater specification is necessary to put into perspective the usefulness of pragmatist theory to this respect. And in this point a disciplinary aspect typical of educators arises: their duties, often, consists of 'introducing' certain individuals into social practices. Their function does not consist in identifying the normative nature in consolidated practices—in other words, normalized practices— but instead, in proposing and perhaps modifying (or intervening) certain specific practices, that maybe such educator can judge, ultimately, as not contributing to any pedagogical purpose.

Taking into consideration this characteristic role of the educator or pedagogue, it can be deduced, at a glance, certain methodological consequences concerning the precise type of normativity that enables social practices and, hence, makes such learning conceivable:

- 1 If social practices involve a normativity that does not consist in explicit rules, the role of the educator, for proposing certain practices, would result a failure if it is only limited to transmit particular principles or rules. To educate cannot consist in transmitting information or knowledge data. Why? Because this sole task does not guarantee the acquisition of the social practices, as memorization of the rules of chess does not guarantee that one already knows how to play chess. However, this is not equivalent to denying the need, in certain aspects of teaching, of transmitting contents or working from principles.
- 2 The logic of practices guides certain criteria for evaluating knowledge: given that practices are not constituted from explicit rules, reducing an evaluation of performance —at any instance— to the repetition of information does not guarantee learning. Learning is always about practices, it could be stated, never about explicit rules. Even if this critic around an intellectualist conception of learning is a *locus communis* in the current pedagogic discourse, it is not usual to do it from a point of view about the nature of social practices¹¹.
- 3 Finally, and only to go into more detail, if the rules contained in the practices are neither patterns nor regularities — as natural phenomena operate—, it appears a challenge for many approaches about learning that base themselves on a naturalist conception —at least an extreme one— of social practices.

It is not intended to argue that any naturalist approach to education is irrelevant in all cases, but that, to the purposes of describing learning without major reserves or clarifications, it becomes limited. Otherwise, as derived from Bakhurst (2008), assuming a point of view such as the Brandomian, on one hand, does not prevent to recognize the enormous contributions that have been made by studies about learning from cognitive neuroscience. But, on the other hand, it neither prevents to problematize that the own Brandomian point of view presents some difficulties, like the one previously expressed regarding the introduction of the inferentialist practice from scratch. In other words: even though the manner in which Brandom establishes comprehension is adjusted to different common behaviors (dialogues or conversations), it remains to explain how a child that does not grasp the use of reasons in a natural manner, acquires such practice ‘gradually’. Again, it is necessary to make explicit certain limits in this proposal. The pragmatist conception of nor-

mativity is a mold that has been described in the past sections but, undoubtedly, there is still a long way to go to reach its effective application in the educational field.

Conclusions

In this paper it has been made a brief characterization of pragmatism to refer to the importance of Brandom's theory of social practices of Brandom, within the approaches about learning. It has been argued that, paying attention to this conceptual framework, it is possible to establish certain conceptual limits in specific areas such as formal learning. The second section has focused on describing the naturalist approach to social practices through the example of the anthropologist, which does not have much intent of simplifying but instead going to the point that social practices offer a specific type of normativity. The third section exposed the two previously delimited variants around normativity, associating them to Brandom's strategy. Then, the reasons for rejecting both 'regulism' and 'regularism' of social practices were examined. As a corollary of these points, the final section presents the conception of normativity implicit to practices and, finally, a conceptual delimitation of learning was proposed.

The paper defends that the conceptual framework of social practices enables to rescue two central aspects of formal learning: on one side, its normative nature and, on the other, its relationship with language and specifically with the use of reasons. Before mentioning tasks that can be made from this Brandomian point of view about learning —barely outlined—, it is important to resolve a respectable objection.

Some naturalists could argue that, for decades, cognitive sciences have served the social factor to explain knowledge; that the dogmatic commitment with methodological solipsism that was criticized by Putnam (1999), among others, has been left behind, and that, as indicated by Scotto (2017), current cognitive sciences have consolidated the concrete field of neurocognition.

This objection aims to mitigate certain reductionism usually thrown as an attack to naturalized conceptions. It is true that, in the diversity of approaches in cognitive sciences —though to a lesser extent in the current neuroeducation trends—, usually the value of the social is recognized in its approaches and experimentations. Even conceding this point, Brandom's theory remarks the fact that the conception of norma-



tivity typical of the social is irreducible. Acting correctly or incorrectly requires a community of speakers where a discussion in terms of giving or asking for reasons can be given, and where the behaviors of the individuals can be evaluated, and approved or rejected. This context of social practice is irreducible. Its shift to something different loses sight of the normative nature of mental life. And this conceptual limit that Brandom proposes is not a censorship against a type of experimentation —as it is interpreted sometimes—, but a necessary insight to conduct experiments whose scope is perhaps more bounded. In any case, Brandom’s proposal is to sum forces in an interdisciplinary manner to address formal learning. A sole naturalist point of view is not sufficient. The sole Philosophy is not sufficient either.

At last, the task that derives from the framework offered by Brandom is explaining the development that enables individuals to be incorporated in the structure of social practices. This task exceeds Brandom’s interests, and it is typical of an educational theory in consonance with a philosophy of education. Besides that, the Brandomian platform turns out to be useful as an evaluation criterion and as foundation of the adequate profile that has to be given to language in learning: nor placing it as the only element nor moving it away from the idea of practice.

Finally, the pragmatist approach to learning proposes breaking the dichotomy between theory and practice, to think about the educational community as a space where right or wrong practices that deserve adjustments, critics and confirmation occur. School, as stated by the traditional pragmatist Dewey (1916), is not a ‘medium’ for life. It is life itself.

Notes

- 1 For the historic-conceptual characterization of pragmatism we mostly follow West (2008). Some data were taken from Faerna (1996).
- 2 Both Rouse and Satne, like the different authors summarized in Kiverstein (2016), point at *Philosophical Investigations* (1953) of Wittgenstein as the foundation of the notion of social practices. As it will be seen throughout this study, this characteristic of Wittgenstein’s thinking enables to place him inside pragmatism. Beyond matters of authorship or precedents we propose to interpret, as Brandom does, pragmatism as a type of theory of social practices. Taking into account these conditions, reading Wittgenstein as a pragmatist is plausible (cf. Misak, 2016; Putnam, 1999).
- 3 Here we cite the work of classic pragmatists using the original publication year. In the references we write the original year and the year of the translation employed, separated by a slash.
- 4 By “strategic” it should be understood here a description of an author or theory that seeks to back up a theory explicitly. It is not about a mere manipulation but

a recognition that the purpose of the description is not merely exegetical. Rorty's pragmatism has been fundamentally associated, with its pros and cons, to this way of using the history of philosophy (Faerna, 2014).

- 5 On the other hand, Descartes was one of the first philosophers in proposing a shared reflection between scientific developments of his era and diverse philosophical matters. Hence, it is at least imprudent to describe Descartes as a thinker that only offered false dichotomies and problems to the history of ideas. Although it is true that pragmatism usually speaks about Cartesianism as a tendency or matrix of thought, it is necessary to place Descartes as a thinker with nuances that enable to recognize the enormous impact that he had on subsequent philosophy. Even one of the most recurring attributes in pragmatism, that is the enormous respect for scientific developments, would not have even been conceivable if it was not for the relevance that modern philosophy conferred to natural sciences. One of the architects of such philosophy, without a doubt, was Descartes. I thank the anonymous reviewers of *Sophia* for warning me about the need of mentioning some collections with the presentation of Cartesianism within the pragmatist tradition.
- 6 Classical pragmatists seem a simplification. It is. Nonetheless, specialized bibliography is of common use to refer to aspects —fundamentally critical— that Peirce, James, and Dewey share (v.g. West, 2008).
- 7 Conventionally, *Philosophical Investigations* is cited in this manner (i.e., § 201) referring to the paragraphs in which it is organized. This study subscribes to this general idea, according to which it is not possible to privately follow a rule. However, it exceeds this work to specify in what concrete sense of 'community' is it possible to attribute to Wittgenstein the idea that it is the community that guarantees the conformity of a rule. The debates around Kripke's (1983) interpretation about Wittgenstein show the difficulty of establishing this point.
- 8 Schaufhauser (2014) has shown how the idea of practices has led to talk about a 'pragmatist turn' in sociology that revitalized different methodological aspects of the study of social phenomena.
- 9 We follow the characterization of materialism in philosophy of mind by Searle (2004).
- 10 Saul Kripke thought this example in his famous skeptic objection.
- 11 An example would be Perkins' attempt (2009) in the context of his theory of comprehension.

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