

SOCIAL REPRESENTATIONS, SUBJECTIVITY AND LEARNING

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ABSTRACT

This chapter intends to investigate the extent to which the theory of social representations may define and explain the processes of learning and instruction. The phenomena of learning and instruction have hitherto mostly been investigated and explained from the psychological theories of development and cognition. We believe that less attention has been devoted to the explanation of human learning and instruction from, for example, ethnographic, sociological or socio-psychological analysis. In this chapter, we intend to reflect upon the role that can be played by the theory of social representations, particularly the phenomena of subjectivity and inter-subjectivity in the formation of the processes of human learning and instruction.

**SOCIAL REPRESENTATIONS • LEARNING • EDUCATION •
SUBJECTIVITY**

INTRODUCTION

IN THE HISTORY OF EDUCATIONAL SCIENCES, THE PROCESSES OF INSTRUCTION and formation have been explained and investigated mainly, if not exclusively, in terms of developmental and cognitive theories of psychology. Few attempts have been made to suggest alternative ways to explain and study learning and instruction from perspectives outside of these psychological paradigms. In this chapter, the theory of social representations is tentatively suggested as an alternative way to explain the processes of knowledge acquisition, learning and instruction. As a social-psychological theory of knowledge and communication, the theory of social representations has been successfully applied in many research fields requiring the exploration of cultural, social and psychological phenomena (JODELET, 1989a). The theory has also proved to be a valuable instrument for the study of many issues related to education and professional formation (CHAIB; DANERMARK; SELANDER, 2011). In our view, however, the theory has not been sufficiently considered for its relevance to the study of the processes of learning and instruction. Duveen and Lloyd's pioneering work (1990) constitutes an exception in this context. Their excellent book, however, deals primarily with the development of knowledge and not explicitly with the processes of learning, instruction and formation. In his chapter of that work, Moscovici (1990, p. 164) writes:

There are numerous sciences which study the way in which people handle, distribute and represent knowledge. But the study of how and why people share knowledge and thereby constitute their common reality, of how they transform ideas into practice – in a word, the power of ideas – is the specific problem of social psychology.

Social representation as a theory of knowledge and communication has obvious potential to explain learning and the instructional processes, but for the last one hundred years, the field of learning and instruction has been largely dominated by three main theoretical paradigms: behaviourism, cognitivism and social constructionism.

We intend to advance some arguments for the conception of social representations as a contributor to the explanation of the learning process and, by extension, the processes of instruction and educational formation. This is by no means intended to be an attempt to formulate a new theoretical approach to social representations. It is rather an essay aiming to explore how the epistemological foundations of social representations can improve our understanding of human learning. Our purpose is to outline the boundaries for a theory of learning based on communication and interaction that could constitute an alternative or a complementary perspective to the dominating psychological theories of learning.

DOMINATING THEORIES OF LEARNING AND INSTRUCTION

To understand the way the theory of social representations may constitute an alternative to behaviourism, cognitivism and social constructionism, it is necessary to explore the ontological foundations of these theories and to see their relation to social representations.

The way we define learning and our beliefs about how it occurs has important implications for our ability to facilitate changes in the educational system. Learning theories provide instructional designers with verified instructional strategies and techniques to facilitate learning as well as a foundation for intelligent strategy selection (ERTMER; NEWBY, 1993).

Behaviourism is now considered more or less obsolete as a theory of learning, but its influence is not yet insignificant, mainly because the basic concept of behaviourism – stimulus-response – is easy to understand and for policy makers to refer to. For Watson, Skinner and Pavlov, behaviourism founders and proponents, all behaviour is caused by external stimuli. All learning can be explained without

considering internal mental states of consciousness. The learner is viewed as a passively responding to environmental stimuli. One may ask, if behaviourism no longer influences educational policies, why bother about such an obsolete theory? If we consider how the debate on education and instruction is developing, we can easily see the premise of this question is not quite correct. Ideologically, behaviourism is still alive; it is on the return and experiencing a renewal in school debates. The problems schooling faces in many societies lie behind this revival. Public schooling is heavily criticised for its lack of efficiency in many parts of the world. The failure to address these problems and to solve them has resulted in increased calls for more efficient methods of learning. The individual, psychological and neuro-psychological theories are given much more attention today than they did only a few decades ago. Furthermore, the subjecting of education to competition through, for example, privatisation of education all over the world and the intervention of private actors has raised the demand for more measurable outputs from the educational system. For instance, in Sweden we notice increasing demands for measurable (behaviouristic) testing and examination of student performance at all levels, from pre-school to university. The learner is increasingly conceptualised as a consumer, and education as a consumer good; hence the awakening of behaviourism as a source for efficient learning, instruction and performance measurement (MACPHERSON; ROBERTSON; WALFORD, 2014).

Cognitivism, sometimes also called social constructivism (BURR, 1999), focuses on the inner mental activities of the human mind in the process of learning. In this theory, mainly represented by Piaget and Bruner, people's learning is constructed out of the mental functions and activities of the human mind. Thinking, memory, knowing, and problem solving are the focus of the cognitivists' way of conceiving learning and instruction. In fact, *The child's conception of the world*, one of Piaget's masterworks, originally published in 1926 (2007), is completely devoted to children's reasoning and representations of the world. If one reads this work carefully, in its portrayal of children's reasoning and explanations of the world, one can find obvious similarities with the ideas contained in the theory of social representations. Social representations theory has many similarities with the cognitivism of Piaget. Moscovici has been ascribed some connections with Piaget (JOVCHELOVITCH, 2007), a connection he did not reject: "Social constructivism and the theory of representations have *things in common*" (MOSCOVICI, 1997, p. 5). Yet Piaget's theory is related to the individual learner, whereas Moscovici's is related to how common sense knowledge is generated by groups of people in a process of communication and interaction.

Inspired by the Marxist theory of materialism, Vygotsky, the founder and proponent of social constructionism, and the Russian Cultural Historical School consider the fundamental role of the individual

in creating their own history. People create their own subjective representations of objective reality (BERGER; LUCKMAN, 1991 [1966]). By consequence, in Vygotsky's psychology of the learner is viewed as a constructor of information, and learning as an active process. Here, we can also notice similarities between social representations and social constructionism. Despite the evident similarities between these, the relationship between them is an ambiguous one. In my understanding, as Moscovici (1997, p. 6) puts it, social constructionism "intends to be a meta-theory telling us what is, or what should be *good science*, criticizing what is, or should be *bad science*". Thus, social constructionism is closely related to social representations, but the relation between them should not be understood as an antagonistic one, where the one excludes the other. I think Moscovici (1997, p. 12) is right when he writes, "Without a theory of social representations, we cannot understand social construction".

In summary, the theories of knowledge and learning hitherto presented have some features in common distinguishing them from social representations. They are products of psychological explanations of human behaviour. Except for social constructionism, these theories have been mainly developed from experimental studies of the epistemological structures of how children and young people acquire knowledge. They focus on explaining learning as a product of people's psychological attributes, such as their intelligence, maturity, genetic development, motivation and attitude. Furthermore, these theories are mostly formulated for and within mono-cultural contexts. Their relevance has to be adapted to many challenges in modern times, as current education is often conducted in multicultural and subcultural environments. Group communication and interaction are implicitly included in these theories, but they are not explicitly taken into account as explanatory elements, contrary to the theory of social representations.

The emergence of new learning technologies, the power relations it establishes between different social groups, and the expanding globalization of culture and education transform the act of learning into an act of interpersonal communication. Human beings are expected to learn throughout their lives, with many different methods and in different contexts. Learning is no longer a private act; it is a common sense, diffused and anchored through formal (education) means and mediated by non-formal (social media) means of acquiring knowledge.

SOCIAL REPRESENTATIONS IN LEARNING CONTEXTS

One of the most interesting aspects of the theory of social representations is the fact that the theory takes into account the prominent role of the media in the formation and diffusion of social knowledge. That is what distinguished Moscovici's theory of social representations from Durkheim's theory of collective representations, from which social representations is inspired.

Moscovici (1961) adapted Durkheim's theory of collective representations to the then-emerging expansion of the mass media and its growing role in the diffusion and anchoring of psychoanalysis representations. Similarly, the rapid Internet and social media development should exhort us to integrate into all theories of learning the evidence that people's representations of the learning world are shaped by these modern instruments of communication. Any attempt to explain the process of instruction and to design didactical frames has to take into account the significant interference of these media in the learning process.

Knowledge acquired through books, printed information, in the classroom, and monitored by teachers is challenged by the knowledge acquired by both children and adults, independently, outside the formal instructional context, e.g. through Wikipedia, Google and Facebook. The new technology does not create new representations of the world by itself, nor does it create new knowledge, but it substantially contributes to the diffusion of people's conceptions and representations of the world, quickly and globally. The challenge for teachers is to understand what kind of representations people bring with them into school. The question is how to manage these representations and how to negotiate their functions in the instructional process. Here we are not referring to most teachers' attention to children's prior knowledge, but rather to children's backgrounds (their cultural and subcultural diversities and their beliefs) which constitute their social representations.

As education scientists, we are faced with a double challenge. On the one hand, we have to sustain that the theory of social representations, with its emphasis on the importance of common sense knowledge, might constitute an alternative to psychologically based theories of learning. On the other hand, we have to look at the theory with new eyes. We have to evaluate it from its ability to integrate new elements such as the Internet, globalisation and multiculturalism.

The increasing attention devoted to learning among adults, as well as the emergence of lifelong learning, has emphasized the importance of considering knowledge acquisition as a product of formal, informal and nonformal learning. Formal learning is the kind of organised learning designed in formal contexts, similar to school

teaching. Informal and nonformal learning takes place everywhere, through all kinds of means, sometimes without the learner's awareness. The connection between these different forms of learning emphasises the role people's social representations play in the results of learning. Social representations are formed and disseminated mainly through the informal and nonformal learning processes. If education is the process of influencing people's behaviour, then nonformal and informal learning are the master factors in this process.

Our central idea is that people already have some representations of the learning objects prior to their engagement in any formal learning process. In other words, paraphrasing Sartre's famous, *l'existence precede l'essence* (existence precedes essence), we could say that peoples' social representations of what they are going to learn always precede their act of learning. Moscovici (2000, p. 166) writes that, like all forms of acquisition of knowledge, learning is a question of asking what plays the role of primary idea in the formation of families of representations in a given domain. Quoting Aristotle, Moscovici & Vignaux (1994) and Moscovici (2000) sustained the idea of representations as a prerequisite for learning. For Aristotle (quoted by MOSCOVICI, 2000, p. 167):

All teaching and all learning of an intellectual kind proceeds from pre-existent knowledge. This will be clear if we study all the cases: the mathematical sciences are acquired in this way, and so each of the other arts. Similarly with arguments both deductive and inductive: they affect their teaching through what we already know, the former assuming items, which we are presumed to grasp, the latter proving something universal by way of the fact that the particular cases are plain... There are two ways in which we must already have knowledge: of some things we must already believe that they are, of others we must grasp what the items spoken about are (and of some things both). E.g. of the fact that everything is either asserted or denied truly, we must believe that it is the case; of the triangle, that it means this; and of the unit both (both what it means and that it is).

This statement means that all forms of learning, through the system of *themata*, ought to take into account not only the learner's prior knowledge, as stated above, but also the learner's social representations of what is to be learned, how, and with what consequences for the learner and outcome. Normally, all teachers and instructors are aware of these statements' self-evidence. Yet these truths are not sufficiently taken into account in the classical theories of learning, probably due to the lack of instruments to assess their impact on the instructional process.

The acquisition and, hence, the transformation of knowledge are much more based on emotions and intuitions: two notions that apparently do not have a privileged position in the history of learning and instruction. According to Dreyfus & Dreyfus (1986), both Aristotle and Pascal put forward arguments supporting common sense knowledge as a primary source for the acquisition of knowledge, where both emotions and intuitions play a central role. For these philosophers, learning is not to be reduced to logical reasoning and rational thinking, but ought to take into account human beings' ability to act both rationally and emotionally.

SOCIAL REPRESENTATIONS IN INSTRUCTIONAL CONTEXTS

From the perspective of social representation theory, we consider learning a social relation (*rapport social*), establishing a kind of communication between the teacher and learner. It constitutes a triangular didactic relation between the learner, teacher and learning object. In an educational context, the function of social representations is to establish a consensual relation between the actors involved in a learning process. This relation is negotiable and may lead to conflict or consensus, depending on the nature of the subject to be studied. Social representations act as a socio-cognitive facilitator, integrating what is new and acceptable for all actors. Social representations are also important in directing the process of communication within the learning context. They frame the conduct and behaviours of the actors.

Social representations have a stronger or weaker impact on learning depending on the nature of the learning object. The teaching of history, geography or literature may lead to bigger conflicts of interpretation than the teaching of “neutral” subjects such as mathematics, physics or chemistry, although, mathematics is not as “neutral” a subject as one might think, as can be seen below. Some subjects are more tied to the actors' beliefs and cultural diversities than others. In the case of history, the conflict may emerge because of diverging social representations of history between the learner and the teacher or between the learner and the content of the teaching manuals.

Language teaching may also lead to conflict if the involved actors do not share the images of that language. In their empirical study of social representations of language and teaching, Castellotti & Moore (2002) stated shared images existing in a social group or society about other people and their languages can have significant effects on the attitude towards those languages, and ultimately on learners' interests.

Conflicting social representations may prevent the learner from mobilising enough energy to cope with the learning task. I would like to illustrate such a situation with a personal experience. I was born in Algeria and educated in the French school system from pre-school through secondary school. At that time the teaching system in Algeria, a country considered an integrated part of France, was completely French in content and form. The learning manuals, teaching syllabuses and teaching language were French. Most students were Arab or Berber and the minority spoke French. History teaching referred exclusively to events in the French glorious times. For example, both teaching manuals and teachers would refer to the history of France with the famous phrase “Our ancestors the Gauls!”, illustrated by Vercingetorix’s pictures, the leader of the Gauls, a white, blond-haired, blue-eyed and tall man. Teaching never referred to any historical Algerian individual. Yet the part of the country where I was living, east Algeria, has an impressive rich history, with events covering the Carthaginian, Byzantine, Roman, Vandal, Arabic, and Turkish periods. No mention was made to our native heroes or famous historical people such as Jugurtha and Massinisa, the Berber Kings who fought the Roman invasions; Kahina, a Jewish Berber queen who opposed the Arab invasion from North Africa; Okba Ibn Nafah, the Arab conqueror from North Africa or Saint Augustine, a Berber bishop from Hippo Regius, universally considered the Christian Church Father.

When it came to geography teaching, we were expected to learn all about the French rivers, The Rhine, The Rhone, The Garonne, and The Loire Rivers, as well as the French mountains, The Jura, The Alps, or The Pyrenees. No one mentioned anything whatsoever about Seybouse river located only two and a half kilometres from our school, or Mahouna and Haouara mountains we could see from the windows of our classroom. Arabic, the native language of most students, was offered as an optional fourth language to Arabic students, behind English and Latin. Mathematics, especially algebra, was taught in a very abstract manner for both Arabic and French students. We did not understand the true meaning of solving the algebraic equations. However, I believe that our motivation to learn algebra would have been much more enhanced if someone had told us that algebra was in fact an Arabic word coming from the Arabic *Al-Jabr*, which means restitution or reduction, i.e. reduction of a fracture. The motivation to learn is undoubtedly improved if the subject taught is anchored in students’ cultural schemes and representations. These examples show how the processes of objectification and anchoring are important for the crystallisation and adaptation of teaching frames to students’ cultural frames.

These examples may seem extreme as they reflect a situation in a context of pure colonial domination, but the nature of the problem

itself lingers in many teaching contexts throughout the world today where multicultural and multiethnic education is conducted. This situation occurs also in classroom teaching, as Bourdieu & Passeron (1977) demonstrated in their famous *Reproduction in education, society and culture* [*La reproduction: éléments pour une théorie du système d'enseignement*]. They sociologically scrutinised how the ruling ideas or social systems are related to structure of class, production and power and how these are legitimated and perpetuated in the teaching system. For us their conclusions are an illustration of how intersubjectivity and hence social representations function in a teaching context, when different social systems and values are confronted with each other.

Research on social representations related to education in the multiethnic environment seems to be an expanding field due to the growing number of immigrant children in European schools.

Gorgorió & Planas (2005) looked at the role of social representations as mediator in mathematics learning in multiethnic classrooms. They observed immigrant students with their own personal histories as members of particular social groups and living with school traditions other than the one predominant in the host society have their own images of what high-school mathematics is about. The authors added that individuals interacting in the classroom are all reinterpreting the different episodes from the perspectives of larger group social representations with which they identify themselves. They concluded that different reinterpretations of the same norms clash in multiethnic classrooms. The lack of negotiation gives rise to obstacles to immigrant students' participation in the mathematical conversations and, therefore, interferes with students' learning process.

Guida de Abreu & Núria Gorgorió (2007) also discuss the role of social representations in the teaching of mathematics in multicultural settings. Drawing on the literature and empirical studies, they formulate three basic questions related to that issue: What are the dominant social representations that permeate the multicultural mathematics classroom? How do these social representations affect the multicultural mathematics classroom practices? And finally, what are the spaces for changing these practices through becoming reflective and critically aware of these representations?

From the results of these studies, we can conclude that social representations can be efficiently used to improve the design of instructional schemes aimed at multicultural educational settings.

For Sauv e & Machab ee (2000), representations are the focal point for learning. In their action research related to the study of social representations among teachers, they studied teachers' social representations of education, environment and environmental education. Applying a structural approach, they succeeded in identifying

the stability of the central core of the representations related to the environment and environmental education.

As mentioned before, the study of social representations as a prerequisite for learning is growing and diversified. Thus, in a study of social representations' role in the teaching of economics, Legardez (2004) was able to demonstrate the importance of intentionally using the theory of social representations in teaching principles of economics. He found that the students showed the mastery of two kinds of knowledge about economics. One kind, called *school knowledge*, was appropriated in the classroom. The other, called *social knowledge*, was a kind of common sense knowledge about economics students brought with them to the school. This kind of knowledge was identified as a product of students' economics social representations that was not completely in tune with the school knowledge. The two types of knowledge seemed to belong to two different worlds. Students showed difficulties in negotiating these two types of knowledge. In particular, they were unable to transfer one form of knowledge to the other.

CONCLUDING REMARKS

In this paper, we have tried to investigate how the theory of social representations may help to understand the processes of learning and instruction. In fact, we provide some arguments for considering social representations as a theory of learning and instruction representing an alternative to the dominant, psychologically-oriented theories of learning such as behaviourism and cognitivism. The theoretical reasoning in this paper and the empirical references show the theory of social representations is a viable alternative to the dominant theories. We have suggested in this text to consider the theory of social representations as a useful developing theory of learning. The basic foundations of the theory – communication and interaction and the emphasizing of common sense knowledge – offer support for the conception of social representations as an alternative theory of learning.

Both Moscovici's reference to Aristotle above and Jodelet's definitions of social representations can be interpreted as supportive of the ideas developed in this paper. For Jodelet (1989b):

Social representations are images that condense manifold meanings that allow people to interpret what is happening; categories which serve to classify circumstances, phenomena and individuals with whom we deal, theories which permit us to establish facts about them.

This definition and the empirical facts presented in this paper confirm our standpoint that any form of learning supposes an *a priori*

form of common sense knowledge of the learning object. Through the processes of objectification and anchoring, social representations play a central role in directing and conditioning human learning.

The question is what kind of conclusions can be drawn from these statements. An obvious answer is that social representations should have a much more obvious position in the pedagogical discourse on learning and instruction. Much more of the educational research should be devoted to studying the social-psychological processes of learning and instruction. There are demands, not least from teacher training institutions, for alternative approaches to children's learning and teaching. The growth of research on adult education in Europe, particularly in Scandinavia, demonstrates promising expansion for social representations as an alternative theory for understanding learning among adults. I think a similar development may be observable in the study of learning among school children, where social representations focusing on the social-psychological mode of communication constitutes a strong and meaningful frame for research and implementation.

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