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Social representations theory and environmental studies

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Abstract

The authors of this chapter argue that the study of environmental issues can gain by incorporating ideas derived from the Social Representations perspective. They describe the main tenets of the perspective, in order to present the theoretical and practical instruments it has to offer for the study of people-environment transactions. The authors defend that methodological eclecticism is a strong feature of the social representations perspective, that is absolutely crucial to the advancement towards better and richer descriptions in the field of environmental studies. Several recent applications to diverse environmental issues by European authors are presented. Through these examples we illustrate how various methodological strategies are used to respond to the imperative to take the diversity and dynamics of representations into account, and the need to link them to their contexts. The diversity of studied subjects demonstrates the fruitfulness of the application of the Social Representations perspective to the environmental field.

Introduction

The field of environmental studies is currently a rich and multidisciplinary one. At its heart lies the concern over people-environment transactions. Environmental studies imply looking at how meaning emerges from our transactions with the environment, always taking into account that these transactions are not un-mediated. Indeed, they cannot be but mediated - mediated by a culture and a set of values, by an identity, a position.

In other words, people-environment transactions always take place in the context of a triadic relationship. This triadic relationship includes an Object - such as the environment, or some of its aspects -, an Ego and an Alter. This is precisely the triadic unit that the Social Representations Theory (SRT) has been arguing we should concentrate on for our analysis. And it is in this sense that, from Moscovici's point of view (1961), the representation of an object does not exist by itself, but emerges from this triadic relation. Social representations are to be taken as individual and group reconstructions of their social and physical contexts. It is in this sense that the representation is indeed social, and it is not reducible to a purely intra-individual perception mediating the individuals' relationships with their environment. From the point of view of the SRT, then,

many studies in the environmental field suppose a dyadic relationship, since they deal mostly with the ways in which individuals perceive their environment according to their life experience or their emotions, remaining focused in intra-individual processes. As a consequence, the diversity of the collectively elaborated meanings of the environment receives less attention than it should. In the environmental field, the SRT allows the identification of the set of incorporated knowledge, beliefs and values related to the individuals' relationships with the surrounding spaces. This pool of beliefs related to the "*good environment*" (the best place to live, for instance) is socially generated and elaborated by a given community through its collective and historic relationships with that environment (Félonneau, 2003).

Although the first steps in linking the theory to the environmental field were taken in the '70s, with the work of Milgram and Jodelet (1976) and of Milgram (1984), the linkages are currently rather incipient. It is in this context that we argue that the SRT applied to the environmental field can help researchers in developing richer descriptions of their objects and problems, and thus, in producing more effective explanations. We will also stress that the SRT can help the field of environmental studies to diversify its research methods and to obtain better descriptions. Finally, we also argue that the theory can help the field forge some new, dynamic questions that have to do with the emergence and transformation of representations. In turn, these can help us to better understand human behaviour in context.

After a brief summary of the main tenets of the theory, we will present some recent studies conducted with the help of this perspective. The presentation of these applications is intended to exemplify both how the theory is being used in the environmental field, and the diversity of the employed methods.

Social representations theory

Since its original formulation, the SRT (Moscovici, 1961) has generated a great number of applied researches in various fields of the social sciences. As stated, the theory departs from the tenet that individual behaviours, intergroup relations and social changes cannot be understood in a fitting manner without taking into account the collective elaboration of reality. What is then a social representation? To sketch it briefly, *a social representation (SR) is a socio-cognitive system, processing an aspect of the world, and which provides a given community with a common framework for thinking and acting.* It seems important, in an introductory perspective, to comment several outcomes resulting from this standpoint.

a) First of all, a representation is a system, that is, it has structural properties and obeys a set of rules (see below).

b) Such a system is a function of social positions and belongings. To different positions, as defined for example by a hierarchy, correspond different

representations. That is why a given representation is shared by those who occupy the same position, and is different for those who occupy dissimilar positions.

c) Far from being an abstract and global *Weltanschauung*, a social representation deals specifically with an object of experience and/or belief. Or, more precisely, it deals with a *class* of such objects. In other, more cognitive, words, it elaborates a *concept*. For instance, the concepts of firm (and not only the image of a given firm in the neighbourhood), hygiene (and not a specific type of practice of prevention or cleanliness), ideal group, air pollution, human rights, and so on.

d) As far as a SR gives a framework for thinking, judging and acting, it becomes clear that a correct analysis has to take into account people's usual practices. These are guided (and also justified or granted) by relevant representations: what is done (and not done) depends upon what is believed. Symmetrically, what can be done under the pressure of circumstances, typically as a result of changes in environmental constraints, can produce an adaptive modification of the representation (for a variety of examples, see Abric, 1994). This last point seems particularly important for environmental studies, which are regularly faced with "objective" transformation processes.

Another question that follows from the above has to do with the dynamics of the emergence and structuring of SR. Moscovici (1976) distinguishes two main processes conducting these dynamics: *objectivation* and *anchoring*.

The objectivation process enables a social group to build a common knowledge permitting exchanges between its members. It is composed of several *reality appropriation* stages : information screening, decontextualisation, simplification and neutralisation. It allows the represented object to have an evident character.

The anchoring process has to do with how the representations fit into different fractions of the society (see Doise, Clemence, Lorenzi-Cioldi, 1993). The new object of representation is integrated into the old universe of concepts, and this integration reflects the dynamics of the social relations present in the context.

Another property of a SR is its structure. The elements of a SR have unequal weights depending on the global hierarchy in the structure. Indeed, a SR is composed of a central system and a periphery organised around it (Abric, 1994). The central system gives meaning to the SR, plays an organising function and guarantees its stability. The periphery allows the Representation to be anchored in the reality of the moment. It concretises the central system in the sense of taking up positions and emerging behaviours (Abric, 1994).

Current applications and methodological variety

The SRT has always lived well with methodological eclecticism, defended by Moscovici, and its methods have been multiplying for more than 20 years. As a consequence, the literature on these matters is quite rich (cf. in particular Doise, Clemence & Lorenzi-Cioldi, 1993; Breakwell & Canter, 1993; Flament &

Rouquette, 2003). Within the framework of the theory, then, the essential matter has become that of the *adequacy* between the theory, the object and the techniques of empirical data collection. This adequacy is even more important when it comes to the environmental approach because the use of the SRT is still recent.

In order to show how the SRT can be useful for the environmental field, and to exemplify the use of the analytical and methodological instruments that it has devised, we will briefly describe some recent studies conducted within the framework of the theory.

Questionnaire and scale methodologies - searching for diversity

Questionnaires and scales are, it is well known, the more widely used research instruments in many sub-fields of environmental studies. It is the case of the risk perception sub-field and of the one studying environmental beliefs and attitudes. In the case of the field that studies environmental ideas of the public and environmental concern, one finding is particularly salient and recurrent: all over the world, research findings obtained with Likert-type scales show that the mean agreement with ecological items is higher than the mean agreement for anthropocentric items. Some authors have interpreted this trend as an indication that ecological ideas are overthrowing anthropocentric ones (Dunlap et al., 2000). However, this seemingly robust consensus around the ecological ideas is challenging for researchers, since neither society nor individual behaviour are changing in an ecological direction as quickly as these results imply. This seems to call for a more complex way of approaching the relationship between old (anthropocentric) and new (ecological) ideas. And SRT can precisely offer a more complex perspective, since it does not conceive people as cognitive organisms incapable of enduring the stress of contradictory information. Instead, the Theory is about social beings constructing representations together and creative enough to mix and conciliate ideas that could be seen as contradictory. This has been shown, for example, in the area of environmental ideas, by the work of Castro & Lima (2001).

The authors used the NEP (New Ecological Paradigm) scale (see Dunlap et al., 2000) for a questionnaire study in Portugal. However, instead of assuming, as opposed to the authors of the scale, that each individual had to answer either in the ecological or in the anthropocentric direction, considering these as mutually exclusive, Castro & Lima (2001) assumed that all four combinations were possible. That is, it was assumed that people could agree only with the new ecological ideas, only with the old anthropocentric ideas, with both of them, or with neither of them. And, although the general mean showed a clear advantage for the ecological ideas (mean=3.91, sd=.46, 5 point Likert scale), as compared to the anthropocentric ones (mean=2.91, sd=.56), the four groups were of course found, and those that were in simultaneous agreement with the ecological and the anthropocentric ideas were rather numerous. And thus, instead of assuming

that a smooth substitution of old ideas for new ecological ones is taking place, based on SRT it seems more relevant to depart from the following assumptions: old and new ideas tend to co-exist and to interact. Their interaction assumes different formats, opening up different places from where to think and argue. In turn, this simple conclusion brings with it the advantage that it is more consonant with what is actually happening to environmentalism and ecological ideas in “the real world”, where they live in hybrid forms, shaped by all types of compromises and admitting all sorts of combinations and re-combinations. For the sub-field of risk perception, the same quest for diversity managed through the use of questionnaire instruments can be seen in the work of Lima (2003) concerning the risk perception of co-incineration of dangerous industrial waste. The author shows how in the case of populations whose towns were selected for sitting co-incineration activities, two different representations of their town could be found - a rural and an industrial representation. For the industrial representation co-incineration is not perceived as a threat to the town, whereas it is seen as a risk by those endorsing the rural representation. On the whole, these studies can be considered as examples of how the theory incites the search for diversity and attention to the dialectics among the various contents comprising the representational systems of an epoch and a place.

Focus groups - linking representations with language and communication

In the field studying environmental ideas, focus groups are not quite as common as questionnaires, but can help to look into a series of new questions concerning the actual features that the dialectics between new and old ideas assume through concrete language use. In this sense, focus groups are a rich instrument for linking language and representations.

Castro (2002) attempted to examine what a re-visiting of the communicative modalities as proposed by Moscovici (1961/76) in his study of the French press had to offer for the field. Based on focus groups transcripts, different discursive forms of talking about nature and the environment were identified.

One discursive form showed the characteristics Moscovici (1976) identified for Propagation - it was full of incitements to moderation, focusing mainly on attitude change, aimed at producing a norm by the conciliation of old anthropocentric ideas and new ecological ideas. It was also a discourse depicting the protection of nature as both a desirable end to be achieved and as an end already partially achieved. Other communications showed, instead, the characteristics of Propaganda - focusing on behaviour and behaviour modification and vigilance, aimed at the production of new behaviour, through the depiction of a dichotomised reality, rejecting anthropocentric ideas and considering the protection of nature as a desirable end far from achieved. Finally, other communications presented a format closer to Diffusion, allowing different ideas and preoccupations – both ecological and anthropocentric – to emerge, and offering no articulated proposal for accepting, rejecting or

conciliating them, offering just the awareness of their existence as unsolved, perhaps even unsolvable, matters.

The Focus groups methodology was also used by a wide group of European researchers undertaking a study in public perceptions of biotechnology (see Wagner et al., 2001) to analyse, in the context of genetic modification, public views about nature (see Gaskell & Bauer, 2001). Here, also, the same dialectics between new and old ideas can be seen at work, in what Wagner et al. (2001, pg. 86) call the *spiritual argument* against genetic modification. According to the authors, the argument emerges among the secular public as a testimony of our "deeply ingrained heritage of moral reasoning vis-à-vis life in general" (pg. 92). This is also another example of how the contents of shared representational systems are used to anchor what is new - like genetic modification.

Free Word association tasks

Social representations studies are often founded on associative data. Different methods have been proposed to treat this data : the Prototypicality analysis and the Similarity analysis. They both allow for the exploration of the SR organisation. The two following examples will demonstrate how these methods apply in the environmental field.

A. Linking diversity to context. The crime-and-environment research as well as fear of crime studies often ignore social sides of human cognition and behaviour. In this context, Sautkina (2004) argues that the application of the SRT permits new scopes for the study of crime risk perception and victimization. The following example explores the SR of pick-pocketing places amongst Parisians and Muscovites. Pick-pocketing can be defined as a *surreptitious* theft of objects from pockets or person of an individual.

The study employed a Free Word association task in order for subjects to connect words or expressions to the inductive term 'pick-pocketing places'. In total, 400 subjects without the experience of having been pick-pocketed and 70 pick-pocketing victims were interviewed in Paris and in Moscow.

It was found that in all studied populations the representation's central line was 'crowded places'. Elsewhere in her study, Sautkina (2004) found that social density is the main factor of lay people's pick-pocketing risk estimation. The author shows that people have a highly stereotyped vision of pick-pocketing places. Although the idea that pickpockets act in crowds is generally accepted, usually lay people don't know why pickpockets prefer crowded environments, and thus, do not know how to protect themselves.

Several elements in the studied representations are highly influenced by images of places created by culture, mass media, and other sources. Thus, 'underground' in Paris and 'market' in Moscow are very salient elements since these are the places where the messages "be aware of pickpockets" most often circulate. Furthermore, 'market' in Paris and 'trolleybus' and 'tramway' in Moscow are salient elements influenced by the cultural knowledge of citizens

about pick-pocketing. Markets were the first pick-pocketing places in European history. Trolleybuses and tramways are anchored in the Russian culture of the 20th century as pick-pocketing places. 'Barbès', the place cited in Paris, is known for its high crime rate and was pointed out in the study by Milgram and Jodelet (1976) as the most dangerous one in all the city. The word 'suburbs' introduces a theme of low quality of life, immigration, and high crime rates related to those factors. This association is highly prejudiced, as pick-pockets do not act in those areas.

It was found that victims' representations are less influenced by images of places than non-victims' representations. Sautkina (2004) argues that the experience of victimization changes the SR by putting aside stereotypes and replacing them with elements that designate the sites where people were victimized. The author hypothesizes that the stereotyping that was found in this study could be responsible for pick-pocketing victimization.

B. Linking practices to representations. Through its modes of production and its relationship to the natural elements (water, soil, landscapes...), modern agriculture is directly affected by the current environmental concerns. Therefore, analysing the SR of farmers allows for an understanding of their practices towards the natural environment. Guillou-Michel (2004) attempted to identify the central elements (shared by farmers) and the periphery (reflection of individual variability) of the SR of the environment amongst farmers.

Firstly, 53 farmers were asked to spontaneously associate three to five words with the inductive word "environment" and to justify their association.

In terms of contents, the results from Prototypicality analysis show that the representation of the environment is composed of three dimensions: 1) the natural environment; 2) the polluted environment; and 3) the relationship between agriculture and environment and/or society. In terms of structure, the SR is organized around the natural environment. This central dimension is, thus, a consensual subject within the studied population. Around this core revolve the peripheral elements. Therefore, the concept of "pollution", frequently evoked, is linked to the natural environment by the concept of "protection". In conclusion, the image that the farmers have of the environment is reflected by the need for protecting a spoiled natural environment.

Secondly, Guillou-Michel attempted to identify distinctions at the peripheral level according to practices of the farmers (i.e. traditional vs pro-environmental practices). The results from the Similarity analysis show that the concept of "reasoned agriculture" is more important for those farmers who adopt pro-environmental practices than for those who are uncommitted in these practices. The latter replaces these reasoned practices with the concept of "protection", which refer to a popularised concept. Furthermore, the term "pollution" appears closer to the central core for the "pro-environmental" individuals. Quite obviously, it implies that the recognition of a form of pollution appears more precise for the farmers who are committed to pro-environmental actions.

C. Methodological Implements. In conclusion, these examples show the interest of the methodology used for a study that combines circumstantial factors and representations. It allows to identify the organization of the representational universe of individuals and to compare various populations on the basis of these circumstantial factors. The method of prototypical analysis is particularly advantageous to use when we compare populations. It has been shown here that depending on the experience of victimization, on the cultural context, and on practices the salience of elements change, and thus, their position in the structure of SR also changes.

Conclusion and perspectives

As we argue in this chapter, the methodological diversity, favoured by the Social Representational approach, that has been applied to the social sciences for over 30 years, is all the more fruitful when studying various environmental issues. Thus, we postulate that the environment may legitimately be regarded as an object of SR. It provides a function of concept, it is related to the emergence of specific behaviour, and, lastly, it is a salient matter in private and public communications. The diversity of studied objects as well as the large spectrum of methods presented in this chapter show the advantages of the application of the Social Representations Perspective to various environmental issues still unexplored or unclear. Human cognitions, behaviour and emotions related to the environment can be better understood applying the perspective that we have designed here. In the future, the potential of the Social Representations perspective will allow for the study of current issues such as residential satisfaction, sustainability, ecological concerns and many others.

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