


# Handbook of Theories of Social Psychology



Volume 2

Edited by  
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# Social Representation Theory

Patrick Rateau, Pascal Moliner, Christian Guimelli, and Jean-Claude Abric

## ABSTRACT

As heir to a strong French sociological tradition, the theory of social representations, elaborated by Serge Moscovici in the beginning of the 1960s, has become one of the major theories in social psychology. Mainly European initially, it rapidly brought together a large number of researchers and practitioners worldwide, mainly in the field of social psychology, but also in all other social sciences. These researchers have seen this theory as a flexible conceptual framework that enables us to understand and explain the way individuals and groups elaborate, transform, and communicate their social reality. They have also found in this theory's different developments a vast set of methods and tools, directly applicable to the analysis of a wide range of social issues. Lending itself equally well to qualitative approaches as to experimental applications, studies have multiplied along different lines. Those aiming at making connections between sociorepresentational processes and other processes classically studied in the field of social cognition seem to be the most promising in terms of the theory's future development. This chapter addresses a longstanding tradition of research, covering a period of nearly 100 years of research, from 1893 to 2010.

## INTRODUCTION

### *A common sense theory*

In many ways, social psychology is the study of social reality. That is to say that it deals with the explanations to which we automatically have recourse in order to explain and understand the world around us. Indeed, each one of us desires to make sense of events, behaviors, ideas and exchanges with others and seeks to find around them a certain coherence and stability. Each one of us seeks to explain and understand their environment in order to make it predictable and more controllable. Yet, this environment is made up of innumerable situations and events, and a multiplicity of individuals and groups. Similarly, we are being constantly required, during our everyday interactions, to make decisions, to give our opinion on this or that subject or to explain this or that behavior. In short, we are constantly plunged into an environment where we are bombarded with information and required to deal with it. In order to understand,

master, and make sense of this environment we have to simplify it, to make it more predictable and familiar. In other words we have to reconstruct it in our own fashion.

But one cannot help but notice that this process of reconstruction is a constantly repeated process. From our youngest age, school, the family, institutions and the media, instill in us certain ways of seeing the world and offer us a particular vision of the things around us, presenting us largely with a ready-made construction of the world in which we grow up, the values with which it is invested, the categories which govern it and the principles themselves by which we understand it. Our perception of the environment is next shaped by the groups, the associations, and the clubs that we become part of. It is very largely in our exchanges and our communications with others that our reality of the world around is formed. In the course of our contacts and our multiple involvements with different social groups we ourselves acquire and transmit knowledge, beliefs, and values that allow us to share a common conception of things and of others. In this sense, this reconstruction of reality, this representation of reality, is above all social; that is to say elaborated according to the social characteristics of the individual and shared by a group of other individuals having the same characteristics.

This last point is important. Not all social groups share the same values, the same standards, the same ideologies, or the same concrete experiences. Yet all construct representations that are closely based on these. It follows that social representations bear on the one hand the mark of the social membership of the individuals who adhere to them and give them their identity, and on the other allow these same individuals to distinguish "others", those who do not share the same representations and who appear to them at best as different, at worst as enemies.

To sum up, social representations can be defined as "systems of opinions, knowledge, and beliefs" particular to a culture, a social category, or a group with regard to objects in the social environment. At this introductory

stage, it seems unnecessary to go any further. We will simply note at this point that with regard to social representations the distinction between the notions of "opinions," "knowledge," and "beliefs" is unnecessary. Of course opinions are mostly concerned with the field of position taking, knowledge with the field of learning, and experience and beliefs with that of conviction. But our everyday experience shows us that for individuals, there is frequently confusion between these three areas, especially when talking about a socially invested object. To this effect, we observe beliefs that have the status of established truths, or opinions that look peculiarly similar to beliefs, with the result that the lines between what "I think," "I know," and "I believe" often become blurred. As a consequence, the contents of a representation may be indifferently classed as opinions, information, or beliefs, and we may choose that a social representation comes across concretely as a set of "cognitive elements" relative to a social object.

The first characteristic of this set is that of *organization*. This is well and truly a structure, and not just a collection of cognitive elements. This means that the elements that constitute a social representation interact with each other. More exactly, this means that people cooperate in establishing relationships between these diverse elements. Particular opinions are considered equivalent to others, particular beliefs are deemed incompatible with particular information, and so on.

The second specificity of a representation is that of being *shared* by the members of a particular social group. However, the consensuses observed on the elements of a given representation depend at the same time on the homogeneity of the group and on its members' position towards the object, so that the consensual nature of a representation is generally partial, and localized to certain elements of the latter.

The third characteristic of this set resides in its method of construction; it is *collectively produced* through a more global process of communication. Exchange between individuals and exposure to mass communication



allow the members of a group to share the elements that will constitute a social representation. This sharing process favors the emergence of a consensus at the same time as conferring social validity on diverse opinions, information, and beliefs.

Finally, the fourth specific role of a social representation concerns its purpose—it is *socially useful*. Firstly, of course, in order to understand the object to which the social representation refers. Representations are above all systems allowing the understanding and interpreting of the social environment. But they also intervene in interactions between groups, particularly when these interactions are engaged in around a social object. Every society, as shown by Adam Smith (1776) and Emile Durkheim (1893), revolves around the division of labor. This division is not only a condition of social cohesion, but also a permanent source of dependency and power relationships within the community. Indeed, it leads to the differentiation of groups, roles, status, professions, castes, and so on. Thus, everyone is interdependent whilst being clear about their separate identity. Complementarity and differentiation are two interdependent operations that are fully active within representations. Furthermore, social representations provide criteria for evaluating the social environment that enable determination, justification or legitimization of certain behaviors. Taken together, that is how Serge Moscovici (1961) defines the notion of social representation in his first work devoted to the image and the dissemination of the psychoanalytic theory in France in the middle of the twentieth century. Whilst studying the way in which a scientific theory is transformed into a common sense theory, Moscovici traced the first outlines of what would henceforth be called the theory of social representations (SRT), whose success has not wavered since.

### ***The liveliness of the SRT***

Some 50 years after its introduction to the field of social psychology, the importance of

the SRT is well known; without doubt it is a major theoretical and empirical movement. The reasons for this success are diverse.

Let us start with its interdisciplinary nature. Located in the social and psychological interface, the social representation concept is of interest to all the social sciences. It has found a place in the fields of sociology, anthropology, history, geography, and economy and studies are carried out on its links with ideologies, symbolic systems, and attitudes. But it can also be found in the fields of cognition and linguistics. This multiplicity of relations with other disciplines confers on the SRT a transversal status that mobilizes and connects different fields of research. This interdisciplinary nature constitutes without a doubt one of the most fertile and dynamic contributions made by this field of study.

The second reason is the flexibility of its conceptual framework which has enabled this theory to adapt to various research areas (communication, social practice, intergroup relations, etc.), and to initiate many theoretical and methodological developments. But to these reasons can be added another, more fundamental point from our perspective. As a “socially built and shared knowledge theory” (Jodelet, 1989), the SRT is a theory of social bonding. It gives us an insight on what permanently connects us to the world and to others. It teaches us about how this bond is built. In this sense, one can see here a global theory of the social individual and a possible way for integrating the diverse paradigms and fields of social psychology.

The success of the SRT can be measured in terms of its scientific verve. Indeed, ever since the founding work by Serge Moscovici innumerable works have regularly presented new research developments in the field of social representations. In France, this phenomenon has been particularly marked since the 1980s when publications devoted to this theme appeared approximately every three years. It was also in the 1980s that the theory began its rapid expansion abroad, with the publication and translation into English of many books on the subject (Breakwell and

Canter, 1979; Deaux and Philogène, 2001a, 2001b; Duveen, 2001; Farr and Moscovici, 1984; Moscovici, 1981, 1982, 1984, 1988, 2001a, 2001b; Mugny and Carugati, 1989).

According to the census conducted by Vergès (1996), the SRT, with more than 2000 articles, laid claim to be one of the most famous psychosocial theories, at the same level as cognitive dissonance, which, in its 27 years of existence had had more than 1,000 references (Cooper and Croyle, 1984). In addition, regular international symposiums are dedicated to it (Ravello, 1992; Rio de Janeiro, 1994; Aix-en-Provence, 1996; Mexico, 1998; Montréal, 2000; Stirling, 2002; Guadalajara, 2004; Rome, 2006; Bali, 2008; Tunis, 2010), as are many journals and special editions of journals. Finally, we should mention the creation of an Internet network (Social Representations and Communication Thematic Network) bringing together researchers worldwide (South America, the US, Japan, India, Russia, etc.) and of a European PhD on Communication and Social Representations in 1993. If one can say that a good theory is one that is 'talked about', then the sheer quantity of communication around the theory of social representations confers on it the status of a major theory.

Ultimately, the scientific assessment of the SRT may appear to be somewhat flattering. However, it has not always been like this. By examining the historical development of the SRT, we will attempt to show how it progressively found its place in the field of social psychology, the different orientations running through it at present, what connections it has with other major psychosocial paradigms, and finally, in what way it constitutes today an essential theory for analyzing and understanding social problems.

## **A BRIEF HISTORY OF THE THEORY AND ITS DEVELOPMENTS**

After having been the most memorable phenomenon in French social sciences at the

beginning of the twentieth century, the notion of collective representations, introduced by the French sociologist Emile Durkheim in 1898, fell into disuse for more than 50 years. It was towards the beginning of the 1960s that Moscovici renewed studies of the concept and aroused the interest of a small group of social psychologists, thus bringing the theory back to life. They saw in it the possibility for tackling their discipline's issues from a new and original angle (Abric, 1976; Codol, 1970; Flament, 1971). The study of knowledge dissemination, of the relationship between thought and communication, and of the genesis of common sense, formed the elements of a new program that has been familiar ever since. But, in between the concept of collective representations and the contemporary researches on social representations, the concept has undergone many a metamorphosis, giving it different forms and colors. It is this history that we shall attempt to retrace here.

## ***From collective representations to social representations***

All attempts to reconstitute the past of this concept necessarily begin with sociology. Simmel (1908) was without doubt the first to recognize the connection between the separation of the individual who distances himself from others and the necessity to symbolize these others. He argued that the manner in which we symbolize others shapes reciprocal action and the social circles that they form together. From a different point of view, Weber (1921) saw representations as a reference framework and a channel for action by the individual. He attempts to describe a common knowledge capable of anticipating and prescribing the behavior of individuals.

But the true inventor of this concept is Durkheim (1893, 1895, 1898) insofar as he defines its contours and recognizes its ability to explain various societal phenomena. He defines it as a double separation. First, collective representations are to be distinguished

from individual representations. The latter, unique to each individual, are extremely variable, fleeting, short-lived and constitute a steady stream, whereas collective representations are impersonal and untouched by time. Second, individual representations are rooted in the individual consciousness, whereas collective representations are mutually held throughout society. Such representations are thus homogeneous and shared by all members of society. Their function is to preserve what binds them, to prepare and act in a uniform manner. This is why they are collective, why they are handed down over the years from generation to generation, and why they act for individuals as strong cognitive constraints. For Durkheim, the aim is clear: collective thinking has to be studied in itself and for itself. The forms and content of representations have to become a separate domain in order to be able to claim and prove social autonomy. For him, this is social psychology's task, even though it's still in its formative stages and its purpose still seems unclear.

However, during the very beginning of the twentieth century, it was above all sociology, anthropology, and ethnology (Lévi-Strauss, 1962; Lévy-Bruhl, 1922; Linton, 1945; Mauss, 1903) which would use the notion of representations, in a perfectly descriptive manner, to study different collective representations in cultural or ethnic communities. It was not until the 1960s that, following in Durkheim's footsteps, and based on child (Piaget, 1932) and clinical psychology (Freud, 1908, 1922), Serge Moscovici (1961) attempted to elaborate a social psychology of representations. Considering that Durkheim's conceptions left relatively little place for the question of interactions between the individual and the collective, he proposed to replace the term "collective representation" with a more restricted "social representation". In the words of the author, it was to

transfer to modern society a notion that seemed to be reserved to more traditional societies [in response to the] necessity of making representations into a bridge between individual and social

spheres, by associating them with the perspective of a changing society. (Moscovici, 1989: 82)

This evolution is marked by two fundamental changes in relation to Durkheimian conceptions.

First, Moscovici considers that representations are not the product of society as a whole, but the products of the social groups who build this society. Second, he focuses on communication processes, considered as explaining the emergence and transmission of social representations. The first point allows the conception of a social mentality which is overdetermined by societal structures and also by the insertion of individuals in these structures, in such a way that different social representations of the same object are seen to exist within a given society. The second change to the representation theory, introduced by Moscovici, permits the conception that through communication—and the influence, normalization and conformity processes that go with it—individual beliefs can be the object of a consensus at the same time as collective beliefs can impose themselves on the individual.

However, the social representation concept would undergo another period of latency before mobilizing the broad stream of research mentioned earlier in this chapter. The theory's true deployment couldn't happen until many epistemological obstacles had been removed, the largest of them all being the behaviorist model, which denied any validity to the consideration of mental processes and their specificity. The decline of behaviorism and the emergence of the "new look" in the 1970s, followed by cognitivism in the 1980s, led to the progressive expansion of the "stimulus-response" (S-R) paradigm. This development meant that internal psychological states, conceived as an active cognitive construction of the environment and dependent on individual and social factors, were recognized as having a creative role in the behavior elaboration process. This is perfectly expressed by Moscovici, when he says that representations determine at the same time stimuli and responses, in other

words “that there is no line between the external and internal universes of individuals or a group” (1969: 9).

This overturning of perspectives marked, from the 1980s, the development and improvement of work on social representations. It is also considered, in a diagrammatic sense, that these works were developed along three main lines, each one attempting to develop different facets of the concept. One which examines the regulatory role of social representations on real social interactions, another which studies the impact of social relationships on the elaboration of social representations, and a third which analyses representational dynamics and their structural characteristics, more specifically linked to social conduct. These three lines of development revolve not so much around different points of view as different ways of approaching social representations. This diversity of orientation most probably comes from the fact that Moscovici himself proposed diverse definitions of social representations, all of which are complementary.

There are multiple reasons for this flexibility. First of all, research is not limited by being enclosed within a rigid and narrow theoretical framework. Second, it allows the study of social representations to be situated within the framework of a paradigm, a line of thought and a knowledge structuring tool, rather than within an established and narrow-minded theoretical framework. Finally, the reality of social representations is such that their definition can vary according to the researcher's perspective. We can therefore study them in their emergence and in their role as regulator of social interaction and communications, from the angle of their internal structure or even from that of their links with social relations. We are now going to briefly introduce these three perspectives.

### ***Orientations of the SRT***

#### ***The sociogenetic model***

When he formed his theory, Moscovici (1961) wanted above all to propose a description of

the genesis and the development of social representations. According to him, the emergence of a social representation always coincides with the emergence of an unprecedented situation, unknown phenomenon, or unusual event. This new nature of the object implies that information about it is limited, incomplete, or widely spread throughout the different social groups involved with the emergence of this object (what Moscovici called the *dispersion of information*). This new object arouses worry and vigilance or disrupts the normal course of things. It thus motivates intense cognitive activity to understand it, control it, or even defend oneself from it (*inference pressure* phenomenon), and causes a multiplicity of debates and of interpersonal and media communication. As a result of this, information, beliefs, hypotheses, or speculations are shared, leading to the emergence of majority positions in different social groups. This emergence is facilitated by the fact that individuals deal with information on the object or the situation selectively, focusing on particular aspects according to their expectations and the orientations of the group (*focalization* phenomenon).

The gradual emergence of a representation occurs spontaneously and is based on three kinds of phenomena: the dispersion of information, focalization and the pressure to make inferences. But these phenomena themselves are developed on the basis of two major processes defined by Moscovici: *objectification* and *anchoring*.

*Objectification* refers to the way in which a new object, through communication about it, will be rapidly simplified, imaged, and diagrammed. Through the phenomenon of selective construction, different characteristics of the object are taken out of context and sorted according to cultural criteria (all groups do not have an equal access to object relative information), to normative criteria (only what agrees with the group's system of values is retained). The different aspects of the object are thus separated from the field to which they belong to be appropriated by groups who, by projecting them into their

own reality, can control them more easily. These selected elements form together what Moscovici calls a *figurative core*, that is to say a coherent visualization that reproduces the object in a concrete and selective manner. By penetrating the social body through communication, by collective generalization, this simplification of the object replaces the objects reality, and is “naturalized”. A representation is then created and takes on an “obvious” status. As such, it is an “independent theory” of the object which will serve as a basis for judgments and behavior oriented towards it.

To this effect, Moscovici, while studying the emergence of the representation of psychoanalysis in French society, observed the apparition of a figurative core composed of four parts: the conscious, the unconscious, repression, and complexes. These elements are fully extracted from their original theoretical context. They are also naturalized in the sense that individuals don’t consider them as abstract notions but as concrete and observable elements of the psychic apparatus. From there comes the possibility to communicate about psychoanalysis beyond its conceptual framework, to recognize categories of disorders and symptoms (the superiority complex, modesty, the slip, unconscious repression, subconscious acts, etc.) and different categories of people (the complicated, the repressed, the neurotic etc.).

*Anchoring* completes the objectification process. It corresponds to the way an object finds its place in a pre-existing individual and group thought system. Depending on an elementary mode of knowledge production based on an analogy principle, the new object is assimilated into forms that are already known and into familiar categories, and so on. At the same time, it will become identified with a network of already present meanings. The hierarchy of values belonging to different groups constitutes a meaning network in which the object will be located and evaluated. The object will thus be interpreted in different ways depending on social groups. Furthermore, this interpretation extends to anything that remotely concerns this object.

Thus, all social groups attach the object to their own meaning networks, guarantors of their identity. In this way a vast set of collective meaning is created around the object. In this way also, the object becomes a mediator and a criteria for relationships between groups. However, and this is an essential point to anchoring, integrating the new object into a pre-existent system of norms and values cannot happen smoothly. An innovative mix results from this contact with the new and the old, due both to the integration of the hitherto unknown object, and to the persistence of the old, the new object reactivating habitual frameworks of thought in order to incorporate it. From this it follows that a social representation always appears as innovative and enduring, changing and unchanging.

On this general theoretical basis of the process of generating social representations has developed a large research field, initiated notably by the work of Denise Jodelet (1989). This stream of research focuses on the descriptive study of social representations as meaning systems that express the relationships that individuals and groups have with their environment. Considering that representations are born essentially through interaction and contact with public discourses, this line of research concentrates firstly on language and speech from two complementary viewpoints. Social representations are approached as being at once fixed *in* language and as functioning themselves *as* language through their symbolic value and the framework they supply for coding and categorizing individuals’ environment.

So-called monographic and qualitative approaches to discourse and behavior data collection and analysis (ethnographic techniques, sociological investigations, historical analysis, in-depth interviewing, focus groups, discourse analysis, documentary analysis, verbal association techniques, etc.) constitute the main methodological framework for works carried out in this area (see, for example, Kronberger and Wagner, 2000; Markova, 1997, 2003; Wagner, 1994; Wagner et al., 1999).



### *The structural model*

Based at the same time on Moscovici's objectification process and on Asch's work on social perception (1946), Jean-Claude Abric and Claude Flament proposed an approach known as the "central core theory" (see Abric, 1993, 2001). This approach has massively contributed to clarifying sociocognitive logics underlying the general organization of social representations.

We are reminded that, at the time of his famous observations, Asch showed that amongst the seven character traits suggested to subjects as criteria for evaluating the image of a partner, one of them (warm/cold) played a principal and central role in the process studied, inasmuch as it played a far greater role in determining the perception of the other person than the other traits proposed.

Inspired by these results, Abric proposed transcending the purely genetic framework of the figurative core idea by recognizing its paramount role in all established representations. The basis of the central core theory is to consider that, in the overall picture of cognitive elements which make up a representation, certain elements play a different role to others. These elements, called central elements, form a structure named by Abric the "central core". This internal structure of representations provides two essential functions: (a) a meaning generative function—it is through the central core that other elements in the representational field acquire meaning and specific value for individuals; and (b) an organizational function—it is around the central core that other representational elements are arranged. And it is this same core that determines the relationships that these elements maintain with each other.

Thus, as a cognitive structure providing meaning generative and organizational functions, the core structures in its turn elements that refer to the object of representation. These elements, dependent on the core, are called "peripheral elements."

As proposed by Flament (1989), in reference to the scripts theory (Schank and Abelson,

1977), these peripheral elements allow representations to function as a "decryption" grid of social situations experienced by individuals. If the central core can be understood as the abstract part of the representation, the peripheral system should be understood as its concrete and operational one.

In the end, according to Abric, social representations act as entities, but with two different and complementary components:

- 1 The central system structures cognitive elements relative to an object and is the fruit of particular historical, symbolic and social determinisms to which different social groups are subject. It is characterized by two fundamental properties. First, by a great stability, thus assuring the permanence and durability of the representation. In other words, the central system resists any scrutiny, in one way or another, of the representation's general basis. It is, moreover, where consensus on the representation is found, and thus constitutes its collectively shared common basis. It enables each group member to "see things" in approximately the same way, and through it, the group's homogeneity concerning the representation's object is defined. Thanks to the central system, group members can recognize each other, but also differentiate themselves from neighboring groups, and thus, to a great extent, it contributes to social identity.
- 2 The peripheral system, in tune with every day contingencies, enables a representation to be adapted to various social contexts. Flament assigns to it three essential functions:
  - (a) It prescribes behavior and position taking allowing individuals to know what is and is not normal to say or do in a given situation, in view of its purpose.
  - (b) It permits personalization of the representation and of the behaviors which are linked to it. Depending on the context, the same representation can lead to different interpersonal opinions within a group. These differences remain compatible with the central system, but correspond to an internal variability of the peripheral system.
  - (c) It protects the central core when necessary and acts as a representation's "bumper." In this sense, the transformation of a social representation occurs in most cases through the prior modification of peripheral elements.

From an epistemological point of view, the structural approach marks a major turning point for the theory of social representations. On the one hand because it provides researchers with a conceptual framework for studying stabilized representations rather than representations in their formative stage. Seen from this perspective, social representations are no longer simple “spheres of opinions,” but become structured spheres. In this sense, the study of their structure takes over from that of their content. On the other hand, the structural approach offers a framework for analysis which allows us to identify the interaction between the functioning of the individual and the contexts in which the individual evolves. Finally, because the structural approach offers formalized concepts, it allows the formulation of hypotheses around the sociocognitive adaptation of social actors faced with the evolutions of their environment. And these hypotheses are at the origin of the experimental method in the study of social representations.

### *The sociodynamic model*

Based on the anchoring process defined by Moscovici, Willem Doise (see Clémence, 2001 for an overview) proposed a theoretical model which aimed to reconcile the structural complexity of social representations and their insertion in plural social and ideological contexts.

According to Doise, representations can only be envisaged in the social dynamic which, through communication, places social players in interactive situations. This social dynamic, when elaborated around important issues, arouses specific position taking, in relation to the social integration of individuals. That is to say that positions expressed on a given question depend fundamentally upon peoples’ social memberships, which refers back to Moscovici’s anchoring process. But Doise adds that these positions depend also on the situations within which they are produced. This double source of variation can generate an apparent multiplicity of position taking even though they arise from common

organizational principles. Indeed, for Doise, all social interactions have symbolic characteristics. They enable people and groups to define themselves in relation to others. They therefore contribute to defining everyone’s identity. This is why they have to be organized according to common rules among specific group members. By supplying shared “reference points” serving as a basis for the position taking of individuals and groups, representations constitute common rules. They thus organize the symbolic processes which underlie social interaction.

In other words, this model assigns a double role to representations. They are defined, firstly, as principles that generate position taking. But they are also principles for organizing individual differences. On the one hand, they supply individuals with common reference points. On the other hand, these reference points become issues that individual differences revolve around. If representations allow the object of the debate to be defined, they also organize this debate by suggesting the questions to be asked.

In this conception, there isn’t necessarily a consensus regarding opinions expressed by individuals. It is not the points of view which are shared, rather it is the questions which attract conflicting points of view. To sum up, position taking can diverge even when referring to common principles. Let us note finally that the theory of organizational principles gives great importance to intergroup relationships, by trying to show how different social memberships can determine the importance given to different principles. From this perspective, it’s to do with studying the anchoring of representations in collective realities.

The sociodynamic approach introduces a new way of thinking of the question of consensus in the SRT. For Moscovici, this consensus resulted from the sharing of certain beliefs within a given group. And this sharing was itself the result of the communication process. Doise considered consensus more as anchoring points for a social representation. And the convergences or divergences

between these anchoring points find their origin in the structuring of existing social relations between groups. Seen from this perspective, the study of social representations needs to make use of multiple approaches that will highlight the links between cognitive elements and also between individuals or groups and cognitive elements (see Doise et al., 1992). So it is a question of establishing principles of homology between the social positions of individuals and their position taking in order to reveal the organizing principles of the representations studied (see Clémence, 2001; Lorenzi-Cioldi and Clémence, 2001; 2010; Spini, 2002).

### *The expansion of the theory*

These three theoretical orientations developed by French and Swiss researchers constituted, and still constitute, the bases on which would develop, notably from the 1980s, a multitude of studies, first from outside of Europe, mainly in Latin America.

Very soon, and mainly under the influence of Robert Farr and Miles Hewstone, the SRT gained a foothold in the UK from which emerged, for example, the work of Gerard Duveen centering on the connection between the individual and the group within the framework of microgenetic socialization processes; that of Sandra Jovchelovitch who proposes the view of social representations as a space between the individual and the society linking objects, the subject and activities; that of Caroline Howarth centering on the links between the SRT and social identity; or yet again that of Ivana Markova who is developing links between dialogicity and social representations. In Austria, the work of Wolfgang Wagner in particular has demonstrated the role between social interactions and discursive exchanges in the processes of construction of social representations. In Italy, under the impetus of Augusto Palmonari, then of Felice Carrugati, the work of Anna Maria de Rosa led to the establishment and dissemination of the SRT throughout Europe. On the other side of the Atlantic, it was mainly in the countries of Latin America and

South America (particularly Mexico, Brazil, Argentina and Venezuela) that the SRT found, from the 1990s onwards, very fertile ground for expansion. The impact of social, historical, and cultural contexts on the formulation of Latin American scientific issues had a lot to do with this success. Researchers in social psychology have found in it a creative, reflexive and critical way of thinking, suitable for dealing with change and political, economic, and social crises. They participate actively today in the theoretical developments of the SRT by linking it particularly with other psychosocial issues such as, for example, social memory or the processes of social change. We should also mention studies carried out in Portugal, Spain, and Rumania and more recently in Australia, Asia, and Africa, but one chapter does not give us adequate space to do so.

We will point out, on the other hand, that in this international picture, the US is one of the most notable absentees. Despite the remarkable work of Gina Philogene and Serge Moscovici to attempt to integrate the SRT into North American social psychology studies, one cannot but notice that it has not found true ground for development. The reasons for this are many and once again there is not enough space here to draw up a coherent and detailed list. The relative laxity of the initial theoretical arguments and the publication almost exclusively in French of the first developments in the SRT are undoubtedly among the main reasons. But there are also more profound and metatheoretical reasons which have long made SRT and social cognition strangers to each other.

Amongst these reasons, that which appears to us to have the most weight concerns the difference in the types of analysis assigned to research carried out in the two fields. Traditionally, social cognition is mainly interested in the intraindividual processes which underlie social interaction, whereas SRT is historically concerned with interindividual phenomena (Kruglanski, 2001), which affect the consciousness of the individual.

The bridging of the gaps between these two fields of study constitutes without doubt one of the most fascinating scientific issues for the years to come in the field of social psychology. It is also in this direction that a part of our own work lies.

### PERSONAL NARRATIVE OF THE THEORY'S DEVELOPMENT

Our personal involvement in social representation research dates back to the mid-1980s. At the time, the theory was beginning to expand rapidly in France and in Europe, but was still the object of much criticism. The theory was reproached mainly for being too flexible in terms of concepts and lacking in terms of methodology. Basically, what new aspects did social representations bring to the notions of opinion and attitude, already solidly anchored in social psychology? To answer this criticism, a team of researchers from the University of Aix en Provence proposed two arguments. For Jean Claude Abric and Claude Flament, who were leading this team, representations had to be conceived as cognitive structures. They were not just spheres of opinions, as advanced by Moscovici, but well and truly structured groups within which some elements had a specific role to play. Moreover, even if this idea wasn't yet clearly formed, Abric and Flament thought that, contrary to attitudes, essentially linked to the *evaluation* of social objects, representations concerned above anything else the *meaning* of those same objects. Basically, the idea was that it is the representation which defines the object of the attitude.

Based on these arguments, it was necessary to propose a theory that would account for both the structure and the dynamics of a social representation. This theory already existed, it had been proposed by Jean-Claude Abric in 1976. It still had to be confirmed and demonstrated that it allowed the stability and the dynamic of representations to be better described. It was in this context that

two of us joined the Aix en Provence team as doctoral students. In 1988, two theses were defended. The first showed that within social representations, certain beliefs effectively play a specific role (Moliner, 1988). These beliefs are "non-negotiable," are associated to an object by individuals and are considered by them to as its definition. The second thesis showed that these beliefs also play a role in the dynamics of social representations, particularly when individuals adopt new behavior that contradicts them or makes previous behavior obsolete (Guimelli, 1988). A few years later, a third thesis was defended, this time at the University of Montpellier (Rateau, 1995). In this work, it was shown experimentally that the non-negotiable beliefs structuring representations are themselves hierarchal. These works were our first contributions to social representation research, and apart from their theoretical implications, they also led to the finalization of specific methods dedicated to the study of social representations (Guimelli and Rouquette, 1992; Moliner, 1994; Rouquette and Rateau, 1998). Thus, they all served to answer the criticism of the SRT's first detractors.

But towards the end of the 1990s, new criticism appeared. At this time, it seemed as if social representation research was closing in upon itself, in utter disregard to its obvious links with another up and coming trend; that of social cognition. For us, this criticism had to be taken into consideration, which is why we turned our research towards the systematic exploration of links between social representations and certain sociocognitive processes. All began with research on attitudes (Moliner and Tafani, 1997), followed by social categorization, attribution processes and social comparison processes (Rateau and Moliner, 2009). This work, mostly experimental, shows today that the barrier that some people saw between the social representation field and other areas of social psychology was probably just an illusion that time is beginning to erase. This is in any case our dearest wish as only this bridging of gaps will in the end allow us to fully

understand and explain the social problems to which social psychology has the task of replying. It is also partly in this role that the SRT has been most successful as we now going to try and demonstrate.

### THE SRT'S APPLICABILITY TO SOCIAL ISSUES

To convince oneself of the SRT's applicability, one could try to list all the research that has adopted it. One would see in this case that numerous societal questions have been approached from this angle, and in fields as varied as health (e.g., Washer and Joffe, 2006), economy (e.g., Kirchler et al., 2003), marketing (e.g., Tafani et al., 2007), environmental psychology (e.g., Leone and Lesales, 2009) or relationships with new technology (e.g., Gal and Berente, 2008). However, apart from the fact that we are unable to make an exhaustive list of all these works in this chapter, it is not certain that such a list would allow the reader to understand why the SRT is used in such a diverse set of questions. From our point of view, the answer to this question depends on three points. The SRT is an adaptable and versatile theory, a common sense psychosocial theory, and is finally a theory that has given rise to the elaboration of varied methodologies.

#### *A flexible and adaptable theory*

As we said earlier, one of the most frequent criticisms of SRT concerns the too-great imprecision of its concepts (McKinlay and Potter, 1987; Potter and Litton, 1985). And it is true that upon reading Moscovici's original book, the apparent laxity with which the author presents the elements of his theory can be surprising, starting with the very definition he gives to the notion of social representations. But paradoxically, it is this very flexibility that confers on it its general scope. It is important to remember here that upstream

from the theory, there is a protean phenomenon of which Durkheim had an intuition, and that Moscovici (2001a: 4) summarized with the words: "[T]he idea of social or collective representations is engraved in a societal vision in which coherency and practice are driven by beliefs, knowledge, norms and languages that it produces..." As such, it is a phenomenon that concerns logics of social relations just as much as those of action. And one whose regulations can operate at different cognitive levels, including that of language. Thus, one understands the danger of attempting to study this kind of phenomena on the basis of concepts that are too narrow. This being the case, it is probably because the SRT's initial concepts are relatively broad that other disciplines, relatively unrelated to psychology, have been able to use them. Let us consider three examples.

The first is supplied by the work of historians who, wanting to transcend simple factual and event historiography, began to be interested by forms of thought and beliefs characteristic of past eras. Thus, they put the notion of "mentality" at the center of their preoccupations. Borrowed from Lévy-Bruhl (1922), this notion referred directly to that of mental representations, in relation to interactions in the social sphere. But it's clear today that the project of a "history of mentalities" comes down to a history of social representations.

The second example that we would like to briefly mention concerns geography. From the introduction of the mental map notion (Downs and Stea, 1977; Gould and White, 1974), and then the idea of a certain subjectivity in relation to space (Tuan, 1975, and finally the premise which recommends taking an interest in the mental processes which contribute to the perception of space, but which will especially lead to space being endowed with meanings and values. From this arises a "geography of representations," which considers representations to be finally determinants of spatial practice (Lussaut, 2007).

Finally, let us mention work carried out in linguistics, and more precisely in language didactics, where the necessity to understand



the meanings associated with learning and speaking a given language was noticed. This preoccupation has become central in multilingual situations, because of the identity problems they can give rise to. The notion of 'linguistic representation' appeared (Dagenais and Jacquet, 2008), inspired directly by the SRT and designating beliefs relative to languages, their usages, and the groups that use them.

These examples suggest that outside the psychology field, when researchers ask themselves questions about cognitive determinants of behavior, they find in the SRT a conceptual framework that can be adapted to deal with their issues. But this is only possible thanks to the fact that this theory offers a great deal of latitude, which is, from our point of view, one of the reasons of its applicative success in social sciences.

### ***An everyday knowledge theory***

Before being a belief or opinion theory, the SRT is first of all a theory of "common sense," in that it accounts for the way in which common sense is formed, how it is structured, and how it combines with the pre-occupations and social insertion of the people who use it. From this perspective, the most obvious application of the SRT concerns communication. Indeed, many studies show that different groups can have different representations of the same object. In fact, when these groups interact, whether it be for commercial reasons (a supplier and his clients), educational reasons (teachers versus pupils), or technical reasons (work teams), one can expect that different representations will be a potential source of confusion between groups. Consequently, the study of different existing representations can enable us to take suitable measures in the area of communication. For example, in his study on the representation of a hospital's computer security system, Vaast (2007) observed differences between doctors and nurses. For the doctors, system security meant principally access to data, whereas for

nurses, it meant the protection of patient confidentiality. He concluded by insisting on the fact that the people responsible for the system have to take these differences on board in their personnel training.

Another SRT application is inspired by relations between representations and behavior. Indeed, generally speaking, common sense is what guides most of our every day behavior and interactions. "Our common sense includes a lot of know-how, ways in which to make friends, succeed in life and avoid crises, eat well, etc. ... It is on the basis of this knowledge that people are mostly aware of their situation or make important decisions..." (Moscovici, 2001b: 11). From this perspective, the study of social representations provides us with elements for understanding the reasons behind decisions or behavior. For example, in a study carried out on 1,005 French drivers, representations of speed were studied (Pianelli et al., 2007). This study showed that different representations coexist. The first one, the larger (44 percent of the population), was organized around the unique notion of "danger". Another one, the smaller (12 percent of the population) was organized around the sole notion of "pleasure." Thus, it was supposed that these two representations determined different driving practices. For those who belonged to the first representation, driving was seen as "careful", whereas the others saw it as "hedonistic." This hypothesis gains a first element of validation when one examines the causal link which the individuals made between speed and the occurrence of road accidents. Sixty-four percent of the "prudent" drivers thought that speed was the main cause of accidents, against only 24 percent of the "hedonists." Moreover, this study showed that there were less members of the first subgroup who admitted to having broken the speed limit than of the second subgroup (52 versus 76 percent on roads, and 47 versus 78 percent on motorways). There were also less people in the first subgroup to have been fined by the Police for speeding (9 versus 19 percent). As in many other

studies the relationship between representations and behavior was clearly established. This relationship leads us to expect that action on the first will have an impact on the second. Thus, a third type of application appeared on the horizon, attempting to modify people's behavior. In fact, many studies (Mugny et al., 2000) show that influence procedures can provoke deep changes within social representations. But the few studies to have examined the durability of these changes have led to disappointing results.

However, recently, researchers working on these problems have been exploring a new avenue. It is no longer a question of modifying the contents of social representations, but of using these contents to bring individuals to make a decision. For example, Eyssartier et al. (2007) asked themselves the following question: How can the study of organ donation representations be useful for convincing people to become donors? From there, they identified four central elements and four peripheral elements of this representation. They then elaborated a "foot-in-the-door" technique (Freedman and Fraser, 1966), designed to convince people to sign an organ donor card. It should be remembered that the foot-in-the-door principle consists of asking little (preparatory act) before asking more (final request). Yet, one knows that the importance that individuals grant to the preparatory act is a commitment-increasing factor (Kiesler, 1971, see also Burger, 1999). So the authors considered that a preparatory act referring to a central element of the representation was more important than a preparatory act referring to a peripheral element. Thus, they made the hypothesis that the effects of behavior commitment will be more effective in the first case than in the second. To test this hypothesis, an experimenter introduced himself as a volunteer for the "French Graft Establishment." He only addressed people who were alone walking around a university hall, and asked them to sign a petition (preparatory act). This petition would allegedly be sent to the Ministry of Health, to gain financial aid for a communication campaign

on organ donation. The petition's title contained either a slogan using a central element of the representation (i.e. "Organ donation helps others"), or a peripheral element of the representation (i.e. "Organ donation is a civic act"). Whether or not the preparatory act was accepted, the experimenter asked the person to sign an organ donor card (final request). Eight experimental conditions were studied (four "central slogans" and four "peripheral slogans"). The results showed that when the preparatory act concerned a central element of the representation of organ donation, there were significantly more participants who signed an organ donor card (51 percent) than when the preparatory act concerned peripheral elements (34 percent).

### ***A great methodological diversity***

Without doubt, the SRT has provoked a remarkable diversity of methodologies because it can be applied to so many problems in various contexts. This methodological preoccupation became tangible from the end of the 1980s, when chapters dedicated to methodological questions were published in collective books on social representations. Later on, from the beginning of the 1990s, entire books were dedicated to methods of studying social representations.

The methodological advances presented in these books concern first of all techniques for collecting social representation content. Based on traditional psychosocial methods (interviewing, focus groups, investigations, etc.), verbal association techniques emerged, aiming to minimize the amount of interpretation to be done by the researcher. To do this, these methods introduce constraints in the associative process, by inviting the subjects to only produce a certain type of answer (only verbs, adjectives or definitions). Furthermore, they invite the people questioned to evaluate their own contributions. For example, using the "Basic Cognitive Schema" technique (Guimelli, 1993, 1998), the participants are asked to say why they

gave particular answers, and what inductors they used to do so. Using the Associative Network Method (De Rosa and Kirchler, 2001), the participants evaluate their associative production with help from different criteria supplied by the interviewer (positive or negative connotations, importance, etc.).

Methodological advances can also be found in questionnaire techniques. In contrast once again to more traditional approaches (opinion or attitude questionnaires), authors devise questionnaires that ask people to describe the studied objects in a standardized manner. It is no longer about measuring participants' opinions with regard to an object of representation, but rather highlighting the manner in which this object is described (see, for example, Moliner, 2002), and identifying the structuring elements of these descriptions.

Finally, the development of multivariate techniques, their computerization and their growth in accessibility have driven researchers to detail the specificities of each method compared with the SRT's postulates (see Doise et al., 1992).

Generally, researchers now have a large diversity of methods at their disposal, which helps them tackle a great range of questions in a large array of contexts.

## CONCLUSION

By way of conclusion and introduction, we would like to further develop points that we have already mentioned rather allusively, because we think they constitute the basis of an important development in SRT, and more generally, of our knowledge of individual and group psychosocial functioning.

The first point refers to theoretical bridges that it seems possible to establish between the concepts of attitudes and social representation. This issue appears crucial and has already been the object of prolonged theoretical discussions (Billig, 1993; Farr, 1994; Howarth, 2006; Jaspas and Fraser, 1984; Scarbrough,

1990) in the attempt to understand and explain the reasons behind the mutual ignorance these two concepts have of each other. The inventory of these reasons, as interesting as it may be, would take too long to set out here. We prefer to focus on the hypothetical links that some authors have developed.

This is particularly true of Moliner and Tafani (1997) who consider that whatever theoretical definition is referred to, the observable part of attitudes always resides in the affective, behavioral, or cognitive responses that individuals express about an object. Yet, to produce this response, individuals need information about this object. This general idea has also been proposed by Fishbein and Ajzen (1975) and Zanna and Rempel (1988), for whom attitudes are the result of attributes that people associate with an object. In other, more direct words: to express an attitude towards an object, people have to have a representation of it.

This position is also defended by Doise (1989), for whom attitudes find their origin in more general knowledge of their social environment that individuals share. In studying this issue experimentally, Moliner and Tafani (1997) came to the conclusion that attitudes refer above all to evaluation, whereas representations refer above all to meaning. But to be able to evaluate an object, individuals have necessarily to have a meaning for it. In other words, attitudes are an evaluative expression of a shared representation of an object.

Rouquette (1996, 2010) also defends this idea, and recently proposed integrating the concepts of opinion, attitude, social representation and ideology in a global theoretical structure based on two general principles: the growing applicative stability and generality of each of these notions. From this dual viewpoint, Rouquette observes on the one hand that opinions are more volatile than attitudes (whence, for example, the need to do repeated opinion polls to measure fairly rapid fluctuations). On the other hand, he observes that opinions refer to particular objects, groups or individuals, in circumstances that are also particular, whereas attitudes, which are more

general, refer to thematic categories involving more than one object. For example, an opinion at a given time about a particular politician stems from the attitude towards politicians in general. In other words, a group's attitudes towards a given object are said to be the definitive source for opinions held about this object.

The same reasoning applies to the attitude/social representation duo. Apart from the first's larger variability than the latter's, it seems to be social representations that provide the basis for an attitude. Echebarria Echabe and Gonzalez Castro (1993) have shown, for example, that attitudes expressed by individuals towards elections are intimately intertwined with their representation of democracy in general.

Moreover, Rouquette proposes considering ideology as providing in its turn the basis for a social representation or a set of social representations. Certainly, ideology needs to be specified, because of its multiple meanings, its comprehensive scope and its weakness of operationalization. But ideology can be conceived, not as a more or less organized assembly of content that may vary from one society to another, or from a group to its adversary, but as a repertory of general processes, with underlying formalizable qualities, and generic categories that are open to diverse description. It is essentially said to be made of values, norms, beliefs and themata (Moscovici and Vignaux, 2000). This framework obviously needs more development and formalization, but it is without doubt a promising basis for research with the aim of promoting a model of connection between the different conventions of expression of psychosocial functioning.

The second point refers to the links that can be made between the SRT and the processes traditionally studied in the field of social cognition which are the stereotypes, causal attribution or social comparison. Again, these two approaches have been strangers for a long time. The main issue, without doubt, in this mutual ignorance concerns different perceptions of the "social."

Social cognition advocates see social knowledge used by individuals as being the result of an accumulation of individual cognitive processes. Knowledge that is therefore, above all, individual, although shared. As for "social" determinisms, they are more than often limited to "others," thus totally neglecting laws, organizational structures, social relationships or group history. As regards the advocates of social representation, it has for long time been considered that the processes described by social cognition were highly reductive, studied with the aid of methods that also appeared to be simplistic, and in the end totally incapable of accounting for the historicity and impact of representations in the life of societies and in attitudes. But by wanting too much to account for this impact, studies devoted to social representations have often only led to a compilation of qualitative approaches, with blurred methodological contours, not allowing the restitution or the definition of the cognitive processes invested in their functioning.

However, we think it obvious to consider that the link between social cognition and social representations is twofold. On the one hand, we consider that social cognition processes intervene massively in the elaboration of social representations. It can be expected that the fruit of these processes (categories, stereotypes, causal attributions) are to be found in the contents and the structure of social representations. In other words, even if representations are collective constructions, they are still partially constructed by individuals.

At the same time, one can suppose that the processes studied in the field of social cognition are produced on the basis of representations. Thus, one can expect to observe modulations of these processes, depending on the underlying representations. To categorize, judge or explain one's immediate environment, individuals are thought to rely on, amongst other things, collective beliefs. This reflexive link is what unifies social representations and emotional, identity, attribution, social influence or social comparison processes: social representations account for these

processes, as well as actively participating in their own modes of operation. This idea can be illustrated by three examples.

First, in classic research, intergroup judgments and perceptions are studied through the processes of social categorization and stereotyping. But from the point of view of the SRT, intergroup representations are defined as social representations revolving around groups of people (Lorenzi-Cioldi and Clémence, 2001). Yet, a series of researches show that the central elements of an intergroup representation are the same as the stereotypical elements of the category of people they concern (Moliner and Vidal, 2003); that certain of these central elements play an explanatory role in the behaviors of members of the group in question (Moliner and Gutermann, 2004); and that they intervene to justify or rationalize asymmetric intergroup relations (Moliner et al. 2009).

Second, in the field of research performed on the process of attribution (Heider, 1958), the work of Ross (1977) highlighted the tendency of individuals to prefer dispositional factors (traits, aptitudes, motivation, etc.) to explain the behavior of an actor. On the other hand, we know that in situations of self-presentation, individuals prefer this type of explanation in order to give a good image of themselves, just as they judge more favorably people who prefer this type of explanation (Jellison and Green, 1981). However, in a series of experiments (Moliner, 2000), it was demonstrated that the expression of this preference remains dependent on the representations that the individuals activate in relation to the social situations in which they express themselves. Thus, when one suggests to the participants that the process of attribution to which they are going to submit themselves takes place in an affectively oriented social situation, one notices the disappearance of the systematic preference for dispositional explanations, in favor of the appearance of a self-serving bias (Zuckerman, 1979) or a person-positive bias (Sears, 1983). On the contrary, the systematic preference for dispositional factors is more marked when subjects

make attributions in competitive situations with a practical purpose. Thus, the manner in which the subjects interpret the situation in which they find themselves at the moment when they are making the attributions determines the orientation of the process.

Third and finally, in the wide field of social comparison, several works have attested to the existence of a phenomenon of asymmetry in the comparison of the self to others (see Holyoak and Gordon, 1983; Mussweiler, 2001; Srull and Gaellick, 1983). The self and the other are seen as more similar when the other is taken as the point of departure (assimilation effect) and the reverse when it is the self that is taken as a reference point (contrast effect). In a series of recent studies (Chokier and Rateau, 2009; Rateau, submitted), we were able to demonstrate that this general process could be altered by the type of opinion at issue in the comparison and notably by the central or peripheral nature of the latter in structure of the representation of the object involved (in this case the social representation of studies shared by psychology students).

The participants are asked to compare themselves to a peer (either in the order the self–other, or other–self) who, depending on the case, is presented as defending a properipheral opinion, counterperipheral opinion, procentral or countercentral in relation to studies. With regard to a peripheral opinion, characterized by a significant intragroup heterogeneity, the appearance of the “classic” process of interindividual comparison of the self with another was recorded; that is to say, a contrast effect in the case of a comparison of the self–other order and an assimilation effect in the other–self order, regardless of the valency of the opinion defended by the source. This result illustrates perfectly the flexibility and possibilities for interindividual modulation which traditionally characterizes the peripheral elements of social representations.

With regard to a central opinion, the processes in play are very different. Whatever the order of the comparison, it is noticed that individuals differentiate themselves



systematically from a group member who deviates from the central opinion and that they identify with a member who conforms. In other words, the individual seeks here to maintain the cohesiveness of the representation at any cost by systematically stating the “right” opinion in relation to the representation shared by their group of the object. The contrast/assimilation process does not depend here on the meaning of the comparison but only on the position taking displayed by the source, according to whether it contradicts the central opinion or not and ensures the homogeneity and social identity of the group.

This systematic study of the link between social representations and sociocognitive processes represents a desire to unite and mutually enrich both of these research fields. New hypotheses concerning functioning and roles of social representations, as well as sociocognitive processes when they are integrated into representational processes are beginning to appear. Let us wager that they will provide the basis of many studies, and that their theoretical and empirical range will be crucial in the development of our knowledge about the psychosocial functioning of individuals and groups.

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## REFERENCES

- Abric, J.C. (1976) Jeux, conflits et représentations sociales. PhD thesis, Université de Provence, Aix-Marseille.
- Abric, J.C. (1993) Central system, peripheral system: their functions and roles in the dynamics of social representation. *Papers on Social Representations*, 2, 75–78.
- Abric, J.C. (2001) A structural approach to social representations. In K. Deaux and G. Philogène (eds), *Representations of the Social*, pp. 42–47. Oxford: Blackwell.
- Asch, S.E. (1946) Forming impressions of personality. *Journal of Abnormal and Social Psychology*, 41, 258–290.
- Billig, M. (1993) Studying the thinking society: Social representations and attitudes. In G.M. Breakwell and D. Canter (eds), *Empirical Approach to Social Representations*, pp. 39–62. New York: Clarendon Press.
- Breakwell, G.M. and Canter, D.V. (1979) *Empirical Approach to Social Representations*. Oxford: Clarendon Press.
- Burger, J.M. (1999) The foot-in-the-door compliance procedure: A multiple-process analysis and review. *Personality and Social Psychology Review*, 3, 303–325.
- Clémence, A. (2001) Social positioning and social representations. In K. Deaux and G. Philogène (eds), *Representations of the Social*, pp. 83–95. Oxford: Blackwell.
- Codol, J.P. (1970) Influence de la représentation d'autrui sur l'activité des membres d'un groupe expérimental. *L'Année Psychologique*, 70, 131–150.
- Cooper, J. and Croyle, R.T. (1984) Attitudes and attitude change. *Annual Review of Psychology*, 35, 395–426.
- Dagenais, D. and Jacquet, M. (2008) Theories of representation in French and English scholarship multilingualism. *International Journal of Multilingualism*, 5, 41–52.
- Deaux, K. and Philogène, G. (2001a) *Social Representations: Introductions and Explorations*. New York: Blackwell.
- Deaux, K. and Philogène, G. (2001b) *Representations of the Social*. Oxford: Blackwell.
- De Rosa, A.S. and Kirchler, E. (2001) Ambiguous images in advertising: An application of the Associative Network Method. In C. Roland-Lévy, E. Kirchler, E. Penz and C. Gray (eds), *Everyday Representations of the Economy*, pp. 49–66. Wien: WUV Universitätsverlag.
- Doise, W. (1989) Attitudes et représentations sociales. In D. Jodelet (ed.), *Les Représentations Sociales*, pp. 220–238. Paris: Presses Universitaires de France.
- Doise, W., Clémence, A. and Lorenzi-Cioldi, F. (1992) *Représentations Sociales et Analyse de Données*. Grenoble: Presses Universitaires de Grenoble;
- J. Kaneko, tr. (1993) *The Quantitative Analysis of Social Representations*. Hemel-Hempstead: Harvester Wheatsheaf.
- Downs, R.M. and Stea, D. (1977) *Maps in Mind: Reflexions on Cognitive Mapping*. New York: Harper and Row.

- Durkheim, E. (1893) *La Division du Travail*. Paris: Presses Universitaires de France; G. Simpson, tr. (1947) *The Division of Labor in Society*. New York: The Free Press.
- Durkheim, E. (1895) *Les Règles de la Méthode Sociologique*. Paris: Alcan. W.D. Halls, tr. (1982) *The Rules of Sociological Method*. New-York: The Free Press.
- Durkheim, E. (1898) Représentations individuelles et représentations collectives. *Revue de Métaphysique et de Morale*, 6, 273–302; D.F. Pollock, tr. (1953) Individual and Collective Representations. In E. Durkheim (ed.) *Sociology and Philosophy*, pp. 1–34. London: Cohen and West.
- Duveen, G. (2001) Representations, identities, resistance. In K. Deaux and G. Philogene (eds), *Representations of the social: Bridging theoretical tradition*, pp. 257–270. Oxford: Blackwell.
- Echebarria Echabe, A. and Gonzalez Castro, J.L. (1993) Social representation of power and democracy, attitudes towards elections and voting behaviour. *International Review of Social Psychology*, 6, 21–46.
- Eyssartier, C., Joule, R.V. and Guimelli, C. (2007) Effets comportementaux et cognitifs de l'engagement dans un acte préparatoire activant un élément central vs périphérique de la représentation du don d'organe. *Psychologie Française*, 52, 499–517.
- Farr, R.M. (1994) Attitudes, social representations and social attitudes. *Papers on Social Representations*, 3, 33–36.
- Farr, R. and Moscovici, S. (1984) *Social Representations*. Cambridge: Cambridge University Press.
- Fishbein, M. and Ajzen, I. (1975) *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*. Boston: Addison-Wesley.
- Flament, C. (1971) Image des relations amicales dans les groupes hiérarchisés. *L'Année Psychologique*, 71, 117–125.
- Flament, C. (1989) Structure et dynamique des représentations sociales. In D. Jodelet (ed.), *Les Représentations Sociales*, pp. 204–219. Paris: Presses Universitaires de France.
- Freedman, J.L. and Fraser, S.C. (1966) Compliance without pressure: The foot-in-the-door techniques. *Journal of Personality and Social Psychology*, 4, 195–202.
- Freud, S. (1908) *On the Sexual Theories of Children*, Vol. 9. London: Standard Edition.
- Freud, S. (1922) *Some Points in a Comparative Study of Organic and Hysterical Crisis*, Vol. 1. London: Hogarth Press.
- Gal, U. and Berente, N. (2008) A social representation perspective on informational implementation: rethinking the concept of frames. *Information, Technology and People*, 21, 133–154.
- Gould, P. and White, R. (1974) *Mental Maps*. Harmondsworth: Penguin Books.
- Guimelli, C. (1988) Agression idéologique, pratiques nouvelles et transformation progressive d'une représentation sociale. PhD thesis, Université de Provence, Aix en Provence.
- Guimelli, C. (1993) Locating the central core of social representations: towards a method. *European Journal of Social Psychology*, 23, 555–559.
- Guimelli, C. (1998) Differentiation between the central core elements of social representations: normative vs. functional elements. *Swiss Journal of Psychology*, 57, 209–224.
- Guimelli, C. and Rouquette, M.L. (1992) Contribution du modèle associatif des Schèmes Cognitifs de Base à l'analyse structurale des représentations sociales. *Bulletin de Psychologie*, 405, 196–202.
- Heider, F. (1958) *The Psychology of Interpersonal Relations*. New York: Wiley.
- Holyoak, K.J. and Gordon, P.C. (1983) Social reference points. *Journal of Personality and Social Psychology*, 44, 881–887.
- Howarth, C. (2006) How social representations of attitudes have informed attitudes theories: the consensual and the reified. *Theory and Psychology*, 16, 691–714.
- Jaspar, J. and Fraser, C. (1984) Attitudes and social representations. In R.M. Farr, and S. Moscovici (eds), *Social Representations*, pp. 101–123. Cambridge: Cambridge University Press.
- Jellison, J. and Green, J. (1981) A self presentation approach to the fundamental attribution error: the norm of internality. *Journal of Personality and Social Psychology*, 40, 643–649.
- Jodelet, D. (1989) *Folie et Représentations Sociales*. Paris: Presses Universitaires de France; T. Pownall, tr. (1992) *Madness and Social Representations*. Berkeley: University of California Press.
- Kiesler, C.A. (1971) *The Psychology of Commitment. Experiments Linking Behavior to Belief*. New York: Academic Press.
- Kirchler, E., Maciejovsky, B. and Schneider, F. (2003) Everyday representations of tax avoidance, tax evasion, and tax flight: Do legal differences matter? *Journal of Economic Psychology*, 24, 535–553.
- Kronberger, N. and Wagner, W. (2000) Key words in context: statistical analysis of text features. In M.W. Bauer and G. Gaskell (eds), *Qualitative Researching with Text, Image and Sound. A Practical Handbook*, pp. 299–317. London: Sage.
- Kruglanski, A.W. (2001) Social cognition, social representations and the dilemmas of social theory construction. In K. Deaux, and G. Philogène (eds),

- Representations of the Social*, pp. 242–248. Oxford: Blackwell.
- Leone, F. and Lesales, T. (2009) The interest of cartography for a better perception and management of volcanic risk: From scientific to social representations. *Journal of Volcanology and Geothermal Research*, 186, 186–194.
- Lévi-Strauss, C. (1962) *La pensée sauvage*. Paris: Plon; G. Weidenfeld and Nicolson, tr. (1966) *The Savage Mind*. Chicago: University of Chicago Press
- Lévy-Bruhl, L. (1922) *La mentalité primitive*. Paris: Alcan; L.A. Clare, tr. (1978) *Primitive Mentality*. New York: AMS Press.
- Linton, R. (1945) *The Cultural Background of Personality*. New York: D. Appleton-Century Co.
- Lorenzi-Cioldi, F. and Clémence, A. (2001) Group processes and the construction of social representations. In M.A. Hogg and S. Tindale (eds), *Handbook of Social Psychology: Group Processes*, pp. 311–333. Oxford: Blackwell.
- Lorenzi-Cioldi, F. and Clémence, A. (2010) Social representations. In J. Levine, and M. Hogg (eds), *Encyclopedia of Group processes and Intergroup Relations*. London: Sage.
- Lussaut, M. (2007) *L'homme spatial. Construction sociale de l'espace humain*. Paris: Seuil.
- Markova, I. (1997) Language and authenticity. *The Journal for the Theory of Social Behaviour*, 27, 265–275.
- Markova, I. (2003) *Dialogicality and Social Representations. The Dynamics of Mind*. Cambridge: Cambridge University Press.
- Mauss, M. (1903) *Représentations collectives et diversité des civilisations*. Paris: Minuit (1974 edition).
- McKinlay, A. and Potter, J. (1987) Social representation: A conceptual critique. *Journal for The Theory of Social Behavior*, 17, 471–487.
- Moliner, P. (1988) *La représentation sociale comme grille de lecture*. PhD thesis, Université de Provence, Aix-en-Provence.
- Moliner, P. (1994) Les méthodes de repérage et d'identification du noyau des représentations sociales. In C. Guimelli (ed.), *Structures et Transformations des Représentations Sociales*, pp. 199–232. Neuchâtel: Delachaux et Niestlé.
- Moliner, P. (2000) De la norme d'internalité à la représentation des relations sociales. *Revue Internationale de Psychologie Sociale*, 2, 7–32.
- Moliner, P. (2002) Ambiguous scenario and attribute challenge techniques. Social Representations of 'The Firm' and 'The nurse'. *European Review of Applied Psychology*, 3, 273–280.
- Moliner, P. and Gutermann, M. (2004) Dynamique des descriptions et des explications dans une représentation sociale. *Papers On Social Representations*, 13, 1–12.
- Moliner, P., Lorenzi-Cioldi, F. and Vinet, E. (2009) Utilité sociale des représentations intergroupes de sexe. Domination masculine, contexte professionnel et discrimination positive. *Cahiers Internationaux de Psychologie Sociale*, 83, 25–44.
- Moliner, P. and Tafani, E. (1997) Attitudes and social representations: A theoretical and experimental approach. *European Journal of Social Psychology*, 27, 687–702.
- Moliner, P. and Vidal, J. (2003) Stéréotype de la catégorisation et noyau de la représentation. *Revue Internationale de Psychologie Sociale*, 1, 157–176.
- Moscovici, S. (1961). *La Psychanalyse: Son Image et son Public*. Paris: Presses Universitaires de France (1976 edition); D. Macey, tr. (2008) *Psychoanalysis. Its Image and its Public*. Cambridge: Polity Press.
- Moscovici, S. (1969) Préface. In C. Herzlich, *Santé et Maladie*, pp. 7–12. Paris: Mouton.
- Moscovici, S. (1981) On social representations. In J. Forgas (ed.), *Social Cognition: Perspectives on Everyday Understanding*, pp. 181–210. New York: Academic Press.
- Moscovici, S. (1982) The coming era of representations. In J.P. Codol and J.P. Leyens (eds), *Cognitive Approaches to Social Behavior*, pp. 115–150. The Hague: M. Nijhoff.
- Moscovici, S. (1984) The phenomenon of social representations representations. In R. Farr and S. Moscovici (eds), *Social Representations*, pp. 3–69. Cambridge: Cambridge University Press.
- Moscovici, S. (1988) Notes towards a description of social representations. *European Journal of Social Psychology*, 18(3), 211–250.
- Moscovici, S. (1989) Des représentations collectives aux représentations sociales. Eléments pour une histoire. In D. Jodelet (ed.), *Les Représentations Sociales*, pp. 62–86. Paris: Presses Universitaires de France.
- Moscovici, S. (2001a) *Social Representations: Explorations in Social Psychology*. Cambridge: Polity Press.
- Moscovici, S. (2001b) Why a theory of social representations? In K. Deaux, and G. Philogène (eds), *Representations of the Social*, pp. 8–36. Oxford: Blackwell.
- Moscovici, S. and Vignaux, G. (2000) The concept of themata. In S. Moscovici and G. Duveen (eds), *Social Representations. Explorations in Social Psychology*, pp. 156–183. Cambridge: Polity Press.
- Mugny, G. and Carugati, F. (1989) *Social Representations of Intelligence*. Cambridge: Cambridge University Press.
- Mugny, G., Tafani, E., Falomir, J.M. and Layat, C. (2000) Source credibility, social comparison and

- social influence. *International Review of Social Psychology*, 13, 151–175.
- Mussweiler, T. (2001) Focus of comparison as a determinant of assimilation versus contrast in social comparison. *Personality and Social Psychology Bulletin*, 27, 38–47.
- Piaget, J. (1932) *Le Jugement Moral Chez l'Enfant*. Paris: Presses Universitaires de France; M. Gabain, tr. (1965) *The Moral Judgment of the Child*. New York: The Free Press.
- Pianelli, C., Saad, F. and Abric, J.C. (2007) Social representations and acceptability of LAVIA (French ISA system). *Proceedings of the 14th World Congress and Exhibition on Intelligent Transport Systems and Services*, 8–12 October 2007, Pékin, Paper 4057.
- Potter, J. and Litton, I. (1985) Some problems underlying the theory of social representations. *British Journal of Social Psychology*, 24, 81–90.
- Rateau, P. (1995) Structure et fonctionnement du système central des représentations sociales. PhD thesis, Université de Montpellier 3, Montpellier.
- Rateau, P. and Moliner, P. (2009) *Représentations Sociales et Processus Sociocognitifs*. Rennes: Presses Universitaires de Rennes.
- Rateau, P. (submitted) Assimilation and contrast to in-group prime: The moderating effect of central vs. peripheral elements of social representations. *International Review of Social Psychology*.
- Ross, L. (1977) The intuitive psychologist and his shortcoming: Distortions in the attribution process. In L. Berkowitz (ed.), *Advances in Experimental Social Psychology*, 10, 173–220. New York: Academic Press.
- Rouquette, M.L. (1996) Représentations et idéologie. In J.C. Deschamps and J.L. Beauvois (eds), *Des Attitudes aux Attributions*, pp. 163–173. Grenoble: Presses Universitaires de Grenoble.
- Rouquette, M.L. (2010) *La Pensée Sociale*. Toulouse: Érès.
- Rouquette, M.L. and Rateau, P. (1998) *Introduction à l'Étude des Représentations Sociales*. Grenoble: Presses Universitaires de Grenoble.
- Scarbrough, E. (1990) Attitudes, social representations and ideology. In C. Fraser and G. Gaskell (eds), *The Social Psychological Study of Widespread Beliefs*, pp. 99–117. New York: Clarendon Press.
- Schank, R. and Abelson, R. (1977) *Scripts, Plans, Goals and Understanding: An Inquiry into Human Knowledge Structures*. Hillsdale: Erlbaum.
- Sears, D.O. (1983) The person-positive bias. *Journal of Personality and Social Psychology*, 44, 223–250.
- Simmel, G. (1908) *Soziologie*. Berlin: Duncker Humblot; S. Muller and L. Deroche-Gurcel, tr. French (1999) *Sociologie. Etudes sur les Formes de la Socialisation*. Paris: Presses Universitaires de France.
- Smith, A. (1776) *An Inquiry into the Nature and Causes of the Wealth of Nations*. London: Strahan & Cadell.
- Spini, D. (2002) Multidimensional scaling. A technique for the analysis of the common field of social representations. *European Review of Applied Psychology*, 52, 231–240.
- Srull, T.K. and Gaelick, L. (1983) General principles and individual differences in the self as a habitual reference point: An examination of self-other judgments of similarity. *Social Cognition*, 2, 108–121.
- Tafari, E., Haguel, V. and Menager, A. (2007) From corporate images to social representations: an application to the motor car industry. *Les Cahiers Internationaux de Psychologie Sociale*, 73, 27–46.
- Tuan, Y-F. (1975) Images and mental maps. *Annals of the Association of American Geographers*, 65, 205–212.
- Vaast, E. (2007) Danger is in the eye of the beholders: Social representations of information systems security in healthcare. *Journal of Strategic Information Systems*, 16, 130–152.
- Vergès, P. (1996) Bibliographie des représentations sociales. Third International Conference on Social Representations, Aix-en-Provence, September 27–30.
- Wagner, W. (1994) Fields of research and socio-genesis of social representations: a discussion of criteria and diagnostics. *Social Science Information*, 33, 199–228.
- Wagner, W., Duveen, G., Farr, R., Jovchelovitch, S., Lorenzi-Cioldi, F., Marková, I. and Rose, D. (1999) Theory and method of social representations. *Asian Journal of Social Psychology*, 2, 95–125.
- Washer, P. and Joffe, H. (2006) The 'hospital superbug': Social representations of MRSA. *Social Science and Medicine*, 63, 2141–2152.
- Weber, M. (1921) *Economy and Society*. Berkeley, CA: University of California Press, 1978.
- Zanna, M. and Rempel, J. (1988) Attitudes: a new look at an old concept. In D. Bar-tal and A.W. Kruglanski (eds), *The Social Psychology of Knowledge*, pp. 315–334. New York: Cambridge University Press.
- Zuckerman, M. (1979) Attribution of success and failure revisited or: The motivational bias is alive and well in attribution theory. *Journal of Personality and Social Psychology*, 47, 245–287.