

Social semiotics and social representations theory

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Abstract

The role of multiple levels of signification is present in many theories from different psychological traditions, from psychoanalysis to cognitive psychology. It also plays a crucial role in Social Representation Theory, despite not being fully integrated with the rest of this theory. This article introduces the notions of denotative and connotative meanings to social representations theory to enrich and develop the theoretical discussion of the processes of anchoring and objectification. The conceptual trajectory of denotation and connotation in semiotics is synthesized, and includes elements of the work of Hjelmslev, Peirce, Barthes, Greimas and Eco. The two concepts are applied so as to clarify the social signification processes among social groups and the recursive semiosis that takes place in conflicts among them. The semiotic interpretations of ‘anchoring’ and ‘objectification’ offer a more communication-oriented account of the genesis of social representations than was present in Moscovici’s original work. The final part of the paper considers the methodological and theoretical implications of such a re-definition, and proposes future lines of development.

Keywords: social representation theory, denotation, connotation, anchoring, objectification.

Introduction

The aim of this chapter is to enrich social representations theory (SRT) by focusing on the role of the communication processes at the core of this theory as formulated by Moscovici (Moscovici and Duveen, 2008). These processes play a fundamental role in the genesis of social representations in the public sphere. This chapter also explores the concept of multiple levels of signification in SRT

through two semiotic concepts: denotation and connotation, to further explain the processes of ‘anchoring’ and ‘objectification’. These two processes are mostly described in terms of their outcomes: “making the unfamiliar familiar” in the case of anchoring, or “saturation of reality” in the case of objectification. However, before discussing social representations theory and semiotics, it is necessary to state that the concept of multiple levels of signification is not foreign to psychological theories. Denotation and connotation, and their distinction in semiotics, are a formal way of considering this multi-layered signification. The idea of multiple levels of signification goes beyond a simple expression-content relationship about the way signs and symbols are conceived and how they ostensibly work in the process of human signification and interpretation.

The process of ‘multiple significations’ has an important place in both the psychology and sociology literature. Concepts such as ‘symbol’ and ‘sign’ have been a part of the discipline of psychology since its emergence, and they still play a crucial role in several social psychological theories. The social nature of signs and symbols and the processes of social signification were considered in early sociology and social psychology, for example in Emile Durkheim’s (1915/1965) analysis of shared cultural symbols. Thus, from the outset, the conceptualisation of a process of social signification was not confined to a simple expression-content relationship, but rather entailed the idea that there are multiple levels of signification that perform different epistemic, communicative and social functions. For example, the psychologist F.C. Bartlett (1925) highlighted the need to distinguish between signs and symbols, stressing the multiple significations that characterize the latter as one of the most important social functions of symbols. Other traditions in psychology have also valued the concept of multiple significations. Several psychologists, in rather different contexts, have developed the notion of asymmetrical signification. According to Salvatore & Venuleo (2008), the asymmetrical and symmetrical aspects of signification play a crucial role in Freud’s (1923) structural model of the unconscious structure of the mind. In particular, the role of affective semiosis, by contrast to paradigmatic thought, is considered an essential feature of the meaning-making process, as highlighted by other psychoanalysts such as Fornari (1979) and Matte Blanco (1975).

From the perspective of the psychological study of language, the role of multiple signification and connotative meanings is at the core of the three main theories regarding the production of metaphors: Ortony's model (1979) of the 'salience imbalanced'; Gentner and Clement's (1988) model of the 'transposal of structure'; and Tourangeau and Sternberg's (1981; 1982) model of the 'interaction between domains'. However, it is in the socio-cultural tradition of psychology that social signification plays its most fundamental role. In the work of Valsiner (2007) and Rosa (2007), culture is essentially seen as a form of semiotic mediation, and these authors borrow heavily from the semiotic tradition, and in particular from the work of Charles Peirce and the successive interpretative semiotics school. For example, for Valsiner (2007) the role of semiosis is at the centre of human experience and he introduces the notions of 'field, node and promoter signs' in his account of the structural features of signs and symbols. It is only in the work of these socio-cultural psychologists that semiotics and SRT have been discussed together.

Social Representations

Social representations theory (Moscovici, 2000) is, above all, a social psychological theory of the social origin of the relationships between knowledge, representations and contexts (Jovchelovitch, 2007), in which the role of communication is central for the production of representations, and particularly for the second part of Moscovici's original work on psychoanalysis (see the recent English translation by Moscovici and Duveen, 2008). Yet, the idea of multiple significations was not conceptualized directly in this theory, in spite of the frequent indirect references to this, or to process that might imply this. In fact, signification is often described in terms of a simple expression-content relationship. The role of social signification is referred to very frequently in SRT, in particular in terms of the process of anchoring and objectification; however, these processes remain as obscure elements – the 'black boxes' of social signification – that require greater clarification. That is the aim of this paper.

Many studies applying SRT deal with processes of communication and instances of social signification in the public sphere and yet include references to the notions of signs and symbols that are heterogeneous and unsystematic. There are several disciplines with their own conceptualizations

from which the notion of multiple levels of signification might be discussed in the context of SRT; semiotics is one of these. The advantage of semiotics, as we will discuss later, is that its intellectual trajectory has many points of theoretical convergence (particularly in the case of socio and cultural semiotics) with a social theory of the relationships between knowledge, representations and contexts. At the same time, semiotics can provide a set of concepts – such as the distinction between denotative and connotative meanings – with explanatory power, as will be seen in the examples discussed later. Moreover, opening the ‘black box’ of signification helps us understand a number of sociocultural phenomena that have become marginal in SRT (for examples of this debate see: Semin, 1985; Potter and Litton, 1985; Moscovici, 1985; Billig, 1993; Markova, 2003). As mentioned above, the symbolic functions of transforming the unfamiliar into the familiar, and the processes of anchoring and objectification lie at the core of social representations theory. These two symbolic transformations and acts of signification are crucial for the genesis of social representations, and yet they have been the subject of much debate. They are obviously in need of clearer conceptualization.

The aim of the following discussion is thus to explore the points of convergence between social representations theory and semiotics in order to accommodate both the communicative and the contextual knowledge functions of social representations through the idea of multiple and layered signification. It is precisely this idea of multiple and layered signification, which lies at the core of the distinction between denotative and connotative meanings, that will be discussed in the next section. Focusing on the role of denotation and connotation also means that any type of sign (e.g. linguistic or not) can play a role in the process of anchoring and objectification.

Denotation and Connotation in Semiotics and Social Semiotics

The technical term *semiotics* originated in the fourth century BCE and was used to refer to the medical practice of interpreting symptoms. Etymologically derived from the Greek *sémeion* (sign), the use of this term referred to the recognition of symptoms as signs, and thus of something to be interpreted (*Encyclopedia of Semiotics*). The broader, modern use of the term denotes the discipline stemming from the works of the Swiss linguist Ferdinand de Saussure and of the American logician

Charles Saunders Peirce. For Saussure, concerned primarily with linguistics, ‘semiology’ was to be a “science” of signs¹; while Peirce defined ‘semiotic’ as a “formal doctrine of signs,” or logic (Peirce, 1955:98). Semiotics today refers to the study of signs in both the Peircean (cognitive-interpretative) and Saussurean (structuralist) traditions, and many contemporary semioticians see the two approaches as complementary rather than oppositional².

This section presents the precursors of the notions of denotation and connotation in semiotics and outlines the different perspectives of these two notions of structural and cognitive-interpretative semiotics. Later, conceptual elements from both approaches are considered in the context of SRT’s anchoring and objectification.

Denotation and connotation are two concepts that have been developed and discussed in a wide range of theories in semiotics and linguistics. However, they first appeared in the writings of several logicians and philosophers. In logic, denotation is usually identified as the extension of a word, while connotation is considered as the intension of a word. The extension of a word is the object, or the set of objects, to which that word can be attributed and therefore points to the ‘extra-linguistic world’. For example, all objects that have two wheels and pedals are attributed the word ‘bicycle’. Conversely, the intension is a set of properties that determine whether an object does or does not belong to a given extension (Orecchioni-Kerbrat, 1983). In Ockam, Mill, Frege and Carnap, the two levels of signification are more or less defined in this way – although they are not always referred to specifically as denotation and connotation. The first person to use the term ‘connotation’ consistently, however, was John Stuart Mill (1843/2006). Hence, although the terminology varies considerably from one author to another, it is reasonable to make conceptual analogies. According to Eco (1973), both dyadic and triadic relationships between denotation and connotation and their object can be represented by the famous triangle schema (Figure 1).

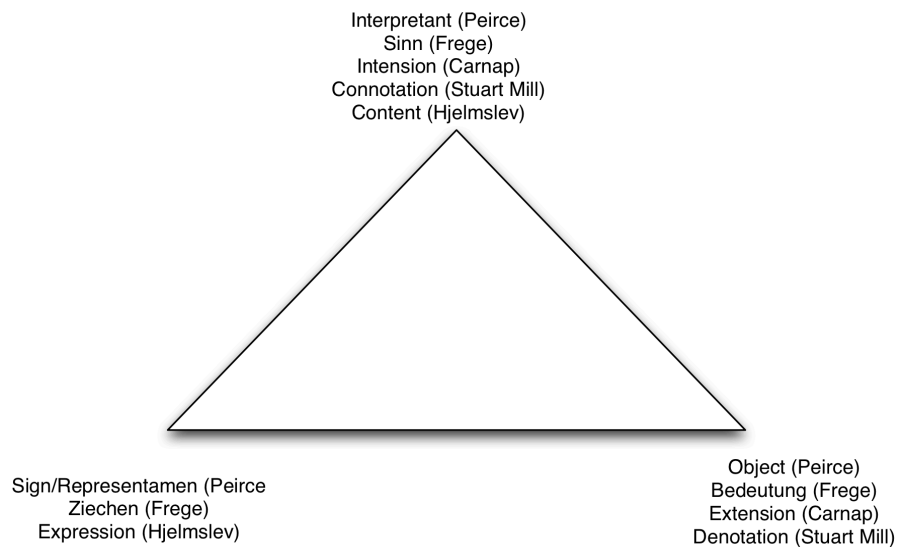


Figure 1 A representation of the different ways of conceiving the denotation-connotation-object relationships, from Eco (1973).

From the philosophical-logical tradition to linguistics and semiotics, the conceptualization of denotation and connotation changes considerably. While in the first tradition, connotative meanings include practically the whole area of meaning, because they are opposed to denotation, in the second tradition connotation is one aspect of meaning. Even with Sapir (1921/1970), we find the linguistic/semiotics approach to denotation and connotation. Sapir discusses the connotative affective value of words that are attached to a word's meaning and that vary from individual to individual, and from time to time. However, Bloomfield (1933) was the first to use the term 'connotation' in linguistics. In a chapter on meaning, he divides meanings into 'normal or core' and 'marginal or translated,' considering the latter as a language's capacity for plasticity. Hence, Bloomfield created the conceptual distinction between a more stable core meaning (denotation) and a more fluid connotative meaning. His focus on connotation is strongly related to what we might describe as style: the accents, grammatical forms and lexicons of individuals have connotative meanings about their social class. This focus on connotative languages greatly influenced Hjelmslev, who was well versed in Bloomfield's theory (for an extensive discussion of such influences see Garza-Cuaron, 1991).

The precursor: Hjelmslev

Moving from the antecedents in linguistics to semiotics, it is with Hjelmslev that connotation and denotation first became a semiotic notion. Hence, the origin of the denotation/connotation distinction in semiotics is rooted within the structuralist tradition that stemmed from the work of Saussure (1959).

Hjelmslev, whose aim was to develop a formal theory of the study of languages under the name of 'glossematics', introduces the role of 'connotators' to describe the 'particles' of supplementary meaning to the denotative one. The semiotic distinction in the tradition of Hjelmslev concerns a denotation that is a relation between the expression and the content of a sign, and a connotation that relates two signs (i.e. two units of expression and content) in a particular way. According to Hjelmslev (1943), connotation is a particular configuration of languages, opposed, in this respect, not only to denotation, but also to meta-language. According to his definitions, a connotative language is a language, i.e. a system of signs, whose expression plane is another language, or the inversion of a meta-language, which is a form of language used for the description or analysis of another language. Contrary to both connotative and meta-languages, denotative language is a language in which none of its planes form another language. Thus, denotation is a relation that serves to connect the expression and the content of a sign, whereas connotation and meta-language both relate two separate signs, each with its own expression and content. Apart from the definitions, Hjelmslev also gives examples of connotations, such as different styles, genres, dialects, national languages, voices, and so on. In analysing these and other examples, it becomes apparent that semiotic connotations reside in the choice of a particular expression to stand for a given content, chosen from a set of alternatives, or of a particular variant to realise the expression invariant (Sonesson, 1989). Thus, what is important to connotation, according to Hjelmslev, are not the particular contents, or kinds of contents, conveyed, but the formal relationships that they presuppose. Hjelmslev assigns the study of the 'social and sacral' values usually conveyed by the languages of connotation to the theory of 'substance'.

From Hjelmslev, who conceptualizes connotative meanings in terms of style and indirect sense, and who therefore focuses on the language of connotations, there is an initial disjunction within the structuralist semiotics approach. Barthes, Greimas and, to a certain extent, Eco developed Hjelmslev's ideas in rather different ways. They were interested in connotations at the level of 'lexemes' (Barthes and Greimas) and of encyclopaedic connotations (Eco). Therefore, connotative meanings are no longer an issue of style but are to be considered as connotative semantic marks or added meanings.

The semiotics of Barthes and Greimas

Barthes (1968), who greatly diffused Hjelmslev's distinction of denotative and connotative meanings, shifts to the study of 'ideological connotations' with an emphasis on communication processes. For Barthes, connotative semiotics is an instrument for understanding and explaining the 'ideological naturalization of myths' (Barthes, 1972). Barthes focused on communication processes that reveal the signification structure's underlying myths. In a departure from Hjelmslev's model, Barthes argues that the orders of signification known as denotation and connotation combine to produce ideology – which has been described as a 'third order' of signification: myth. In summary, Barthes retains a structural approach. According to his concept of connotation, in semiotic systems (not limited to natural language) there are some signifiers – the 'connotators' – that in a fluid manner stand as symbolic or connotative meanings. The set of 'connotators' constitutes 'rhetoric' while the set of connotative meanings constitute 'ideology'.

Greimas (1970) does not place the notions of denotation and connotation at the centre of his semiotic enquiry, which focuses on the narrative structures of texts. However, it contributes to the debate by re-organizing Barthes' intuition and making a clear distinction between the study of connotative languages related to discourses and the study of connotation of concepts related to lexemes (Greimas and Courtes, 1979). Connotative meanings are, in essence, given by 'classemes', particles of contextual meaning that complement a more stable semantic core. The context of these classemes is culture. According to Greimas (1990), the connotative structure of a language is a manifestation of the 'cultural universe of common sense' of a given society. The idea is to study

connotative structures of cultural objects in order to gain insights about how they are represented by a given culture and thus to gain information about a culture itself. The role of socio-semiotics assumes the shape of a meta-analysis of meanings in society and those meanings become the instrument with which to investigate society itself. Amongst the common notions used in this domain of research, Greimas (1990), Lotman (1990) and others consider crucial the 'connotative projections' that a society gives to a cultural object. The focus of attention is the social life of signs, with the intention of considering the social and cultural context of the process of sense making. It is important to note that both Barthes' and Greimas' theories of denotation and connotation fall firmly within the structuralist approach to semiotics. These notions are therefore viewed synchronically, as code based, and there is an emphasis on seeking regularities.

The interpretative approach: Charles Peirce

Beyond the structuralist approach, there have been attempts to apply the notions of denotation and connotation within an interpretative semiotic approach based on the work of Charles Peirce (1960). Peirce developed a complex formal theory of interpretative-cognitive semiotics (for a complete discussion of Peirce's ideas in the domain of cultural psychology, see Rosa, 2007). At the core of Peirce's formal doctrine of signs lies the idea of the sign as a triadic relationship, never reducible to a relationship of pairs, between the object, the sign and the interpretant (Figure 1). The starting point is the object, understood in a wider sense as the external reality. The object, therefore, is the first engine of semiosis. Although Peirce's terminology is not always univocally interpretable, very often Peirce defines the object as 'dynamic', referring to the thing in itself, the object in the external reality. To be aware of and to understand external objects we need signs. The sign is therefore the fulcrum of semiosis because it mediates between the object and the interpretant. However, to play this role the sign has to 'spotlight' the object, highlighting certain aspects, grasping some qualities and constituting a fundamental idea. The object is 'lit' by the interpretation based on a hypothesis about it. Here Peirce makes another distinction between two components of the sign: the 'representamen' and the 'immediate object'. For Peirce, a sign can also be thought of as the merging of signifier (representamen) and signified (immediate object). If the 'dynamic object' is the external

object in itself, the ‘immediate object’ is the meaning or “the object as the sign represents it” (Peirce: CP 4.536). However, according to Peirce the only way to delimit the content of a sign is to use an ‘interpretant’, which is another sign that adds greater meaning to the initial sign. Hence, in theory the ‘immediate object’ is the set of all possible interpretants of a sign, therefore our knowledge will always be partial (in the sense of being asyntonic), and it will never capture the full ‘essence’ of meaning. The very same reasoning indicates that semiosis is potentially infinite because the use of interpretants is potentially infinite. According to Peirce, the ‘infinite regression of interpretants’ is also triadic in nature: it includes an ‘immediate interpretant’ (the sign’s initial effect on the mind of the interpreter), a ‘dynamic interpretant’ (the ‘real’ effect produced in the mind of the interpreter) and the ‘final interpretant’, the interpretation that halts, although only temporarily, the process of semiosis.

From this perspective the focus shifts from semantics to pragmatics, hence emphasis is placed on the processes and creations of ‘sense’ rather than on analysing structures and codes. The core concept changes from the notion of code, crucial in the structural perspective, to that of interpretation. The most exhaustive discussion of the notion of connotation within a Peircean framework is that of Bonfantini (1987). Bonfantini defines the interpretative approach as compared to the structuralist approach as being characterized by three main tensions: Systematic semiotics vs. Semiosis; Synchronic vs. diachronic analysis; Codes vs. interpretants; and more generally Representation vs. interpretation. According to Bonfantini, the structuralist approach to connotation runs the risk of being little more than taxonomic work, useful only to order semiotic phenomena. Whilst he recognized the value of Hjelmslev’s intuition about the notion of connotation, he also recognises the danger of seeing denotation and connotation as abstract, almost metaphysical, properties. Bonfantini introduced two important ideas about connotations from a pragmatic point of view. The first is that connotations should be seen as part of the communicative act of individuals rather than the simple outcome of a connotative code excluded from the communication flow. The second point is that communicative acts are characterized by ‘communicative games’. Communicative games are constituted by the combined presence of several factors: socio-cultural position in society; the participants in the communication process; the time,

the place and ‘perceptual situation’; the uttered texts; the relevant texts in the communicative game; and the non-linguistic actions. These points give an idea of the complexity of a communicative game from a pragmatic point of view. Connotative attribution and interpretation are thought of as being in the aforementioned frame. In the interpretative approach, the idea of connotation as a semantic property or fixed added meaning is discarded completely. The determination of denotations and connotation become entirely fluid in a communicative game depending on its aims and context; they are the components of semiosis. To summarize, there are two main useful ideas from this perspective: first, denotation and connotation are not considered as static meanings in a cultural code but as stages in a process of semiosis, hence as meanings that are active during interpretation depending on the nature and context of communicative games; second, the idea of considering denotation and connotation as ‘interpretants’ in Peirce’s terms.

	Connotative languages	Connotations
<i>Object</i>	Indirect senses (styles, etc.)	1. Semantic marks 2. Added meanings
<i>Shared</i>	It presupposes a denotative code	
<i>Specific features</i>	<ul style="list-style-type: none"> • Phrastic dimension (discourses) • Connotators in the plane of expression and content 	Lexical dimension Connotation starts from the content plane of denotation
	<i>Structuralist</i>	<i>Interpretative</i>
<i>Analytical categories</i>	Synchronic Code based Systematic Semiotics	Diachronic Interpretant Semiosis
<i>Emphasis</i>	Regularity	Variance

Table 1 A summary of the differences regarding connotative meanings within the structural semiotic paradigm and between the latter and interpretative approach.

In the upper part of table 1, we can see a summary of the differences in conceptualizing connotations in the two structuralist approaches based on the distinction between connotative languages and connotations that refers to the first part of this section. In the bottom part of Table 1, the differences between the structuralist and the interpretative approaches in terms of analytical categories and emphasis are summarised.

Eco (1976, 1984, 1990, and 2000) has considered the tension between connotations as a code and as an act of pragmatic semiosis, and he arrives at a 'hybrid' theory that includes both structuralist and interpretative elements. A necessary premise is that Eco starts his discussion of connotations similarly to Barthes and Greimas as 'classemes', but goes on to consider them as added meanings (signifieds) (Eco, 1990 and 2000). As mentioned above, Eco tries to combine the interpretative approach characterized by semiosis with the structural notion of 'encyclopaedia' (Eco, 1984, p.109), where the encyclopaedia is the set of all possible interpretations. This notion acts as a postulate in the sense that it is impossible to describe entirely, and it works as regulative hypothesis because when an actor communicates he or she also selects portions of encyclopaedia to establish certain semiotic competences as a starting point. The encyclopaedia entails semantic instructions and routines attached to context, in another word, 'scripts'. Within Eco's semantic model of scripts in encyclopaedic form, giving a sign means sending packets of semantic information activated according to scripts related to contexts, circumstances and interpretative mechanisms. Connotative properties manifest themselves as added meanings that are constituted on the basis of a denotative or a previous code. In this model, rhetorical figures are interpreted thanks to inferences that activate 'semiotic correlations' based on pre-existing denotative codes. In this model, context is crucial and so is the diachronic dimension (interpretative approach) of the fluctuations of denotations and connotations. Eco clearly states that connotations can be seen as a 'phenomenon of system or process', preferring the interpretative approach offered by Bonfantini. However, he also highlights the fact that some connotations are rather more stable in a semiotic community, in other words the encyclopaedia is being constantly reshaped by interpretations while also experiencing temporary and unstable equilibriums. The synchronic/diachronic tension is often associated with that of an individual/collective. Connotations born as individual acts or from the interpretation of small groups can become temporarily collective through social influence. To conclude, Eco is convinced of the necessity to consider both the synchronic and the diachronic aspects of denotations and connotations because, "the unstable equilibrium of this co-existence is not (theoretically) syncretic because our knowledge proceeds on this happily unstable equilibrium " (Eco, 2000, p. 218).

Regardless of the two different structuralist approaches or interpretative takes on connotations, the role of contexts is crucial. The problem of context becomes one of style for connotative languages and one of social and cultural contexts in terms of connotations as added meanings. In the latter case, social and cultural contexts are at the core of social semiotics as envisioned by Greimas and Cortes (1979) and Hodge and Kress (1988). Greimas and Cortes summarised (1979) four main research directions: the study of societal attitudes towards its signs, for example the work of Lotman (1990) and Foucault (2006); the study of the degree of verification that a given society attributes to discourses; the study of social discourses and of connotative meanings; the investigation of communication strategies determined by connotations. Fabbri (1998) suggested a further direction for research in social semiotics that focuses on connotations: to pursue a cultural ontology of connotative meanings and the analysis of communication strategies of a connotative nature.

This section has summarised the different approaches to the notions of denotation and connotation within the two main traditions of semiotics, the structuralist and the interpretative/pragmatic, and has highlighted the theoretical tensions between the two. The last part has explored Eco's semantic encyclopaedic model that aims to combine the two approaches. In the following section, the core of this paper, we will discuss how denotation and connotation can be applied to social representation theory by enriching the notions of anchoring and objectification and adding a distinctive communicative dimension to these processes.

The cultural (semiotic) process of anchoring and objectification

The core idea of this chapter is that anchoring and objectification can be formulated as the outcome of the processes of recursive social semiosis within and between social groups in the public sphere. As a consequence, it proposes a social and communicative description of the dynamics of multiple levels of signification in the public sphere that is largely unaccounted for in SRT. The outcome of these processes of semiosis is the establishment of denotative and connotative meanings of a social object. Denotative and connotative meanings are the constituents of the different representations that are negotiated in the public sphere. This way of conceptualizing anchoring and objectification

brings together the structural and the interpretative approaches of semiotics, both the diachronic and synchronic dimensions of signification. Social groups inhabit different structural semiotic conditions because of their different social positioning, but it is through ‘communicative games’ (Bonfantini, 1987) that a social object takes on a temporarily stable social meaning. Anchoring and objectification are thus the outcome of communicative games performed by social groups in the public sphere that reach temporarily stable social meanings, and the latter feed into potential new communicative games.

Denotative meanings are the first and most basic codification of the meaning of a social object. From the SRT perspective, denotations are established by groups that have sufficient power and authority to introduce them to the semantic field, or ‘semiosphere’ (Lotman, 1990), of a given culture. As mentioned before, Moscovici identifies two main loci of knowledge production, distinguishing between first-hand and second-hand knowledge. The former is the result of the formation of scientific knowledge. We might argue that denotative meanings capable of defining the semantic field are produced by groups that have significant amounts of authority, power and prestige, often seen as esoteric in the mastery of their own knowledge. Scientific knowledge is the best, but not the only, example of this. In this context, the main difference between denotation and connotation is that they imply different epistemic roles for actors in the process of establishing or proposing denotative or connotative meaning. Denotations are the outcome of making something intelligible, of defining something that was previously un-representable. The role of naming, although in theory available to everyone, is in fact restricted to certain groups within society. Scientists represent a powerful group, able to introduce new descriptions of reality; they forge denotations from their perceived epistemic position as knowledge-seekers. This is not to say that such groups do not experience intra-group dynamics that influence the way in which they establish shared meanings, in particular through conflicts and debates. However, such dynamics do not usually involve society at large, and only enter the public sphere when controversies escalate.

Connotations follow a different social dynamic due to their epistemic function and the epistemic position of the actors involved: experts present connotations as claims (for example, that in the future nanotechnology will lead to cures for all diseases (Gaskell, Eyck *et al.*, 2005), but there

are other actors competing in this domain, such as critical scientists, politicians, the media and NGOs. Such connotative meanings are produced through claims, narratives, analogies, symbols, metaphors and other symbolic forms such as myths and recurrent themes. Hence, denotation and connotation play a different role once they enter the public sphere, and they operate in different ways.

Connotations are an additional level of signification. They establish a semiotic domain as the outcome of a semiotic (or interpreting) community. According to Eco (1976), a semiotic community is characterized by the decoding of symbols through a semiotic domain of its value systems and ideological, ethical, religious positions. Hence, a semiotic community is defined by shared cultural codes and common semiotic resources that might be not directly evident and accessible to outsiders. Connotative meanings are “contextualisers” because they entail specific symbolic repertoires. Connotative meanings include metacognitive knowledge about the limits to the validity of a particular social representation (Wagner, 1995). They are also embedded in the socially constructed world from the point of view of different groups, who are differentiated by the nature of their position and activity towards a particular social object. Here we refer to the notion of semiotic position as formulated by Vygotskii (1962)³. In the introduction to this paper we referred to the social functions of symbols as conceived by the social psychologist Bartlett (1925). In his conceptualization a clear double function emerges in social psychological terms, the function of facilitating inter-group communication and at the same time expressing in-group social identity (Rommetweit, 1984).

Recursive Semiosis

The signification processes that involve denotative and connotative meanings lead to anchoring and objectification in terms of recursive semiosis processes within and among social groups in the public sphere. A recursive semiosis is a process of signification in which a previous semiosis become a base (a new *representamen*) for a subsequent semiosis, therefore adding a developmental dimension (Rosa, 2007). Thus, anchoring and objectification are unpacked in a series of reiteration of signification processes, as summarised in Figure 2.

The starting point of the anchoring and objectification of a social object is in the activity of an authoritative social group that alters a society's semantic field by introducing a new social object and naming it. In other words, they establish its denotative meaning. The most straightforward examples come from the role performed by scientists when introducing notions such as 'genes', and 'dark matter,' but also from other powerful groups such as economists arguing about 'inflation', 'GDP', etc.

Authoritative groups are not immune to intra-group conflicts in the process of establishing the denotative meaning of a new social object. For example, at the earliest stages of constructing nanotechnology as a social object, scientists debated its definition extensively (for example, the Smalley-Drexler debate: see Smalley 2001, 2003a and 2003b; Drexler 2003a, 2003b). This can happen before or in tandem with the introduction of the new social object to the public sphere. Once a stable consensus is reached, or the pretence of one for the benefit of out-groups, the authoritative group disseminates the new social object into the public domain where they also add connotative meanings to its denotative meanings. Such connotative meanings express goals, interests and cultural repertoires of rhetorical forms and myths, given by the social and cultural position of the proposing authoritative group. One possible conflict-free outcome is when other social groups adopt both denotative and connotative meanings of the new social object proposed by the initiating authoritative group. However, conflict might arise at both the denotative and connotative levels. The authoritative group's definition may be contested; consider the definition of an embryo for scientists as compared to lay people with religious beliefs (Maienschein, 2003). The recursive semiosis that leads to the re-establishment of a denotative meaning is re-signification.

Connotative meanings are potentially even more conflict-prone because they are vested with contextual signification given by the societal position of each social group. In other words, connotative meanings are really the act of interpretation of new social object that takes on board contextual knowledge, values, and attitudes. In connotative meanings, signification refers to both a semiotic and a political ordering of sense. In the first mode, what is significant is a symbolic property; in the second what is significant becomes the product of the assertion of a political will. Hence, it is guided by a project (Bauer and Gaskell, 2008) or a worldview (Wildaski, 1987).

Conflicts and tensions are viewed as important in the formation of social representations (SRs) and in the semiosphere, through Lotman's conception of structural heterogeneity of semiosphere (Lotman, 1990) which is the basis for dialogue, and therefore also the basis for creating meanings and novelty. In particular, as previously argued by Raudsepp (2005), the notion of 'semiosphere' by Lotman (1990) is a useful notion regarding social representations theory. The semiosphere represents all semiotic resources of a semiotic subject (society/culture/groups). According to Raudsepp (1995, p. 459-460) we can consider it in terms of SRT because "it contains all SRs in their objectified and stabilized form (texts, artefacts, images, meanings, institutions)."

Once the new social object enters the public domain, other social groups might borrow the authoritative group's denotative meaning but contest their proposed connotative meaning, which is to say that they will contest claims, narrative frames, etc. Specific to connotative meanings are one particular type of sign: promoter signs. Promoter signs are signs of sufficient abstractness that begin to function as guides to the range of possible constructions of the future (Valsiner, 2007).

Most importantly, connotative meanings are a direct expression of social contexts as discussed in the elaboration of connotation in terms of both structural and interpretative semiotics. The conflict or collision of connotative meanings among social groups in the public sphere is what constitutes the upper limit of the process of anchoring conceptualized in semiotic terms. A conflict of connotative meanings can also emerge within the authoritative group. In that case, social groups in their conflict over "logonomic control" (Hodge and Kress, 1988, p. 4) can use the internal conflict in the authoritative group. There are many examples of competing connotative meanings of a social object by different social groups. The case of AIDS is an apt example (see Markova, 1992), where different groups integrated medical information into their general theories and systems of beliefs in contrasting ways. The same can be said about new technologies with potential risks, such as biotechnology and GM food (e.g. Wagner & Kronenberg, 2001), food risks and the Hong Kong case of bird flu (Joffe and Lee, 2004).

Recursive social significations underlying anchoring and objectification

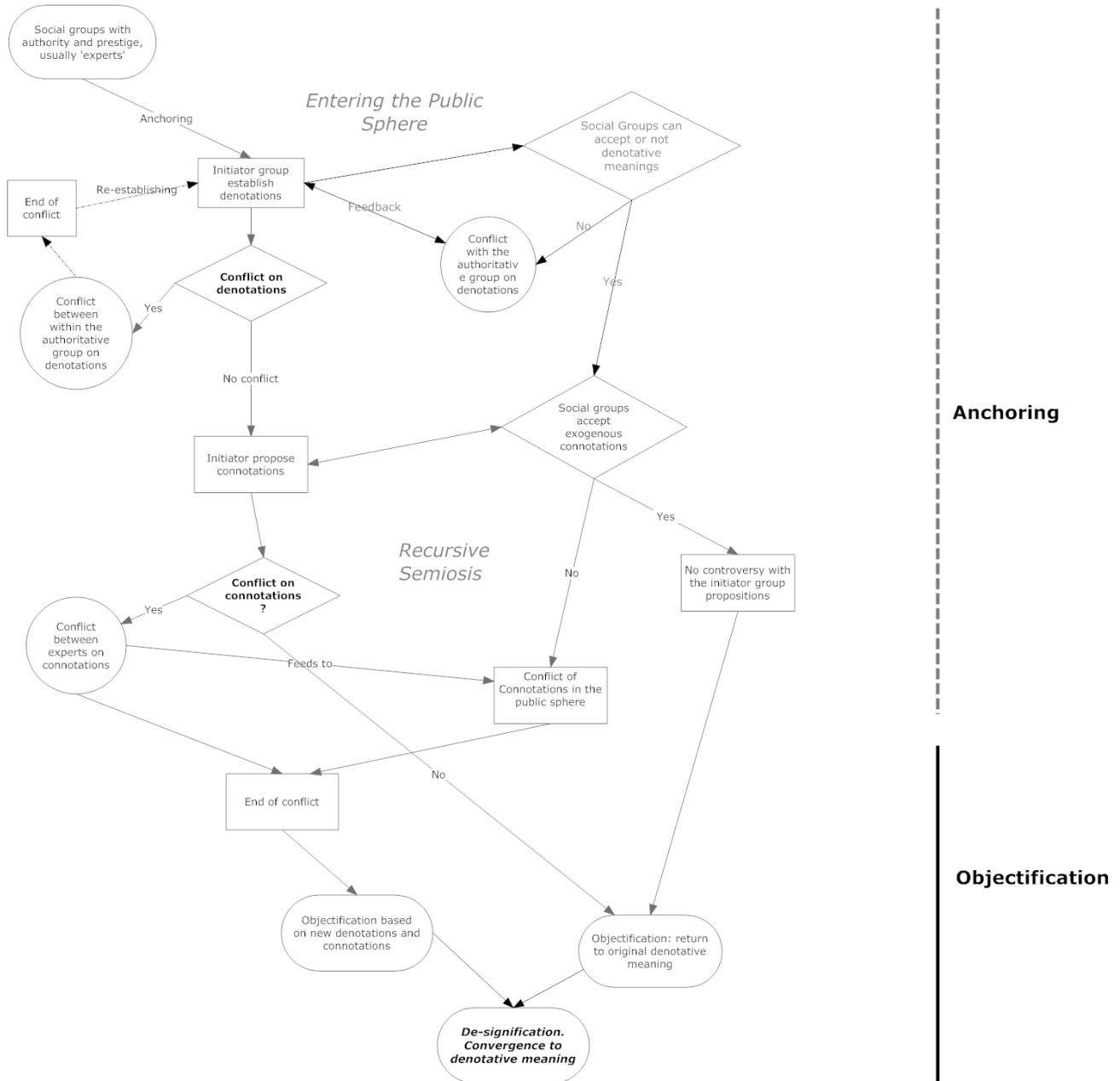


Figure 2

Two processes characterize the recursive semiosis that stands at the core of anchoring: re-signification and counter-signification. These are features of communicative games (Bonfantini, 1987) played by social groups in the social sphere to obtain 'logonomic control'. Here, the contribution of the interpretative school of semiotics is to add a pragmatic and synchronic dimension. This means that what stands for denotative and connotative is fluid, and is determined within a communicative game as the game proceeds. Strategic or temporary alliances are formed

among social groups, see for example the discursive coalitions between experts and other social actors in the case of the public creationism controversy in the UK (Allgaier, 2010). Re-signification stands for a rearranging of the denotative and connotative meanings because of their mutual influence (see the example of red and green biotechnology, Bauer, 2005). Re-signification is the process that answers an important question posed by Bauer and Gaskell about reversing the vector (2008, p.350): “how does common sense challenge the source of dignified knowledge?”

Counter-signification is limited to substituting connotative meanings that are expressions of one social group for others that are expressions of another social actor that was adversely signified in the original representation, and therefore imposing a different ‘project’ (Bauer and Gaskell, 2008). Resistance is also a function of social representations, protecting the group in periods of change while at the same time signalling the need for changes to the agents of innovation (Bauer, 1994). Counter-signification is an important resistance strategy used by individuals and social groups when a new transcendent representation is forced upon an immanent one (Jensen & Wagoner, 2009). Both re-signification and counter-signification are dynamics of social meanings in the public sphere, because of the intrinsically communicative nature of social representations, as discussed before in the role of the public sphere for SRT (Jovchelovitch, 2007).

That which constitutes anchoring from a semiotic perspective is the processes of recursive semiosis characterized by either re-signification or counter-signification. The outcome is a temporary resolution of conflicts that leads to the process of objectification. After processes of recursive semiotics reach a precarious equilibrium, objectification comes into play as a phenomenon of de-signification. The de-signification stage represents the greatest stability of the representation of a social object. Wherever objectification occurs out of a conflict-free path, or after several conflicts for logonomic control, a set of denotative and connotative meanings are crystallized in what Eco defines as the ‘encyclopedia’. At least temporarily, the social object finds stability and its social meaning attains maximum consensus, although new contestations in the forms of new semiosis are always theoretically possible. The price of this consensus is a redefinition of denotative and connotative meaning in which many social meanings are lost, to be replaced by a synthesis that is certainly less rich but also less conflictual. De-signification is similar to ‘ontologizing’, one of the

three stages Moscovici (2000) identifies in his description of objectification: personification, figuration and ontologizing. However, it does not involve the problem of establishing what constitutes reality in social representation theory, something that, thus far, has not been sufficiently critiqued. Losing their semiotic richness, a social object becomes a ‘familiar background’. Many aspects of social life that were once controversial are now part of a familiar background perceived mainly in denotative terms.

Conflict can reappear only as the result of a direct semiotic act by a social group that advocates conflicting denotative or connotative meanings. Authoritative groups have the power in the future to challenge denotative meanings in society by their epistemic position and therefore it is not unusual that the ‘familiar background’ is re-signified as something else, thereby initiating a new process of anchoring and objectification.

Conclusions

This chapter has presented a semiotic perspective on social representations theory, introducing the semiotic distinction between denotative and connotative meanings. The aim has been to enrich the theoretical description of the anchoring and objectification processes, which are discussed not only in terms of their end results. The proposed theoretical framework explains anchoring and objectification from a communicative perspective that refers to both the structural-synchronic and the interpretative-diachronic semiotic conceptualization of denotative and connotative meanings. These two notions are crucial for understanding the role of social contexts and epistemic selectivity and their position in the process of social signification by different societal groups.

The different stages of anchoring and objectification (Figure 2) orient the researcher so that he or she can recognize what aspect of interaction needs to be focused upon. For example, one might concentrate on the establishing of denotative and/or connotative meanings by authoritative groups and their reaching of an internal consensus. Another might focus on the conditions that lead other social groups to adopt (or not adopt) denotative and connotative meanings from authoritative groups. These are just a few examples of how the SRT research agenda might be expanded by opening the ‘black box’ of signification represented so far by anchoring and objectification.

There is the potential for the mutual exchange of concepts and methodologies that can benefit both theoretical domains. Social representations theory can enrich its formulation of social signification processes while social semiotics might benefit from learning more about the social psychological dynamics underpinning social signification. In conclusion, the dialogue between social/cultural semiotics and social representation theory represents fertile ground for future research.

¹ One of the most famous definitions of semiotics is that of Ferdinand de Saussure (1959: 16) 'A science that studies the life of signs within society is conceivable ... I shall call it semiology (from Greek *semeion*, "sign").'

² According to Eco (1976), a general semiotic theory should include not only a theory of how codes may establish rules for systems of signification but also a theory of how signs may be produced and interpreted. A theory of codes may clarify aspects of 'signification,' while a theory of sign-production may clarify aspects of 'communication'.

³ According to Vygotskii, the nature of what is said to be our 'inner' lives is explored, and it is argued that they are neither so private, nor so inner, nor so systematic and logical as has been assumed. Instead, people's higher mental processes originate in their feelings of how, semiotically, they are 'positioned' in relation to the others around them.

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