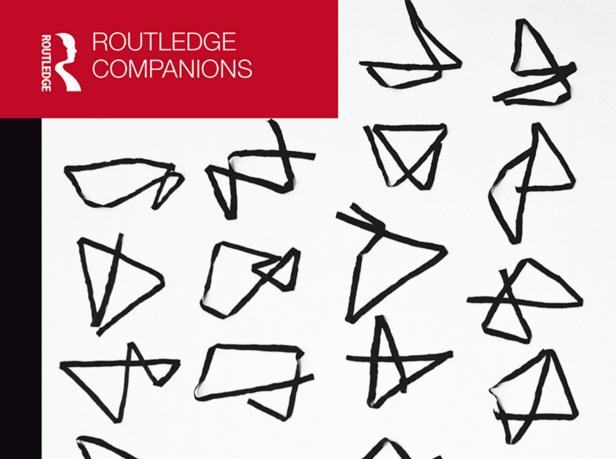
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#### What can ANT still learn from semiotics?

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Edited by Anders Blok, Ignacio Farías and Celia Roberts

# The Routledge Companion to Actor-Network Theory

This companion explores ANT as an intellectual practice, tracking its movements and engagements with a wide range of other academic and activist projects. Showcasing the work of a diverse set of 'second generation' ANT scholars from around the world, it highlights the exciting depth and breadth of contemporary ANT and its future possibilities.

The companion has 38 chapters, each answering a key question about ANT and its capacities. Early chapters explore ANT as an intellectual practice and highlight ANT's dialogues with other fields and key theorists. Others open critical, provocative discussions of its limitations. Later sections explore how ANT has been developed in a range of social scientific fields and how it has been used to explore a wide range of scales and sites. Chapters in the final section discuss ANT's involvement in 'real world' endeavours such as disability and environmental activism, and even running a Chilean hospital. Each chapter contains an overview of relevant work and introduces original examples and ideas from the authors' recent research. The chapters orient readers in rich, complex fields and can be read in any order or combination. Throughout the volume, authors mobilise ANT to explore and account for a range of exciting case studies: from wheelchair activism to parliamentary decision-making; from racial profiling to energy consumption monitoring; from queer sex to Korean cities. A comprehensive introduction by the editors explores the significance of ANT more broadly and provides an overview of the volume.

The Routledge Companion to Actor-Network Theory will be an inspiring and lively companion to academics and advanced undergraduates and postgraduates from across many disciplines across the social sciences, including Sociology, Geography, Politics and Urban Studies, Environmental Studies and STS, and anyone wishing to engage with ANT, to understand what it has already been used to do and to imagine what it might do in the future.

**Anders Blok** is an Associate Professor of Sociology at the University of Copenhagen. He is the co-author (with Torben E. Jensen) of *Bruno Latour: Hybrid Thoughts in a Hybrid World* (Routledge 2011) and the co-editor (with Ignacio Farías) of *Urban Cosmopolitics: Agencements, Assemblies, Atmospheres* (Routledge 2016).

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## What can ANT still learn from semiotics?

Alvise Mattozzi

#### Semiotics, still

'Still' is the pivot, around which the question I have been asked to answer turns. 'Still' connects the past with present and, from there, with the future: It suggests that ANT has previously learned from semiotics and that it can possibly keep learning from semiotics.

Therefore, 'still' acknowledges a long-term relationship between ANT and semiotics. Such relationship has been frequently explored, reenacted and recalled by Latour and it has been sealed by John Law's definition of ANT as 'material semiotics.' Despite all that, such relationship has been often overlooked, disregarded, forgotten.<sup>1</sup>

Therefore, in order to answer the question making up the title of this contribution, I first need to recover the history of such relationship.

#### Semiotics, then

Semiotics (or semiology) is, from an etymological point of view, 'the science of signs.' As such, semiotics studies signification as the outcome of sign processes: Something, material, present to perception – the sound of a word, the coloured cloth of a flag, the shape of an emoticon, the look of a car or the cut of a suit – *stands for* something else, more immaterial, abstract and absent – the meaning of a word, a nation, an emotion, a lifestyle, a social class.

The first founder of modern semiotics, the American pragmatist philosopher Charles Sanders Peirce, thought the sign as a threefold relation (Figure 9.1a) among:

- an object or referent;
- a representamen, i.e. the actual sign the configuration, which represents the object;
- an *interpretant*, i.e. the further configuration elicited by the *representamen*, usually intended as the idea created in the mind, but which does not need to be a mental representation.

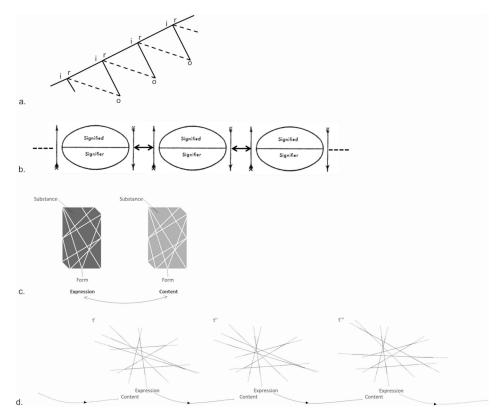


Figure 9.1 Signification models: a. Peirce, o = object, r = representamen, i = interpretant (my elaboration); b. de Saussure's ([1916] 1959: 115); c. Hjelmslev's (my elaboration); d. ANT's (my elaboration)

Peirce's (1868) semiotics is a complex classification of signs, developed by considering the types of relations the three elements can entertain. The most famous classification is the one based on the relation between the *representamen* and the *object*, which can produce:

- an icon or likeness, i.e. a resemblance, as with a figurative images;
- an index, i.e. physical or causal relations, like a pointing finger or smoke for fire;
- a symbol, i.e. conventional relations, like the word 'dog' for the domestic barking animal.

The Swiss linguist and originator of structuralism Ferdinand de Saussure is the second founder of modern semiotics. Being a linguist, Saussure focused only on verbal language, considering it grounded in conventional signs, akin to Peirce's *symbols*. However, Saussure thought the sign as binary: A relation between a *signifier* – the sound of a word as perceived – and a *signified* – the concept recalled by the perception (Figure 9.1b).

Despite the focus on verbal language, Saussure ([1916] 1959: 16) acknowledged that language is comparable to other sign systems like 'the alphabet of deaf-mutes' or 'symbolic rites.' All of them are studied by 'semiology,' i.e. 'the science that studies the life of signs within society.'

Peirce's one is a philosophical semiotics aimed at developing a theory of knowledge, which could provide the rules for scientific inquiries, by considering which kinds of signs are used by scientists within their deductions, inductions or abductions.

Saussure's one is a scientific semiotics, aimed at providing a method for studying languages or, more in general, sign systems. Following Saussure's approach, linguistics and semiotics have been developed as methodologies providing terms, categories and models to describe-analyse<sup>2</sup> sign systems, as well as their specific empirical manifestations.

#### Semiotics: from signs to relations

All along the 20th century, various semiotics have been elaborated assuming as ground the sign and developed through various related notions such as representation, symbol, language, code, communication, etc. Within such framework, signs have been often reduced to what they represent, according to given societal, cultural or mental structures. Therefore, signs have been often reduced to their most de-situated, disembodied and immaterial aspects. Such approach to signs is clearly at odds with ANT. No wonder that 'semiotics readings' pursuing such dualist – material/immaterial-ideal – and transcendent understanding of signifying processes have been considered 'incompatible' with ANT (Farías and Mützel 2015: 524).

Nevertheless, such incompatibility is the result of a partial view of semiotics, based on a simplified and isolated conception of the sign, put forth and adopted, first of all, by many semioticians. Such conception of the sign does not, however, pertain neither to Peirce nor to Saussure, nor to some of their heirs. Peirce and Saussure developed their semiotics by addressing issues that take place beneath and above the sign. They indeed intended signs as mediating entities and mediation as a process, taking place through relations. Examples of mediating entities considered by semiotics can be: The interpretant, between object and representamen, within the Peircian sign (Figure 9.1a); language, between sound and thought (Saussure [1915] 1959: 112); forms between substances of expression and of content (Hjelmslev [1943] 1961; Figure 9.1c, see below), enunciation between language (langue) and speech (parole) (see below). These mediating entities not only allow establishing relations, but are constituted by relations: For Peirce (1898), the basic categories from which signs arise are relational; for Saussure ([1916] 1959: 122), in language 'everything is based on relations,' so that signification is never reducible to the simple coupling of signifier-signified, but it has always to be considered in relation with other couplings (Figure 9.1b). The latter approach has been radicalised by the Danish linguist Louis Hjelmslev ([1943] 1961), for whom signification is solely based on relations and relations among relations, i.e. relations among configurations of relations or, using Hjelmslev's terms, relations among 'forms': A form of expression (signifier) and a form of content (signified)

Signs are then just the 'tip of an iceberg' and semiotics is actually concerned with the 'complex [...] work' under the 'tip' (Marrone 2002: 14, my translation), carried out by relations and mediations.

While signs, considered as isolated entities reduced to the immaterial representations to which they refer, can be of no relevance for ANT (Farías and Mützel 2015: 524), relations and mediations certainly are.

Relations have indeed provided the common ground for the exchange between ANT and semiotics. It is not coincidence, then, that ANT considers semiotics, not the 'science of signs,' but the 'science of relations' (Law 2002: 49).

#### What ANT has learned from semiotics

The 'semiotic insight' of 'the relationality of entities' (Law 1999: 4), according to which 'everything in the social and natural worlds [is] a continuously generated effect of the webs of relations within which they are located' (Law 2008: 141), is what, in general, ANT has learned from semiotics. As Annemarie Mol (2010: 257) acknowledges

In [d]e Saussure's version of semiotics, words do not point directly to a referent, but form part of a network of words. They acquire their meaning relationally, through their similarities with and differences from other words. Thus, the word "fish" is not a label that points with an arrow to the swimming creature itself. Instead, it achieves sense through its contrast with "meat", its association with "gills" or "scales" and its evocation of "water". In ANT this semiotic understanding of relatedness has been shifted on from language to the rest of reality. Thus it is not simply the term, but the very phenomenon of "fish" that is taken to exist thanks to its relations.

Because of this extension of relationality 'from language to the rest of reality,' of its 'ruthless' application 'to all materials,' ANT has been considered 'a *semiotics of materiality*' (Law 1999: 4). As such, it 'forget[s] about signs and signification, [...] only retain[ing] the stress on interdependence' (Mol and Mesman 1996: 420), thus producing a version of semiotics which 'is not about meaning' (Mol and Mesman 1996: 429).

And yet, the 'insight' of relationality has emerged to be the ground for the relationship between ANT and semiotics only at a later stage.

At first, ANT has learned from semiotics a method. Only through the use of such method, the 'insight of relationality' has emerged as a shared ground between ANT and semiotics.

In semiotics, indeed, Latour initially found a way to describe-analyse agency (Latour 2014a), regardless of the ontological status of agents, by considering relations among entities and how they are transformed. Latour, together with semiotician Paolo Fabbri, was thus able to write the first ANT science studies article, by using semiotics as a 'methodology' able to take 'sociology of science at the heart of [scientific] articles' (Latour and Fabbri 1977: 82, my translation). In the following years, thanks also to the collaboration with biologist and semiotician Françoise Bastide, Latour and other ANT scholars have drawn on semiotics as

- a "method" that allows describing the "interdefinition of actors and the chains of translations" (Latour [1984] 1988: 11) or that allows "following, along the design phase, the user as is inscribed, translated" in a technical object (Akrich 1990: 84, my translation)
- a set of "tools" "used to compare what Einstein says about the activity of building spaces and times with what sociologists of science can tell us" (Latour 1988: 3),
- a way to map "a common ground, a common vocabulary, that would be intermediary between [empirical descriptions] one hand and the ontological questions [...] on the other" (Latour 2000: 251).

ANT has then learned from semiotics an insight about relationality and a method based on relationality. While the insight is still relevant as a general theoretical framework, the method semiotics provides has been relevant for ANT in a more circumscribed way: Mainly during the 1980s and early 1990s, for a limited number of ANT scholars. Nevertheless, for Latour, semiotics has continued to play a relevant role as descriptive—analytical methodology, because it provides an 'organon' or 'toolkit' able 'to record important variations' (Latour 2014b: 265).

#### A semiotics of relational transformations

What Latour refers to as 'organon' for ANT is not semiotics in general, but a very specific strand of semiotics: The one developed by the French-Lithuanian semiotician Algirdas J. Greimas and his collaborators (Greimas and Courtés 1979).

Greimas has turned the linguistics elaborated by Saussure and Hjelmslev into a semiotics not only by extending beyond verbal language the signifying configurations to be described-analysed, but also dynamicising them, by taking into account signification as a transformation occurring among configurations. He has achieved such dynamicisation by integrating Saussure's and Hjelmslev's framework with narratology and the theory of enunciation.

As for narratology, Greimas drew on the analysis of folktales elaborated by Russian folklorist Vladimir Propp and revised it through the relational syntax elaborated by French linguist Lucien Tesnière – the actual coiner of the term 'actant.' Thus, Greimas was able to develop a narrative syntax – considered the syntactic ground of signification – which allows describing transformation of relations among actants.

As for enunciation, by drawing and operationalising the theory of enunciation proposed by the French linguist Émile Benveniste, Greimas was able to describe-analyse the discursive dynamics taking place among various frames of reference. Benveniste introduced the notion of 'enunciation' in order to account for the individual act of appropriation of *language* (*langue*) through which *speech* (*parole*) is produced. Such appropriation entails various tensions between the person, the time and the space from which the appropriation takes place and the person, the time and the space within the produced sentence (Figure 9.2). The descriptions-analyses of these tensions and of the related dynamics give way to accounts of the circulation of meanings through various frames of reference, as well as of the shiftings among points of view and of the positionings of utterers and recipients (Figures 9.2 and 9.4).

These are the features that Latour has found interesting in Greimassian semiotics, which cannot be found in other semiotics that tend to be more rigid and more bound to signs and verbal language, rather than relational transformation more in general.

ANT thus uses Greimassian semiotics to describe the relational transformations it is interested in. However, it has always used Greimassian tools in a limited way, without borrowing 'all of [semiotics'] argument and jargon' (Latour 2005: 55) and formalism, in order to prevent to efface actors' own language, instead of highlighting it (Akrich 1992a).

Nevertheless, the use of semiotics' tools has been extended from literary text, initially considered by Greimas, to 'settings, machines, bodies, and programming languages' (Akrich and Latour 1992: 259), thus overcoming the limits that Latour ([1984] 1988: 183) saw in the way semiotics had been enacted before ANT.<sup>3</sup>

Latour's *infralanguage*, used in order 'to help [analysts] become attentive to the actors' own fully developed metalanguage' (Latour 2005: 49), is indeed built on Greimassian semiotic tools and is used in order to account for

- narrative dynamics related to actants' actions and transformations through semiotic tools like: "actant/actor", "competence/performance", "dictum/modus", "do/make-do", "figurative/non-figurative", "prescription/proscription/affordances/allowances", "program/anti-program of action" (Figure 9.3)
- enunciational dynamics related to the way actants' actions and transformations are framed and made to circulate: "enunciation", "delegation", "shifting in/out/down" (Figure 9.2 and 9.4).

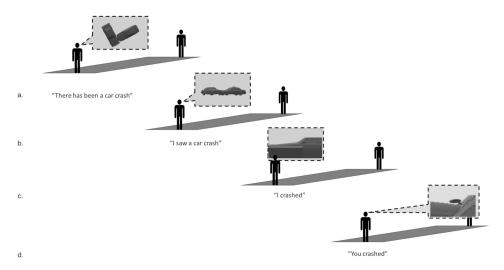


Figure 9.2 Examples of enunciational relations referring to the same narrative relations

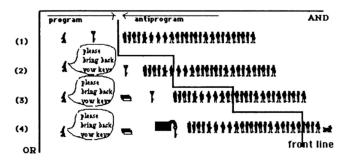


Figure 9.3 Example of the use of semiotics categories and models (Akrich and Latour, 1992: 263). Here, the following models are used: 'AND/OR relations,' 'program' and 'anti-program of action.' The 'program of action' is the goal an 'actor' wants to achieve – in this case the hotel manager wants to have the keys back; the 'anti-program of action' is the opposite programme, in this case carried out by the other 'actors,' the customers, and consists in keeping the key. The diagram shows the way in which, for each new association (AND), the entire set of relations is replaced (OR) by another set

The model built on the category 'association/substitution' or 'AND/OR relations,' able to map relations more in general, is also a semiotic model, coming originally from linguistics (Figure 9.3).

#### Coming out as a semiotics

As we have seen, ANT shares with semiotics – and especially with the semiotics emerged from the Saussurean tradition – an interest in describing-analysing relations and mediations through specific tools, however forgetting, apparently, about signification (Mol and Mesman 1996: 420). Despite the fact that signification, sense and meanings are not issues

often directly addressed by ANT, they are not forgotten, but reframed, breaking away from a dualist and transcendent way of conceiving them, clearly at odds with ANT (Farías and Mützel 2015).

Akrich and Latour (1992: 259) assumed meaning as ANT's object of study by reframing it as 'how one privileged trajectory is built, out of an indefinite number of possibilities.' Akrich (1992a; 1992b) has made clear what 'trajectories' are through her research works on technical objects. For her, signification takes place through differences emerging through displacements, seen as passages from one moment to another of the configuration of relations characterising a specific technical object or as passages between the actions an artefact disposes and the actions a user unfolds. These displacements outline trajectories that can be then seen as 'concatenations of mediations,' in which each mediator 'transform[s] [...] the meaning or the elements it is supposed to carry' (Latour 2005: 39). More recently, Latour ([2012] 2013: 236) has clarified that 'sense' is 'the direction or trajectory [...] traced by a[ny] mode [of existence] and [...] defin[ing] both the predecessors and the successors of any course of action whatsoever,' whereas 'signs,' intended as figures undergoing the same general dynamic of sense, characterise one specific mode of existence, i.e. [FIC]tion. Therefore, for Latour, sense precedes signs and does not need them to unfold.

This way of conceiving sense (Figure 9.1d), signification and meanings is very far from the *signifier-signified* relation, to which these are often reduced by certain strands of semiotics. Yet, it is similar to the dynamics outlined by Peirce for signification, seen as chains of interpretants (Figure 9.1a). Moreover, it complies with signification as intended by Hjelmselv (Figure 9.1c), especially if considered, as Gilles Deleuze and Felix Guattari ([1972] 2003: 241) did, like 'flows of form and substance, content and expression,' i.e. not as a rigid relationship between a *signifier* determining a *signified*, but as encounters between different *agencements* (or configurations), for instance, the *agencement* of the movements of a technological object, with the *agencement* of the movements of users, referring to a situation considered by Akrich (1992a; 1992b).

By addressing signification and sense, ANT turns out to be a semiotics in itself. Moreover, it turns out to be a quite innovative semiotics, able to combine in a new way the two main semiotic traditions, the one derived from pragmatism, more philosophical, and the one from structuralism, more scientific. Through a pragmatist reading of the structuralist Greimas, homologous to the pragmatist reading of the structuralist Hjelmslev, carried out by Deleuze and Guattari ([1972] 2003), ANT is indeed able to provide Deleuze and Guattari's reflections on signification an actual descriptive—analytical methodology and empirical grounds on which to probe it.

#### What ANT can learn from other semiotics, still and again

Being ANT a semiotics, the initial question needs to be modified into 'what can ANT still learn from *other* semiotics?'

The answer to this question cannot but waive basic notions like signification, relationality and mediation, already appropriated and reformulated by ANT in the process of becoming a semiotics.

What is left to learn, as it happened at the beginning of the relation between semiotics and ANT, are then descriptive—analytical tools, i.e. terms, categories and models.

Greimassian semiotics, from which ANT has mainly drawn the already learned tools, has indeed kept refining old tools and elaborating new ones, of which ANT knows very little, since the relation between ANT and semiotics faded during the 1990s.

However, new and refined tools are not the only ones ANT can learn. Only few scholars have indeed followed Latour's example and used semiotic tools in a systematic and extended way, especially after the 1990s. Therefore, old tools are often unknown to many ANT scholars, so that they can also be learned again.

Given the limited space, I will provide just two examples of the tools ANT can learn anew and of their background that needs to be relearned. The two examples will refer to the main sets of relations, which these tools allow to describe-analyse.

#### Narrative relations

As Latour (2014b) has recently noted, the semiotic category of 'actant/actor' has been key for his work in order to describe the unfolding of agency, by accounting for actions and transformations of any entity. The terms constituting such category have been used by Latour and other scholars in at least three ways. Each of them gives relevance to different aspects of the terms and of the category.

First, 'actant' has been used to point to 'anything that acts' (Latour 1992), regardless of its ontological status, size, scale, features, etc., thus providing the principle of symmetry with a descriptive term.

Secondly, 'actant' has been used in tension with the term 'actor,' thus having the possibility to distinguish between actants. The fact that anything that acts is an actant does not mean that what acts is reducible to the performed action and then that it is 'just' an actant. Any actant can enjoy other relations and have other features that distinguish it from other actants. Thus, for example, the action of reminding to bring the hotel room's key back can be performed by a written note or by a weight attached to the key (Figure 9.3). They are both actants and, as for the action they perform, they are the same actant: They occupy the same position within the network manager-desk-key-customer, by providing the latter with a certain competence, namely a knowledge. However, on another level, with reference to other relations, they are different – they are different actors: A written note, a weight. The first is white, flat, made of paper bearing inscriptions; the second is brown, bulgy and made of metal. Because of that, notwithstanding they perform the same action related to providing a knowledge to the customer, they do that in different ways, so that the second results to be more effective in contributing to the success of the hotel manager's program of action (Figure 9.3).

Thirdly, 'actor' has been intended not just as an actant provided with its various features besides the action it accomplishes, but as 'what is made the source of action' (Latour 2014a). Thus, 'actor' has been intended as the specific entity to which agency is attributed, despite the fact that agency always unfolds through many actants. Akrich (1993) has called the 'actor' seen in this way 'author.'

As we can see, by deploying semiotic tools, 'variations,' differences, can be recorded and comparisons made, among entities, as well as among their features. Allowing the detailed description-analysis of actant-actors and of their actions was indeed the aim of Greimas' narrative grammar. In order to achieve such aim, Greimas elaborated many more terms and categories than those actually used by ANT. He, for instance, introduced other levels between the actant and the actor like actantial and thematic roles. Thus, for Greimas, any actor can cover one or more thematic roles, which, in turn, are performed by covering one or more actantial roles.

Akrich (1990; 1993) is one of the few<sup>4</sup> to have actually took advantage of a more stratified articulation of the 'actant/actor' category, by considering also 'positions' (Akrich 1990) or

'postures' (Akrich 1993) – akin to Greimas' 'thematic roles.' Analysing the design process of a pay-TV service, she has been able to show that the connection between the receiver and the VCR had been neglected, since it would have disrupted the superposition of 'actant,' 'position-posture' and 'actor-author' necessary for the service to work. With

- "actants", she referred to elements of the receiver related to a certain action, like the button "enter":
- "position-posture", she referred to roles assumed by entities, in relation to the milieu in which they would act as, for instance, "the subscriber", "the viewer", "the paying viewer":
- "actor-author" she referred to the entity to which the action can be attributed.

For the service to work properly, the three entities need to superpose, so that to the action of pushing 'enter' corresponds a 'viewer,' to which the action can be attributed and thus made responsible for payments.

ANT can thus learn again to further articulate the 'actant/actor' relation, in order describe and compare more in detail actants and actors.

Such opportunity is even higher today, thanks to the questioning that both ANT and Greimassian semiotics have carried out of action, in order to give relevance to passions and affects. This parallel reconsideration of action, acknowledged by ANT (Hennion, Maisonneve and Gomart 2000), has led both to thematise more and more the role of the body. Jacques Fontanille (2004), French semioticians collaborator of Greimas, has recently proposed to integrate the body or, better, a schematic version of it that works for humans as well for non-humans, into Greimas' narrative syntax. Fontanille has thus provided the actant with a body, allowing to account for actants' senses and passions or, more in general, affects, intended as 'change[s], or variation[s], that occur when bodies collide, or come into contact' (Colman 2005: 11).

Fontanille, in a way similar to the one attempted by Tim Ingold (2007) for the description of materials and their perceptions, shows how contacts and collisions among bodies can be described as pressures-penetrations and envelopments involving internal substances – like flesh – and their envelopes-surfaces – like skin.

I deem Fontanille's schematisation of the body a new tool ANT can learn from Greimassian semiotics, which allows ANT to address up-to-date issues like affects and to describe their unfoldings in detail.

For instance, only by considering the bodies of the actors accompanying the hotel's key (Figure 9.3), we can actually account for their different efficacy. While the written note acts only through its inscribed envelope-surface, which has to be taken into account by the customer's body taking a certain distance from it, the weight reminds of its presence continuously when in contact with the customers' body, by pressing the latter on its surface-envelope through its specific internal-substance and envelope-surface, which provide weight's consistency and shape.

#### **Enunciational relations**

The Greimassian enunciational model (Figure 9.2) has been key for Latour's work in order to distinguish fiction from science (Latour 1988; Figure 9.4), technology from fiction (Latour 1992), science from law, to describe religion and, eventually, to organise the various modes of existence (Latour [1998] 2017; [2012] 2013).

Indeed, through it, Latour has been able to account, distinguish and compare the ways in which entities circulate among different frames of reference. For instance, he has shown how

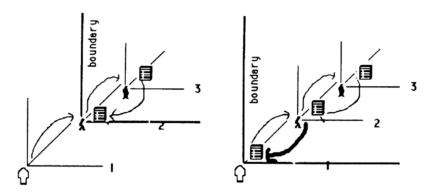


Figure 9.4 Enunciational dynamics in fiction and in science (Latour 1988, 14)

in fiction, figures tend to be shifted out within nested frames away from the original situation of enunciation, whereas in sciences, references tend not only to be shifted out within nested frames, like in fiction, but also to be shifted in, back towards the original situation of enunciation (Figure 9.4).

Despite the relevance the Greimassian enunciational model has had for Latour, it has been neglected by ANT scholars. Because of that, it is certainly a tool that ANT can learn again and, in a certain way, anew from semiotics.

As it should emerge from the references to frames, as well as from the examples provided here, the Greimassian enunciational model can contribute to provide tools to develop an ANT approach to media, which would be able to consider the relation between technology and what is displayed in and through technologies – what Latour ([2012] 2013) would call the intersection between fiction [FIC] and [TEC], or what media scholar Roger Silverstone called the 'double articulation' of media.

This is not such a novelty, given that enunciation, in general, and the Greimassian model more specifically have been widely used in the neo-Latin-speaking world to analyse various forms of communication, probing its efficacy especially for forms of visual communication (advertisements, paintings, cinema, television, etc.). These analyses have mainly focused on the dialogue images disposed with the recipient. The Greimassian model of enunciation could be further used, however, in order to account for the role of media technologies, and especially the role of interfaces, which dispose various shiftings in and out among frames of reference, as well as modes of existence.

Such an approach could lead to rearticulate the present debate around ANT and media. Indeed, the enunciational model, by fully considering mediation (Hennion [1993] 2015), allows accounting for 'the ways in which particular framings of entities are made to circulate,' as asked by Marres and Rogers (2008, 276). However, at the same time, by being akin to a 'diffusionist model[...], which conceive the dissemination of information as a movement from source to recipients,' criticised by Marres and Rogers (2008, 276), it also allows to account for the framed entities and thus account for dynamics that are usually filed under the notion of 'interpretation' – deemed key by Nick Couldry, but criticised by Marres and Rogers. However, such 'interpretation' would take place through dynamics akin to those studied by Akrich (1992) for technical objects (see above), related to the passage between the actions a certain frame and what framed dispose, and the action a recipient unfolds. Using semiotic tools relative to both narrative and enunciational relations would make such approach possible and, I deem, productive.

### Conclusions: The conditions at which ANT can learn from semiotics still and again

From semiotics, and specifically from Greimassian semiotics, ANT has learned the use of various tools – terms, categories and models – enabling the description-analysis of relations. Through their use, ANT has learned the 'insight of relationality.' Furthermore, by unfolding these tools and this insight, ANT has turned out to be itself a semiotics.

Today, ANT can still learn new tools, as well as refined old ones. Indeed, since the 1990s, the exchange between ANT and Greimassian semiotics has faded and ANT has stopped being up-to-date about other semiotics. Given that the tools previously learned have been used only by a limited number of ANT scholars and, though with relevant exceptions, for a limited time, besides the new tools, ANT can also learn again the old ones – and actually this would be a necessary step in order to learn the new ones.

This chapter has then been less of a showcase of new Greimassian semiotic tools, than a refresher of old ones and of the grounds on which the previous learning has been possible.

At the end of this walkthrough, another question can thus be raised: 'Why has ANT stopped learning from semiotics?' Answering it would not only require another chapter, but a further research.

As for now, I intend to conclude by only touching upon the conditions at which I consider ANT can learn still and again from semiotics. Given that the failing of these conditions cannot but lead to a missed learning, their listing provides a first outline for a possible answer to the question emerged here in the conclusion.

ANT can learn from other semiotics still and again if

- 1 it is interested in description if it is actually 'descriptive' (Law 2008: 141). If ANT is mainly interested in other activities like developing concepts, theorising, speculating, providing empirical examples for specific concepts, then, there is not much to re/learn, since semiotic tools are not meant to enable these activities at least not directly;
- 2 it is interested in describing in detail relations, or, in Latour's terms, 'associations,' of any kind, included those 'out of which [actors are] made' (Latour 2005: 233);
- 3 it provides, within its architecture, relevant room and autonomy for the methodological level, a 'middle ground' (Latour 2000: 252), in between the theoretical-conceptual and the empirical ones, around which ANT, like other STS approaches, 'continuous[ly] variat[e]' (Jensen 2014). Indeed, the methodological level is the one on which semiotics mainly operates and from which it addresses the other levels (Figure 9.5);
- 4 it considers, within the methodological level, not only data-gathering methods, summarised by 'follow the actors themselves' and 'generalized symmetry,' which have always characterised ANT as more of a methodology than of a theory (Law 2008: 141; Mol 2010: 253; Sayes 2014: 144), but also the descriptive—analytical methods and tools. Basically, what Latour calls the *infralanguage*.

Indeed, this methodological aspect of semiotics has been the one that led Latour to learn it at first:

the systematic study of texts in this French tradition became what was imported into an American context as 'Theory.' While on this side of the Atlantic, I took it as exactly the opposite of 'theory': as the chance to acquire an empirical method.

(Latour 2016: 468)

This is still the aspect that can lead ANT to learn from other semiotics, still and again.

Conceptual-theoretical level

#### 4. Epistemological level Assessment of the consistency of level 3 and of the descriptions and discoveries taking place on level 2. Infralanguage + Follow the 3. Methodological level actors+Symmetry + principles for writing Notions and procedures giving way to level 2 are here elaborated. good accounts 2. Descriptive level Accounts - Analyses Metalinguistic representation of level 1. **Empirical level** 1. Material studied or Object-**Empirical level** language level b. a.

Figure 9.5 Comparison among disciplinary architectures: a. Greimas' (Greimas and Courtés [1979] 1982: 107 and 171); b. Latour's (2005)

#### Notes

- 1 But see Muniesa (2015) for an outline of ANT where semiotics is considered; Beetz (2017) and Høstaker (2005) for an account of the Greimassian semiotics in Latour's work; Blok and Elgaard (2011) and Schmidgen ([2011] 2015) for a general account of Latour's work, where semiotics is considered; Lenoir (1994) for a critique of Latour's use of semiotics.
- 2 After Hjelmslev ([1943] 1961: 131), in semiotics, an analysis is considered a description of relations. In order to highlight such connection, I will use the two terms together.
- 3 Actually, Greimassian semiotics has always tended to describe-analyse configurations beyond language and literary texts, which also resulted in early forms of ANT (Greimas [1972] 1995: 73). Since the 1990s, such extended use of semiotics' tools has been systematic (Floch [1995] 2000; Marrone 2002).
- 4 Denis and Pontille (2010) recover Akrich's proposal.

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