Space, territory, and territoriality

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Abstract. In this paper I reconstitute my own approach to the notions of space, territory, and territoriality. Developing from the early 1970s, my thoughts resided in the effort devoted to deriving from space the idea of territory qua production by the projection of labor, a Janus-faced category composed of energy and information. The construction of territory is the consequence of territoriality—defined as the ensemble of relations that a society maintains with exteriority and alterity for the satisfaction of its needs, towards the end of attaining the greatest possible autonomy compatible with the resources of the system. I also propose a descriptive model utilizable in the production of territory as well as in the production of representations of this territory in making available 'images' or landscapes. In the conclusion I draw attention to the fact that if labor is always a mediator, it is not thereby any less subordinated to the money whose possessors are in a position to alienate labor by subjecting it to orientations that can be undesirable. Money accelerates the process of territorialization, deterritorialization, and reterritorialization. Geography, by considering only territorial productions, has neglected to take up the issue of labor; consequently, it has not been able to demonstrate the effects on labor of money as a mediator that has rendered everything more and more fluid.

Keywords: territoriality, territory, space, power, mediation, labor, money

Introduction: genealogy of a thought

The exercise I undertake here resembles a 'confession' in many respects. I place the word in scare quotes since it will not reveal my scientific, and thus public, sins, which could have been or could be brought to light by criticism, whether trenchant or not. But it remains a confession that, by definition, can be received as true or simply refused if not considered true. The genre is subject to caution and, at some level or another, it never fails to spark polemics. It is never easy to reconstitute the development of a way of thinking, and it is even more difficult when it is one's own thought processes. Setting aside modesty and humility, to be judge and party to the dispute is not the most comfortable position, precisely because one can lie, nearly completely in good faith, and begin to fabricate things without feeling any sense of guilt. It is thus a dangerous exercise, with many risks. Nevertheless, knowing that I can rely on the authors who have inspired me for forty-five years, I believe that I can effect a reconstruction in the style of a Foucauldian archeology, whose interpretation will at least preserve the heritage of the ideas in the words, if not the entirety of the thought.

First, I will attempt to establish as precisely as possible the genealogy of my own conceptual thinking about space, territory, and territoriality, reconstructing the puzzle of influences received and borrowings made from multiple authors over the years. Second, I will present a descriptive model capable of restoring territoriality in a synthetic manner, simultaneously as a system of relations with material and immaterial realities and as a system of the representation of these realities. Third, I will attempt to conclude this essay with a reflection on the evolution of the mediators of these systems that I believe I see arising, in particular: the role of technical – scientific knowledges

in the process of domestication and simulation of territories, the role of labor, and the role of money, which exhibits a steady tendency of increasing in importance.

Conceptions of space

Since the 1970s I have tried, over the course of my published work, to follow a strain of thought that has varied here and there but has remained rather coherent, it seems to me, in its entirety. When I began to reflect on the concepts of space, territory, and territoriality, I did so in the context of a desire to refound or reformulate political geography, even though these concepts were not specific to a particular area of geography but, rather, concerned geography in its entirety. Reformulation is, without a doubt, the more precise term to express what I wanted to do, given the dissatisfaction I felt then. It is after having elaborated a relational problematic that I understood the necessity of deriving these concepts from each other, privileging, naturally, the activity of the actors (Raffestin, 1980). I took space as a given, a first material offered, on the whole, to human activity. As this space is constituted by natural ecosystems and all the factors characterizing them, it is the given 'original prison'. Some will speak of *nature* and others of *space*. Societies, and consequently those who belong to them or are a part of them, maintain relations with this space or nature and transform it into territory, a constructed or produced 'derived prison' (Raffestin, 1986). The given constraints become produced constraints through the effects of culture, considered from an anthropological point of view.

This space is worked by the actors and is 'layered' (*feuilleté*), in the sense of a pastry, or 'leafed' (*feuilleté*), in the sense of browsed through quickly, as one does with the pages of a book. To leaf is at the same time to model and to browse: to model images and browse through representations of this reality. At this point, to make myself better understood, I might be permitted to evoke Jorge Luis Borges's *Book of Sand*:

> "He told me his book was called *The Book of Sand* because neither sand nor this book has a beginning or an end. ... It can't be, yet it *is*. ... The number of pages in this book is literally infinite. No page is the first page, no page is the last" (1998 [1975], pages 481 – 482).

Borges's fiction is a splendid metaphor for illustrating the problem that space poses, particularly socially produced space, whose origins retreat constantly from view. Space is the book, and vice versa. As opposed to what some might think, I am being serious and offer as proof a citation from a geographer who, like Borges, writes in the preface of an important book, "This book has no beginning and no end. It is a tapestry woven at dawn and undone at dusk. Like Penelope's shroud, it grew out of necessity and desire" (Olsson, 1975, page I). Neither beginning nor end, as with Sisyphus's punishment. There are things that must be repeated ceaselessly, that must always be begun anew.

Without doubt my method can appear too metaphorical and/or too symbolic—in a word, insufficiently continuous with what we commonly call 'geography'. I note and retain this objection to return to it later, but perhaps Einstein will receive more charity for what he writes in his preface to Max Jammer's book, originally entitled *The History of Theories of Space in Physics*: "Both space concepts [ie, relational and absolute] are free creations of the human imagination, means devised for easier comprehension of our sense experience" (1969, page xv). Even if the space of physics is not that of geography, the two concepts have in common their status as 'intermediary tools'. This means that the concept of space has preoccupied the human spirit from antiquity up to today. Whether it is in what we call the natural or social sciences—to which it is permissible to add painting and sculpture—in all of them, in one moment or another, theorists have had to argue over one or several conceptions of space. Some have even gone so far as to say, "Our epoch will be that of 'space'—which seems sometimes to

imply that the preceding one was that of time" (Benoist and Merlini, 2001, page 7). Naturally, geography has not escaped from this, with all the difficulties this entails for the evolution of the discipline.[1]

That is why I believe it has to be said at the outset, keeping Einstein's affirmation constantly in mind, that space is an invention or, if you prefer, a construction; it is a concept that permits us to act. It is a question of nothing other than a tool modifiable according to the dictates of need. Extending this idea, I offer for proof Karl Popper and John Eccles's proposition of the three worlds, which are not only useful 'objects' for breaking open the real but also modifiable at every moment for improving and developing our knowledge of things (Eccles, 1991). World 1 concerns things and material states; world 2, states of conscience, emotion, and subjective knowledge; and world 3, knowledge taken objectively. These invented worlds, crossed with the primary forms of language common to animals and humans as well as the superior forms proper to humans, encompass all forms of existence and all experiences. It is no less than a 'scaffolding'—in other words, an instrumental ensemble utilizable for a scientific construction. It would occur to no one that these three worlds might have any other reality than what normally attaches to a representation. It is sufficient to recall a banality here, that the creation of representations is permanent and will never cease so long as there are humans in the position of seeking to satisfy their needs. In this case we rejoin the conception of Benno Werlen (1993 [1998]) for whom what is pertinent is action rather than space.

Space is a concept that cannot be defined absolutely or permanently. Such a definition would prevent all evolution and contradict the idea of progress, in the sense of new discoveries. It is a concept that permits positing or inventing a means to go beyond, in order to express both material and immaterial realities. As a starting point, it is constantly questioned anew, since the object of geography—as its name indicates—is the knowledge of humans' knowledge and practice of the material reality that we call the 'Earth'. The object of geography, in the scientific sense of the term, is thus a relation—or, if you prefer, an ensemble of relations—formed between actors and a material and/or immaterial reality, as is the case with all symbols attached to the Earth, for instance. The multiple, varied, and changing relations of humans with this material reality over the course of time reveal, if not all then at least a certain number of, the potentialities of this reality: Elisée Reclus (1876) understood this perfectly and expressed it in the first volume of his *Universal Geography*, which is developed in a relational manner that is certainly implicit and sometimes directly explicit. It is because of this relational labor undertaken by humans to satisfy their needs that societies accumulate the knowledges and practices that are the object of representations. We are not very far from a possible definition of the sort of anthropology alongside which geography has travelled for a stretch, for two centuries now. Did not Friedrich Ratzel (1882) entitle his great work *Anthropogeographie*, which today we would call human geography? Did not Philippe Descola write, apropos of anthropology,

"Its mission, as I understand it, is to contribute alongside other sciences, and according to its own methods, to render intelligible the manner in which organisms of a particular sort insert themselves into the world, acquire a stable representation of it and contribute to modifying it by forming constant or ad hoc links with it and between themselves, links of a diversity that is remarkable, but not infinite" (2005, page 12).

[1] Compare with a recent thesis by Alexios Kitsopoulos (2005) from the Department of Geography, University of Lausanne which demonstrates this in an extremely interesting manner.

Human geography is not far from this position. It is still necessary to bear in mind that relations, although identical in appearance, can be dissimilar in their deeper structures.

When geographers address the issue of space, they give the impression of undertaking investigation of an absolute space, a grail of some sort that obviously does not exist. It fails to exist to the extent that space, as a certain conception of geography would have it, is a mental construction of the human species that maintains relations both with what we can call exteriority and with alterity for the satisfaction of its needs. Other animal species, of course, have their own constructions, as developed by Jakob von Uexküll (2010 [1934]) in a small work that is already old, but still of considerable significance. Nonhuman animal species also have a representation of their surroundings, without which they would not be able to satisfy their needs. They probably also have a representation of their 'geography', but—in contradistinction to that of humans—we cannot access this except through experiences and programs that would allow us, in whatever form, to make them explicit (von Uexküll, 2010).

To return to the human species, we find ourselves in the presence of a layering (*feuilletage*) composed of a set of adjectives for qualifying various sorts of spaces, whether physical, mathematical, symbolic, behavioral, etc. According to the geographical school or tradition to which one belongs (French, Anglo-Saxon, German, or Italian, to take only those that I know a little), the denominations change palpably, all the while seeking to describe more or less similar realities. This means that these spaces—in fact, the representations that we produce on the basis of analyzed realities—are created in accordance with the needs of those who attempt to understand and explain phenomena in direct or indirect relation with the terrestrial surface. These are naturally relational phenomena, since what is always at issue is making these relations explicit.

Territory and territoriality derive from the activity that humans carry out in the space that is given or provided to them in common, within the limits of the conception that they have of it. The concepts of territory and territoriality belong not only to the juridical sciences but also to animal ethology, which preceded human ethology. Both are key concepts of animal ethology, defined at the beginning of the 20th century. H Eliot Howard (1920), for example, understands territoriality as the distinctive conduct of an organism to take possession of a territory which is defended against members of its own species. The underlying idea of this concept is an old one. Naturalists, and ornithologists, in particular, were aware of it already in the 17th century, but did not articulate it explicitly. Animal territoriality was investigated in the 20th century by a large number of authors—in particular, von Uexküll, Heini Hediger, Konrad Lorenz, John B Calhoun, and Edward Hall, to cite only the most well known.[2]

The transfer of concepts and their adaptation to the social sciences was realized, broadly speaking, between 1965 and 1975. In this domain psychology was probably, even certainly, the discipline that outpaced the others. Who was the first geographer to employ conjointly the notions of territory and territoriality? That is a question that is not without significance, but to which it is difficult to respond. It is, perhaps, a bit simpler if we pose the question in the plural, losing the idea of priority but gaining contextual precision: who were the geographers to employ conjointly the notions of territory and territoriality?

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[2] Compare with von Uexküll (2010 [1934]) and Hall (1966). The other authors mentioned above are primarily interested in animal ethology, and, consequently retained my attention to a lesser degree.

Territory and territoriality

Before attempting to respond, it is perhaps appropriate to pose another question which, in a certain manner, is complementary to the first: why, when, and how did these concepts arise anew in geography? Representations are like currency: they are subject to inflation and progressively lose their value. In other words, some tend to take it that reality is represented in a less and less adequate manner. This is a signal that triggers the emergence of new modes of representation. We can speak of crises, and eventually of epistemic crises, when certain foundations of the discipline are affected. I wrote a paper on this subject in the middle of the 1980s, showing that for several decades geographers generally used the term 'space' accompanied by an adjective to define its extension, thus unrestrainedly, yet without great result, relayering and manipulating the concept (in the sense of a layered or leafed pastry spoken of above). The concepts of territory or territoriality probably appeared in a context of dissatisfaction. It would thus be difficult to doubt that space, while continuing to be evoked, was pushed aside by territory and territoriality. In the same sense, today more and more geographers ask whether territory is still necessary (Antheaume and Giraut, 2005; Chivallon, 1999; Raffestin, 1989). Posing the problem in this manner does not appear of great importance to me. In effect, either concepts have a sufficiently defined content or they have a rather vague content. Where their content is vague, it can be amended, but otherwise this does not seem to serve any particular end.

But let us return to our principal question. For Edward Soja (1971) territoriality can be understood as a behavior associated with the spatial organization in spheres of influence or in delimited territories which assumes different characteristics and can be considered as exclusive of the one who occupies them and the one who defines them. Soja adds that territoriality affects human behavior at all social activity levels and that the notion is constructed from the Western idea of private ownership. Robert Sack is very close to Soja in his definition of territoriality (1986, pages 1–2). Jean Gottmann, with *The Significance of Territory*, probably both preceded everyone and acted as a liaison—significantly, I would say—between Anglo-Saxon and French geography (1973; see also 1952). Marginalized by a French geography that did not award him the place he deserved, but well received by Anglo-Saxon geography, Gottmann, to whom I am happy to pay homage, assumed a role that is yet to be articulated and evaluated. I would not be able to say if I have drawn the idea of territory from him, but it is quite probable that he influenced me.

My first reflections on territoriality followed Soja, but my first papers did not appear until 1974. Heitor Marques writes, referring to them,

"Territoriality is a set of relations that finds its origins in a three-dimensional social space-time system and corresponds to the actions of several social system agents in a certain geographical area and historical moment. In these relations are included the processes linked to the sphere of production and cultural elements, such as linguistics, morality, ethics and religion, all the set of behaviour standards given by beliefs, as well as spiritual and material values" (2009, page 3).

English and American geographers—such as Doreen Massey, Sack, and others—played an important role in the study of territoriality, but in general their studies appear after 1980: the use of the terms *territoire* and 'territory' have a similar origin in geographies written in French and in English. Anglophone geography, when it makes use of the concepts of territory or territoriality, generally remains faithful, all in all, to the traditional meanings of these terms. However, it does seem that, beginning in the 1980s, we see in English-language geography a relative convergence of authors around the term 'place' and a deepening of reflection on its conceptual value. Paradoxically, this evolution seems to have been partially initiated by the

practitioners of a critical geography of the sort which David Harvey is one of the most illustrious representatives. These authors invest the word 'place' with a social, cultural, and political dimension that contains a critique of political territory, its rigid delimitation, and the state control that is coextensive with it. Thus Massey has long preached the need for a central role for the notion of 'place' in the discipline, provided that it escapes the principally Heideggerian perspective that has guided humanist geography. She recommends associating with it a 'progressive' signification that would permit not only emancipation from an exclusively territorial conception of political action but also recognition of the importance of the social diversity that animates places, the capacity of places to express the interaction of phenomena of different scales, and the types of experience that individuals can have in these places of this diversity and of these interactions: "Instead of thinking of places as areas with boundaries around, (places) can be imaged and articulated moments in networks of social relations and understandings" (Massey, 1993; quoted in Debarbieux, 1999, pages 33 – 34).

As for Sack, he writes that,

"Territoriality in humans is best understood as a spatial strategy to affect, influence or control resources and people, by controlling area; and, as a strategy, territoriality can be turned on and off. In geographical terms, it is a form of spatial behavior" (1986, page 1 – 2).

Whereas for me territoriality is essentially the translation of a system of relations that neither affects only territory nor derives from it completely, for Sack it is fundamentally "a human strategy to affect, influence and control" (page 19). The two visions are not incompatible, but they overlap only slightly.

It is interesting to note that (except for Soja) geography began, paradoxically, to use these concepts rather late. This is all the more paradoxical considering that these concepts are directly linked to geography by their nature. Or, in fact, perhaps there is nothing paradoxical here, to the extent that the emphasis on these concepts coincides with the triumph of the quantitative geography that, without a doubt, eclipsed the paradigm of territoriality in the 1960s and 1970s.

For myself, I have insisted on the system of relations since the beginning of my work, as dictated by my understanding of geography and the relational problematic I took up. I would claim that the relational system is just as important as the material realm, if not more so, because territory, in my conception, is the result of the production of actors. This is a fundamental idea expressed by Henri Lefebvre (1991 [1974]) in his *The Production of Space*. This author, philosopher, and sociologist was an essential milestone in my intellectual journey, as well as in the intellectual journeys of many other geographers of my generation—and subsequent generations, for that matter. Lefebvre utilizes the term 'social space' to designate a 'production'—that which makes a community from an ecosystem that is apportioned to it. Territory, as I employ the term, is nothing other than this, to the extent that it is produced.

We encounter an important issue of terminology here. We must, however, also know how to relativize and to adapt terminology, precisely because authors do not all come from the same cultural – scientific matrix. They utilize terminologies borrowed from different disciplines like—amongst others—those of geography or sociology, as in Lefebvre's case. This obviously signifies that there is no bi-univocal correspondence between two concepts issued from different disciplines. We have to search for 'bridges' to relate or compare them.

In my system territory results from the projection of labor—energy and information— by a community into a given space. This 'relational vein' has been exploited up to the present time, something to which the work of the sociologist Andrea Brighenti testifies.

Studying territoriality—albeit from another perspective, a juridical rather than geographical one—Brighenti comes to conclusions quite near to my own:

"Whereas traditional conceptions tend to conflate territory and its physical spatial extension, this paper advances an argument to oppose such reductionism. It explores the features of a non-intuitive, radical conception of territory and proposes to apply it to law. Relationship, rather than space, is suggested to be at the conceptual core of territory, so that spatial and non-spatial territories can be seen as superimposed one onto the other and endowed with multiple connections, according to different scales and degrees of visibility. Territory is regarded as an activity of boundary-drawing and as a process which creates pre-assigned relational positions, both of which are key concerns for law. From this perspective, law is an inherently territorial endeavour. The focus of enquiry is consequently shifted to the actors who, by building and shaping their social relationships, draw different types of boundaries, on the technologies they apply, and the aims they attempt to achieve through boundary-drawing" (2006, page 65; also 2010).

The role of the actor appears to preponderate, and its relations appear capable of conceiving different territories in the space 'drawn' by the play of boundaries. I recently discovered by chance that my relational problematic approaches in certain aspects the position developed by Bruno Latour (2005) in one of his works treating the social, although this is not the place to pursue that discussion.

My first reflections during the 1970s were crystalized in a text that was not published until 1977 (Raffestin, 1977). In this text I used the concepts of 'presentation' or 'acquaintance' and 'representation' (Cassirer, 1944, page 46) in a perspective of mediation through languages. Already by that time I had defined the notions of geo-structure (geographical, material reality) and geogram (representation of the material geostructure). The opposition between landscape and territoriality bears witness to the opposition between the 'seen' and the 'lived'. The notions of limit and border, of network and ecogenesis, were developed in various papers and books over the course of the following years. Most of these themes were evoked or treated in *Pour une Géographie du Pouvoir* (Raffestin, 1980). I would like to evoke some of the authors who contributed to fueling my reflections. To employ an expression from Michel Foucault, they have been for me a 'toolbox', in the noblest sense of the term.

Among those who stimulated my thought the most strongly, I will cite, in addition to those already cited, sociologists such as Serge Moscovici (1968) and Michel de Certeau (1984) and linguists such as Umberto Eco (1972 [1968]; 1976 [1975]), Luis Prieto (1975), Jurij M Lotman (1985) as well as many others belonging to other disciplines, such as René Thom (1989), Harold Innis (1950), Ferruccio Rossi-Landi (1985), Henri Laborit (1973; 1979), and Pierre Vendryès (1973). The length of this paper does not permit a presentation of these authors who are found throughout my work, who have influenced me over time.

From Moscovici, who inspired me greatly, I borrowed the idea of different 'states of nature'. These provided a framework for a general, evolutionary understanding of territoriality in which the labors of reproduction and invention play a fundamental role, whether in the organic, mechanical, synthetic, or cybernetic state of nature. I remember having seen, while traveling in Tunisia, a symbolic image of these three states of nature juxtaposed with—or, better, nested in—one another. It was a traditional granary of a seminomadic population, in front of which could be seen an old Peugeot. On top of the granary itself was a television satellite dish, the 'intrusion' of the outside world into the scene. That is to say that these noncontemporaneous states of nature coexisted well and truly, even as they belonged to distinctly different epochs.

To these states of nature there correspond territorialities or systems of relations that constrain the admission that the classical opposition of nature and culture does not exist precisely because the nature that is transmitted from one state of nature to another is strongly marked by anterior cultures. The idea of nature changes over the course of time, as do the actors who mold future ecosystems. The molding of ecosystems is a dual process, insofar as it is material through *körperliche Arbeit* (manual labor) and immaterial through *Geistesarbeit* (intellectual labor) (Sohn-Rethel, 1977 [1970], pages 1, and 3 – 4). The first plays an essential role in material production, while the second is important in the production of representations, but they must be considered together, like two sides of the same coin. One of the weaknesses of contemporary geography, it seems to me, is not having taken account of labor and, consequently, not having analyzed it as such. We have nearly always taken account of the productions that result from the projection of labor, but never labor as such. Labor is a constitutive category of territoriality, because it lies at the origin of power. Without labor there is neither transformation nor conservation or maintenance of ecosystems nor, finally, representation. As the original source of power, labor plays a fundamental role in the ecogenesis that is difficult to reconstitute, but possible to sketch with some validity as is done by rural and urban historians. Above all, it must be kept in mind that all systems of relations are complex, the most ancient no less than the most recent. A traditional society is not easier to describe than a contemporary one. It is, above all, important to pick out of cultural evolution the moments of transgression that highlight the norms linked to interdiction. In all territoriality there functions a dialectic of prohibition and transgression, interdiction and violation, norms and the failure to respect them.

This problem of transgression leads us to the notion of the 'limit', not only in a concrete sense, in space, but also in the abstract space of rules and symbols. It is impossible to understand territorial production without the notions of border or transgression, the latter of which has the value of a cultural mechanism of regulation: culture is a catalogue of limits, and history a catalogue of their transgression. A culture is also a catalogue of possible transgressions: every limit is an opportunity for transgression and thus, in a certain sense, an occasion for creativity, as shown by many great myths:

> "Two antithetical concepts make it possible to classify ideas of the origin and the originative character of myth: *poetry* and *terror*. At the beginning stands either the imaginative extravagance of anthropomorphic appropriation of the world and theomorphic enhancement of man, *or* the naked expression of the passivity of fear and horror, of demonic captivity, magic helplessness, utter dependency" (Blumenberg, 1985, page 59).

There would be much to say concerning terror and poetry in geography, concerning the collision between myth and reality. These two terms are not simple words but 'universes' that delimit the axis on which geographical representations develop towards infinity— terms to which are often attributed adjectives (as with 'social' geographical, or 'political' geographical) that obscure more than they elucidate geographical meaning.

It is thanks to von Uexküll that I understood the biological interpretation that must be given to Ludwig Wittgenstein's formula: the limits of my world are the limits of my language. The discovery and interpretation of our world depends on mediators, insofar as it is a question of endosomatic mediators, such as sensory organs or exosomatic mediators, such as the instruments and cultural tools created by people. Mediators play an extremely important role in territoriality, as they are tools of apprehension of and relation with the environment. I will broach the question of mediators in greater detail below.

In the second half of the 1970s I proposed more than just a definition—let us even say a program—for human territoriality that can be described as follows: the ensemble of relations that societies, and consequently the humans that belong to them, maintain, with the assistance of mediators, with the physical and human environment for the satisfaction of their needs towards the end of attaining the greatest possible autonomy allowed by the resources of the system. Territoriality is in some sense the 'skeleton' of everyday life as analyzed by Lefebvre (1971 [1968]). As he himself said, everyday life is what goes without saying, but is not thereby any easier to know. Everyday life most often occurs in territorial morphologies that are not contemporaneous to the relations of which territoriality is woven.

At another level we can follow the evolution of borders to understand what we could call political territoriality (Raffestin, 1986, page 180; 2001). This is the problem of the process that I have called TDR: territorialization, deterritorialization, reterritorialization (Deleuze and Guattari, 1987 [1980], page 348; 2004 [1972], page 36). The temporal intervals between these various phases of the process can be quite short or, on the contrary, quite long. This obviously depends on the actors and a range of ecological and symbolic conditions.

A territory is a state of nature in the sense in which Moscovici defines the notion: it refers to human labor exercised on a complex combination of mechanical, physical, chemical, organic, and other forces and actions. Territory is a reordering of spaces and their contents, whose order is to be found in the informational systems which humans dispose of by virtue of belonging to a culture. Territory can be considered as space informed by the semiosphere—that is, the signifying system from which the actor draws the informational resources for action (Lotman, 1985).

Situating inquiry at the level of relations that are not immediately visible (but nevertheless observable thanks to different human sciences) is a way of understanding that the landscape we have in front of our eyes is not contemporaneous to the observation. For the observer the landscape has every appearance of fixity, even though it is only the image of a moment in evolution, the crystallization of past moments that must be deciphered like a palimpsest. The landscape is perhaps the most complex image to decipher, as it incorporates the 'before' and 'after' that prepare a future which is itself difficult to describe. In other words, it is an evolution whose construction does not cease.

Territoriality as a system of relations is also a system of exchanges and, consequently, a system of flux of all sorts between exteriority (the physical environment) and alterity (the social environment). Territorial morphology is not explicable outside of the activities that created it. To be convinced of this, it suffices to take up again the monographs of regional geography or even the great universal geographies of the previous century to see how agrarian and urban landscapes are described. Agriculture, industry, and services have changed considerably in a century, just like cities and values. Territoriality is different because relations with human beings and with territories have changed. Territoriality is in some sense—as I have said—the hidden, dissimulated structure of the everyday.

It would be enough to take up an inventory of relations that could be placed in parallel with the territories that have resulted from them to discover that they (territories) are no longer adapted to current relations or correspond to relations that perhaps have not completely disappeared, but have been transformed. The connection to rural territory has been modified in considerable proportion. The same thing must be said of industrial and urban territories. In other words, our current society inherited constructed territories that lag behind the satisfaction of the contemporary needs that must be satisfied within territorial frameworks. These frameworks are, in part, maladapted and, consequently, in need of accommodation—that is, transformation.

Globalization has generated new territorialities—in other words, a profound reshuffling of old systems of relations that posits new constructed territories. What does this mean? That spatial, temporal, and human scales impose certain types of relations towards exteriority or alterity that do not permit just any type of activity. Yet globalization is nothing but a gigantic, multifaceted change of scale of which we very slowly become conscious. This change of scale introduces us into a TDR process of the sort already explained. Changes of territoriality imply territorial modifications, but there is a temporal delay in adaptation and accommodation. Changes in human activity are very rapid today, and it would be too costly to imagine territorial transformations at the same tempo: the available resources would not hold out. What is more, a 'real time' adjustment would signify an enormous loss of collective memory and an elimination of all culture of the landscape. Territoriality leads to a sort of spectral analysis of the landscape that can be explained by returning to the idea of the three worlds evoked previously (Eccles, 1991).

In effect, constructed territory mobilizes the three worlds of (1) things and material states, (2) states of conscience, emotion, and subjective knowledge, and (3) knowledge taken objectively; every construction or production is a point of convergence of these three worlds. It is a structure unique in its reality at a given moment—and only at a given moment—but multiple in its representations. It is precisely these multiple representations that can make it possible to deconstruct the history of a territory. The distinction of these levels is all the more indispensable in that intervention in the materiality of territory risks provoking modifications in the two other worlds. As a material prominence, constructed territory unleashes resonances that risk affecting the two other worlds. Indeed, in this respect it would also be necessary to address the problem of scale, a theoretical problem closely connected to process, relations, and durations. The scalar question is never truly resolved in acting upon a constructed territory other than with regards to its material dimensions. For the rest the interest of scale for the two other worlds is hardly taken into account and, so far as I know, there is little theoretical research on the subject. Prominences and resonances cannot be explicated, however, without a synthetic vision of scale (Racine et al, 1980).

Producing territories by means of territories
The formula strongly resembles Piero Sraffa's "Produzione di merci a mezzo di merci" (production of commodities by means of commodities) (1960). We are, however, beyond metaphor. In effect, constructed territories, grown obsolete with respect to the ambient territoriality, constitute the raw material of new territories. It is no longer an issue of 'domesticating' an ancient territory but rather of simulating a new territory, which always supposes multiple possibilities. Even so, it is probable that the phenomenon of 'domestication' is not absolutely absent from the construction materials, since old elements are taken up again for the recomposition of new forms.[3]

It is necessary to return to the TDR mechanism evoked above. Successive territorialities are characterized by specific functions that inscribe themselves in constructed territories. The passage from one territoriality to the other conditions a process of reshuffling or abandonment of certain (territorial) 'constructs' to permit the insertion of other activities linked to new or transformed relations. Let us take some simple examples to illustrate the phenomenon: the neighborhoods of the first industrial revolution and now those of the second are taken up again to be integrated into new constructed territories. Many of these territories lie fallow and await being taken up again. All this is obviously well known, as the phenomenon is nearly quotidian in

[3] Apropos of this shifting of function, compare with Eco (1972 [1968], page 276).

our societies. Since the territories of old territorialities are no longer able to respond to the needs of new territorialities, entire portions of territories are marginalized and abandoned and can serve as raw material for constructing other territories. This is often what explains the mosaic character of our territories that makes elements of very different epochs and styles abut. It is the entire problem of *différance* that is in question here.[4] Constructed territories today await. Their usage is 'deferred'.

Let us attempt to further elucidate the mechanism of the production of constructed territories by means of (previously) constructed territories. All change of relations with the physical and social environment supposes simultaneously a supply of territory that is no longer used, or less used than in the past, and a demand for territory to integrate new activity or activities. Two processes come together: deterritorialization and reterritorialization. For this there will be two possibilities: either there is a space immediately available or territory is recycled, creating landscape to meet demand. According to the circumstances, the costs are not the same, and everything depends on the resources available. Recomposition can be total or partial. It is total when everything is razed and reconstructed; it is partial when the external is preserved and the internal is altered. There is a wide range of possible outcomes, according to the extent to which all the parameters affected by the operation are taken into account. The renowned two axes of composition are put to the test, the paradigmatic axis on the one hand and the syntagmatic axis on the other. All recomposition is carried out by borrowing paradigmatic elements in order to make from them syntagma adapted to new activities. Thus we see novel modifications of the profiles of emerging landscapes that reveal, for a time, the new structure of territoriality. The production of territories by means of territories is an operation of the creation or recreation of values in both senses of the term: economic values and cultural, social, and political values. It is enough to reflect on postmodern architecture to understand what happens. This creation of values passes through memory and oblivion. Indissolubly linked, these two constitute a shroud of Penelope that each generation weaves and unravels in space and in time. Behind the memory of a culture there is the oblivion of another culture from whose elements it was nourished before being itself forgotten in order to permit the constitution of another memory and so on, so long as there are communities and societies.

In a certain manner space and territory are no longer pertinent or determinant precisely because they can be constructed, deconstructed, and reconstructed, functionalized, defunctionalized, and refunctionalized. Places can be imagined from scratch. We have entered the era of fabricated geography, which is to say the mise en scène of geography by culture, including advertisement. Produced geography is no longer the result of the effort of generations projected into space, but the result of an 'advertising plan'. While advertising was once restricted to furnishings, now it latches on to places and territories: the periodic mise en scène of French regions in the Parisian subway illustrates this perfectly. We now 'write' territory like a text. Territory is no longer a cause, but is 'caused' in the same way as most other objects. In all of this fabrication there is the criss crossing of syntagm and paradigm. All fictive but produced spaces and territories now serve as positive or negative reference: fiction informs the real.

More and more we live and consume images rather than the things themselves. In this light, advertising, cinema, and television certainly reveal current culture, since they are the purveyors of the images that testify to our existence. The success of the film *Il Postino* should be considered here. It reveals an enormous need for authenticity, even if the authenticity is false, and an enormous need for utopia, even if the utopia is a deception. These images are products of simulation, favoring more than ever,

[4] I borrow the term *différance* from Jacques Derrida, but in a slightly modified sense.

the traversal of Popper's and Eccles's three worlds: passages from the material to the subjective and objective worlds are now quotidian. Correspondences are established between them by information, which permits variation of points of view and angles of attack. The interpenetration and copenetration of these worlds is obviously a characteristic of contemporary culture. Territory is certainly a material given, but it is just as much an invitation to contemplation, to emotion, to dreaming, and to creative imagination, as it is the object of theoretical scientific, historical, and philosophical systems. The works of Gaston Bachelard bear eloquent testimony to this. Bachelard (1964 [1957]), more than any other, knew how to travel in these three worlds, as his works testify.

Humanity has now entered a phase of the invention of its *nature* or *space* that no longer has anything in common with the unveiling of the 'immutable nature' of the tradition of Greek thought. The images of nature produced by simulation can be only unstable—and, in fact, they are. The most typical example of this simulation is furnished by what architects and urbanists do when they 'invent' landscapes whose durations are generally short, for one part, and whose extensions can be only limited, for the other, because of the cost of energy, among other reasons. In the past we made territory first and landscape came afterwards. Today, landscape is drawn first and transformed into territory afterwards. The situation is inverted. For a long period we lived the sequence going from territory to landscape, or from production to representation, but now we pass from landscape to territory, or from representation to production. This inversion bears weighty consequences, because it means that we invent 'nature'.

After all, is the history of our relations to nature anything other than the chronicle of an exile, that from 'given' nature, which constrains us to continually imagine 'produced' natures? These cannot be inscribed into traditional description because they are by definition 'description' before existing materially. By contrast, they are narration in the sense that they express in 'epic' form what has given birth to them. Would not the modern form of epic be the chronicle of the inventions of simulation? In these conditions is it not fitting to rethink habitat—which is not only housing— from top to bottom? This is clearly a considerable task, one that lies not only with architects but also and especially with those who are attempting to 'dwell' (Heidegger, 2001 [1951]).

Proposal of a descriptive model

With the purely descriptive model I am going to present I have no other pretension than that of accounting for what has been presented above, but in a more systematic—or, if you prefer, synthetic—manner.

At the origin there is always an individual or collective actor, A, who combines various means for the realization of an action in the inorganic, organic, and/or social environment. At this level of generalization it is unnecessary to distinguish the various types of actors more precisely. At this generalist (macro) level we may assume that actors are mostly conditioned by structuring information, whereas on a micro level actors will need to be defined more specifically with reference to circulating information. This category will need to be identified in more or less detail according to the type of territorial production in question.

For the realization of his action or actions the actor naturally disposes of labor, which determines the actor's power and its leverage. The idea of labor as the origin of power owes much to the work of Foucault (1998 [1976]). In effect, each actor disposes of a parcel of power through the labor of which he is capable, and it is for this reason that Foucault says that power comes from below. This human labor can be defined as a combination of energy and information and will be designated by L. The variable quantity of energy and information determines the types of labor:

production, reproduction, and invention. The analyses of Moscovici (1968), in this respect, are of great importance, as are those of Alfred Sohn-Rethel (1977).

The actor also disposes of mediators, M, material and immaterial instruments—thus knowledges as well—that are manipulated for the maintenance of relations with exteriority and alterity. Mediators play a role in the processes of production as well as in those of representation. They are not simple intermediary instruments but complex ensembles manipulated by actor-networks, as Latour (2005) would say.

In acting, the actor chooses (his mediators)—which is to say takes away, eliminates, but also adds to the final combination. Perhaps it is necessary to specify that the mediators employed are practically never contemporaneous to one another. This probably makes the strength but also sometimes the weakness of certain combinations of mediators. In reality, however, we are never fully conscious of the mediators we use: some can be hidden behind or inside others. Actors form constellations of mediators in order to represent themselves and/or act. That said, there is really no action without prior representation. Why do the productions and representations of a certain epoch have a familial air (or resemblance, if you prefer)? It is not only because the actors imitate or copy each other, or because they use constellations of mediators leading to comparable results. 'Styles' crystallize configurations of mediators, in small as well as in large things. Why is it the case that until the 18th century mountains were frightening, whereas afterwards they were looked upon with a benevolent eye? Because the mediators influencing the perception of them changed. This is not only true for representation, which is perhaps easier to evoke, but also for production in the strict sense of the term. Over the course of time actors create a semiosphere that acts as a commutator on perception: it accepts or refuses, globally or partially. It seems permissible to me to suggest that the semiosphere does not exactly function according to the law of the excluded middle.

It is useful to recall, in order to become more clearly conscious of it, that one of the important mediators—perhaps the most important in some respects—is money, which introduced into geography the idea of the ephemeral. We will return to this question in the conclusion.

Obviously, the actor needs a program P, which is a set of intentions, realizable or not, and objectives: for instance, to produce a rural or urban ecosystem, to speak materially, or to represent a rural or urban ecosystem, to speak intellectually. These examples relate to a very general program of action.

The relation maintained by the actor with the environment, composed of a great variety of actions, will be signified by R. This relation can be material or immaterial, such as that maintained by the painter or the writer with material reality. Obviously, this relation is far from simple, and, in order to be well understood, it must be broken up, as it affects a number of things.

The organic and/or inorganic environment will be signified by Sn. From an ecological perspective the organic is assimilable to the biocenosis and the inorganic to the biotope. At its origin this environment is given, in the sense that the actor finds it at his disposition in the state it is in, but of course over time the actor modifies it, often considerably, destroying its parts or transforming it.

The environment produced by the actor with the assistance of his 'instrumental' cultural systems (in the material and immaterial sense) will be signified by So. Thus, the general environment is constituted by Sn + So. The actions of the actor upon Sn + So—that is, actions upon the 'given' and upon what has been 'previously produced'—lead to the production of a territory, T, and to a set of territorial relations, Ta, or territoriality. The actor disposes of the triad L, M, P for acting, whether producing or representing, and he will project this triad into the general environment for the satisfaction of his needs.

At this point it is possible to propose a general, simple, synthetic model of purely descriptive nature (see Raffestin, 2005):

$$A(L-M-P\text{---}R\text{---}S(Sn/So) = T/Ta \ .$$

$$\text{I} \qquad\qquad\qquad\qquad \text{II} \qquad\quad \text{III}$$

A temporal dimension can perfectly well be introduced into this model:

$$A'(L-M-P)\text{---}R\text{---}\big(A(\ L-M-P)\text{---}R\text{---}S(Sn/So) = T/Ta\big) = T'/Ta' \ .$$

The process beginning with A' can denote a continuation or a decomposition (deterritorialization) followed by a recomposition (reterritorialization):

$$A''(L-M-P)''\text{---}R'' = \big(A'(L-M-P)'\text{---}R'\text{---}\big(A(L-M-P)\text{---}R\text{---}S(Sn/So)$$
$$= T/Ta\big) = T'/Ta'\big) = T''/Ta'' \ .$$

Thus, we have a process that takes the older processes up again, here elaborated anew and transformed.

I will not take up all the problems linked to scale, problems that are not all of a geographical nature in the proper sense of the term, but I will say a few words regarding representation—which is fundamental, naturally, qua instrument of knowledge. The synthetic results described above—T/Ta, T'/Ta', T''/Ta''—should also be considered in relation to a regard that depends on a particular semiosphere. I will designate this regard with Sg, and we will thus have Sg T/Ta, Sg' T'/Ta', S'' T''/Ta''. The regard implied by a particular language—whether natural, pictorial, musical, logicomathematical, graphical, etc—is here called G and will produce an image or a landscape:

$$Sg\,G(T/Ta) \ .$$

In the same manner in which there exists a historicity of material territory, there exists a historicity (and even several) of its representation. Without entering too deeply into the subject, it is worthwhile to recall that the regard of Alexander von Humboldt greatly influenced the regard taken of American landscapes, and it is possible to cite the painter Frederick Edwin Church (1826 – 1900) as a reader of Humboldt's (1997 [1845]) *Kosmos*. He considered—correctly, for that matter—painting to be a scientific instrument (cf Raffestin, 2005). At the same level it is permissible to evoke the representations of the Alps over the course of the cultural history of Europe.

Grasping the lived experience of the present is already difficult, but grasping the lived experience of the past borders on the impossible, since it is no longer anything but a representation, knowledge mediated by values whose significance is often difficult to recover and master. However, we dispose of documents such as, for example, the autobiography of Thomas Platter, a Valaisian goatherd of the 16th century. Born in Grächen, at an early age he lost his father, who was cut down by the plague while traveling to Thun for wool. Platter was noticed by Matthieu Schiner, who predicted an uncommon future for him: "Certainly that child will become something wonderful, probably a priest" (Platter, 1839, page 6). Platter's autobiography—written haphazardly in sixteen days, they say, in old high Valaisian—is interesting in many other respects. It reveals the conditions of life and the representations of a man of the 16th century:

"Each one [of us] had a shepherd's basket on his back, with cheese and rye-bread in it … . In this perplexity I suffered extreme anxiety; for I was afraid that the great vultures that flew about in the air below me, would carry me away, as sometimes does happen in the Alps, that they take away children and lambs" (Platter, 1839, pages 7 and 9).

The mountains were feared not only by travelers, such as Montaigne, who would cross the Alps at the end of the 16th century, but also by inhabitants:

"When however I awoke, and saw where I lay, I do not know that I was ever more frightened in my life; for had I in the night gone four yards deeper, I must have fallen down a frightfully steep precipice many thousand feet deep (pages 12 – 13).

In addition, Platter shows us in advance that the idealization of the mountains, to which certain authors of the 18th century will be given, requires correctives:

"This I know well, that I seldom had whole toes, but often great bruises; had many bad falls; without shoes for the most part in summer, or wooden shoes; and endured great thirst. My food was in the morning, before day, a rye-broth, that is, a soup made of rye meal . ... at night cheese-milk; of all however there was a fair measure. In summer, lying on hay; in winter, on a straw mattrass [sic] full of all sorts of vermin. Such are the resting places of the poor little shepherds who serve the farmers in the wildernesses" (page 15).

We are far from the idyllic tableau that Albrecht von Haller would paint in the 18th century, one that marks, moreover, a turning point in the representation of the Alps, neither more nor less accurate than those that preceded it.

The first complete work on the Alps of this epoch dates from the 16th century. It is that of Josias Simler (1984 [1574]), who epitomizes the regard of the Other in *De Alpibus Commentarius*. Published in 1574, it gives a complete representation of the Alps, a sort of Alpine encyclopedia that in its systematic character would serve as a sort of model for later works. Simler's work is obviously not the first to address the Alps, which have been studied since antiquity, but it is probably the most systematic. Beginning with the preface, Simler emphasizes the very particular role of the mountains:

"Wherever the eye might travel across the earth, it meets with plains and mountains. Wherever it meets with the latter, without being able to explain why, they act more impressively on our mind through their prodigious heights and fill us with greater wonder than when it meets with the former, with the wide expanses of flat land" (page 39).

The effect of the mountains on humans is so powerful that explanations are immediately sought: is it because the 'heights' have been created for the use of the gods or that, according to a popular belief, high places are the natural habitat of protective divinities? In any case, this fascination with mountains is not recent and has crossed all of human history, from our origins to the present time. Simler, who echoes this sentiment, is only one witness amongst many others.

In this sort of historical geography of the Alps, Simler stages the great Alpine crossings, giving pride of place to Hannibal and the Gauls. He is probably one of the first to have systematized the alpine toponymic denominations, which are used up to the present day.

Even though he was born in Zurich, in close proximity to the Alps, Simler, as opposed to Platter, was not a native of the Alps. Even if he had experience of them, it was not the experience of an inhabitant but that of a traveler who takes shelter behind the authority of texts. He is still quite close to Strabo, who most often prefers texts to field observation. Simler is not a 'geographer' in the modern sense of the term, but a humanist who privileges documentary over direct observation. His regard is mediated by the document, as would be the regard of many others up to the 19th century. However, whatever he was, Simler wrote the first pages of Alpine literature at a time when little room was made for the mountain.

At the end of the 18th century the fear of mountains was no longer prevalent nor shared, as many travelers attest, Hegel in particular. Many other examples could be

easily provided of different types of territories that have been the subject of extremely varied landscape representations over the course of history, but this is not the place to do that.

Some words of synthesis to conclude

Behind the territorial morphologies that come into view and are the object of multiple representations in photography and cartography, passing through drawing and painting, there are hidden—amongst other things—the ways in which humans satisfy their needs. Behind every territorial creation loom invisible pyramids of needs that we can suppose, but do not see. The visible does not give us the key to the invisible, and yet territory, as the result of the manipulation of eco-bio-anthropo-logics, is the most material expression there is of the needs of humans. As motors of the manipulation of the great logics, needs constrain humans to project their labor into the material, with the assistance of the mediators of which they dispose, and to mobilize available sources of energy and accumulated information. The history of territorial processes recapitulates the history of needs without showing it clearly, a history comprising the relations that humans have maintained with natural ecosystems from the neolithicization of the world up to today. A need, to the extent that it is a demand for a quantity of energy and information, implies a concomitant relation with exteriority and alterity for its satisfaction. This relation is the beginning of an uninterrupted transformation process of the ecosystem. This transformation results from the projection of labor (Raffestin and Bresso, 1979). But what is labor?

In the anthropological sense labor is a biosocial category, an entity with two faces—energy and information—that is the original and essential power of humanity: labor is "a condition of human existence which is independent of all forms of society; it is an eternal natural necessity which mediates the metabolism between man and nature" (Marx, 1976 [1867], page 133). All human ecosystems constructed up to the present are the products of labor, whatever the nature of the labor might be. In effect, the entire human ecosystem is the result of a projection of labor into a natural ecosystem that is thereby partially or completely transformed. Should the projection of labor into a human system cease, the system will crumble little by little. This projection of labor is initially made by 'domestication' and subsequently by 'simulation'.

The common idea that comes immediately to mind when domestication is mentioned is that of taming, subjugation, and enslavement. To apply the term to living organisms and ecosystems is to emphasize their submission to and utilization by humans. But speaking in this way of an adaptation to the needs of humans does not really explain the process.

Domestication leads to the production of living systems that can no longer do without humans: in other words, systems that would disappear should humans cease to take care of them. "[W]e can consider domestication to be complete when the plant or animal, profoundly transformed by the human labor of selection, can neither protect, nourish nor reproduce itself without human assistance" (Barrau, 1990, page 36). This amounts to saying that domesticated organisms or ecosystems are different from what they were before human intervention. From now on they will no longer be able to subsist without human assistance, meaning that humans have privileged certain characteristics of theirs and eliminated others that presented no utility for the human project. In domestication humans produce diversity through hypertrophy or atrophy, the latter being confined to the disappearance of some characteristic or another. In this sense territories are indeed produced by the projection of labor into space, offered up to action.

Beginning with a given biodiversity, it is possible through labor to draw another picture of the living, another biodiversity whose interrelations and morphologies are modified. This process of the integration of the living into human history, with its irreversible flow of time, implies a dependence on human time and, consequently, a change of the scale of time for domesticated species and ecosystems. For the original scale of time is substituted, a scale defined by the social uses that humans make of these domesticated 'objects'. Beginning with a given living object, taken from its own natural time, another object is produced and integrated into the social time of the group that domesticated it. The domesticated object is, in fact, a new object that reflects the mark of the system of intentions framed by the culture of the group. The newly produced biodiversity is adapted to social uses. But if domestication ceases, because social uses have changed, so does all the associated produced biodiversity. If uses fade away or disappear, humans will no longer devote the energy or information necessary to the existence of the domesticated objects which, left to themselves, will simply go into decline and die. Produced biodiversity is temporally unstable, because it is use that determines the duration of its life.

But the scales of time are not the only ones at issue. The spatial scale is modified just as much. Resources being limited, the process of domestication also leads to the selection of places in which humans invest their efforts and thus substitute for the scale of natural diffusion the scale of uses in space. Geodiversity is thereby affected and, here again, we see a production of territories by the exaltation of certain places and the casting aside of others. Why is it that of two places, neighboring one another and apparently similar as far as their characteristics are concerned, one is clearly preferred to the other? Historical reasons could be evoked, but those refer back to culture, which does not always provide a univocal response except for that relating to a modification of uses induced by a new system of intentions whose nature could be political or economic, for example. Here as well, as with time, geodiversity is unstable. A diachronic reading of produced geodiversity could show, if it were undertaken, that there is geographical necessity only because there is history (Reclus, 1876). A plain, a mountain, or a river is declined differently over the course of time by societies that 'use' them. To take a graphic metaphor, it can be said that the image of original geodiversity is in some sense an anamorphosis whose explicit or implicit model of deformation must be discovered. These images are caricatures of nature—thus, systems of differences that are pertinent and coherent but deformed. That said, every model is a caricature, and produced diversity is a caricature of given diversity in many respects:

"The art of the caricaturist consists in detecting this, at times, imperceptible tendency, and in rendering it visible to all eyes by magnifying it . ... He realizes disproportions and deformations which must have existed in nature as mere inclinations, but which have not succeeded in coming to a head, being held in check by a higher force" (Bergson, 1921 [1899], page 26).

Domestication, without knowing it, resembles the art of the caricaturist. Is it not ultimately an implicit, pragmatic theory of caricature applied to nature, to given diversity, for the production of diversity through hypertrophy or atrophy, which is to say according to a law of allometric growth?

Thus, the production of diversity plays with scales. It begins with a given object at a 1:1 scale, from which it selects characteristics whose scale it changes with respect to the whole. Certain elements are treated on a 1:n scale, n being greater than 1 in the case of atrophy or less than 1 in the case of hypertrophy: the domestic object produced is thus, in the full sense of the term, a caricature of the given object. On the whole, produced diversity becomes a function of the play of scales demanded by cultural choices that accent such and such an element of the given object as a way of responding to

a specific use. The cultural choices that modify the original nature of given objects are, in this case, similar to cartographic projections that modify the representation of the geographical object.

In domestication humans do not modify only biodiversity and geodiversity but also themselves, since their relations take place in a transformed environment. By their actions, humans practise a sort of autodomestication without knowing or willing it, over the course of which they modify their bodies and also their thoughts. The evocation of this issue—which I will not address any further—has its sole objective in showing that the process of domestication has multiple effects. Qua process of transformation, domestication is thus partial destruction of the natural object and construction of a new object made by nature and culture—aspects which are often intermixed in an indissociable manner. In this process of domestication the role of labor is that accorded to it by Moscovici in the organic and mechanical states of nature. In the case of organic states of nature, skill is essential and there is no end to perfecting it: human energy, transformed and allied with information that we can, above all, call knowhow, holds an important place. In this organic state of nature all ecogenesis rests on human labor and nothing would function without it. Agrarian and urban human ecosystems need a profusion of labor, without which everything would rapidly crumble. It is the same in the mechanical state of nature, even if in this precise case the labor of invention plays a greater and greater role, since information is transferred to machines, even rudimentary ones, or to abstract instruments like algorithms, for example, when it is a matter of mathematical models.

If labor is and continues to be a fundamental mediator, it nevertheless must be noted that money seems today to have become an even more important one, since it permits the modification of the environment through the appropriation and control of labor. There is no question of returning to Marxist categories since, whether we like it not, we have always been there. In this domain, the old Marxist analysis has lost nothing of its utility. The contours are even clearer. The observation of present society leads to adopting the idea that the most interesting thing in contemporary humanity is no longer really the value of its labor—which is nil or nearly so, due to the abundance of supply—but rather its capacity for consumption, the source of money for producers. Ultimately, the ideal would be to place consumers in a battery so as to be able to extract from each one, for each category, the quantum of money requisite to increase revenue and cash flow, permitting the continued expansion of businesses and their markets. There is clearly a cruel rub in the development of this operation—namely, that potential consumers must be provided with money—which up to the present has come from the labor of each. However, as labor draws less and less, there is a deadlock. The solution, therefore—if we can speak of a solution—is to provide, by appropriate means, money to those who do not have enough for consumption. The means are as various as they are dramatic: they go from the pure and simple assistance of a social insertion wage up to the division of labor, and other formulae besides. These formulae are not solutions, but stopgap measures that are at the origin of territories and territorialities marked by incompleteness, which is to say by the syndrome of the gulag archipelago (Sloterdijk, 1988 [1983], page 315). I already hear the commentaries concerning the excessive character of this expression. If that is so, how should we describe businesses locking up workers without regard for their safety? How should we describe businesses that use only black-market labor, disposing of it as soon as the need has passed? These are no longer the classic minorities seeking a territory, but greater and greater numbers of people, individuals with whom one crosses paths here and there, who have no more territory because they are nomads wherever they go, who have no other territoriality than what they beg for when they reach out their

hand to obtain ... money. It is thoroughly astonishing that geography has become the descriptive chronicle of cynicism, generally without realizing it: geography describes morphologies but remains blind to the cynical destiny of the world, apparently not noticing it. Geography continues as if nothing happened. All our geographical education was based on the 'durability' of the visible, as if the places and names of things on the earth were fixed once and for all, as if the relations of people amongst themselves and with things were given once and for all. The ephemeral and the unstable have taken the place of the durable. Why and how has this passage from one to the other occurred? By the eruption and intrusion of fluidity into territories and territorialities. The definition of territoriality that I have been in the habit of giving is growing outmoded, but before going any further, I should recall it: territoriality is the ensemble of relations that humans maintain with exteriority and alterity, with the assistance of mediators, for the satisfaction of their needs, towards the end of attaining the greatest possible autonomy—that is, the capacity to have aleatory relations with their physical and social environment—taking into account the resources of the system. This definition is in part outmoded, because it is no longer contemporaneous with the situation in which we evolve. The mediators are no longer really chosen, but are a function of money, of the money available for such and such an individual, for such and such a collectivity. The pyramid of needs is broken, and many no longer even know that such a thing existed. It is enough to say that autonomy no longer has the same full sense and that it only continues to exist for a privileged minority and that there are no more aleatory relations for the worst off amongst us. This is what Simmel pointed out perfectly: money, in its pitiless objectivity, connects each thing to every other and makes of each the condition of the other:

> "Just as every emotional accentuation has disappeared from the interpretation of natural processes and has been replaced by an objective intelligence, so the objects and relationships of our practical world, inasmuch as they form increasingly interconnected series, exclude the interference of emotions. They become merely objects of intelligence and appear only at the teleological terminal points" (1978 [1907], page 431).

It is rather obvious that Simmel's analysis shows to what point the monetary goal imposes a leveling that is translated as the pure and simple abolition of personality, something that no longer finds its purpose in any activity. Urban territory is indeed that in which monetary fluxes are 'rivers' of a sort, to which we tie in so as to derive a fraction, in whatever way, so as to have a 'life', if we can call it that: "Money and intellect possess the common traits of neutrality and lack of character. They could develop only where these two factors coexist" (page 433). The mathematization of the world—that is, the advent of the calculation characteristic of modern intellectuality—has monetization as its counterpart at the level of economic praxis. Monetization dispenses with any interest in intrinsic qualities, occupying itself with only (economic) values. To the logic of knowledges there corresponds a logic of money in the modernity that has established itself progressively since the 17th century. We live in the consequence of this abstraction in the present world: in the place of sensible realities we have substituted simulated realities, models that depend entirely upon mathematical structures that no longer have anything to do with perceived or felt qualities. It is thus possible to reconstruct the contents of the world on the basis of systems of signs that eventuate in images modifiable at will. It is possible to simulate a system called 'natural' and derive virtual images from it without any problem, according to the dictates of taste and color, if I can put it like that. Money plays the same role as mathematics in the apprehension of the contents of the world. It offers possibilities for operation without the necessity of taking account of the sensible qualities of things and relations with things.

The particularities and singularities find their expression, reduced as it is, in the play of monetary values; territories and territorialities are more and more susceptible to being expressed in monetary terms and by systems of prices: the price of land, of housing, of labor, etc. Money is only a system of signs, but an extremely powerful one, since it can provoke very rapid changes by a play of interactions between territories and territorialities. Money is no longer the sign of real wealth, but reality has become the sign of money. More than any other in the contemporary period—even if well after Georg Simmel, it is true—Peter Sloterdijk has denounced this problem of money in its most cynical aspect:

"Money is abstraction in action. To hell with value, business is business. For money, nothing matters. It is the medium in which the equating of what is different is realized in practical terms. Like nothing else, it has the power to bring different things to a common denominator" (1988, page 315; see also Machado, 1989).

The current global situation demonstrates this sufficiently enough that there is no need to provide examples.

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