Natures

## Regards

### Dossier « À propos des relations natures/sociétés »

# Territory: with government and market, a major institutional component to achieve resilience

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#### Mots-clés:

territoire; socioécosystème; régulation; action publique **Abstract** – Exploring why the long existing word "territory" is increasingly used to address current sustainability challenges seems a worthwhile effort. Beyond its polysemy, the territory is considered here as having both spatial and social characteristics, liaising for instance at the local level between community and landscape. At the local level, the territory contributes to the provision or management of public goods and has the capacity to generate changes. This concept provides an analytical and operational framework for addressing public regulation needs through the strengthening of targeted collective action, through the partial resolution of market and state failures and through the connection between collective and public action. The text finally looks at commonalties and specificities between the two concepts of socio-ecosystem and territory.

**Résumé** – Le territoire : en complément du marché et de l'État, une notion institutionnelle majeure pour promouvoir la résilience. Dans un premier temps, sont analysées les raisons qui justifient la mobilisation croissante du mot « territoire » pour répondre aux défis du développement durable. Audelà d'une polysémie affirmée, ce terme est ici considéré comme ayant une dimension sociale tout autant que spatiale, et faisant ainsi le lien entre les notions de communauté et de paysage. Le territoire contribue à la production et à la gestion de biens publics, ainsi que sa capacité à générer le changement. Ce concept offre un cadre analytique et opérationnel pour saisir les besoins de régulation publique via le renforcement d'actions collectives dédiées, la résolution partielle des défaillances d'État et de marché et les synergies entre actions collectives et publiques. Le texte identifie enfin les similitudes et spécificités des concepts de socioécosystème et de territoire.

I wish to share three key messages. The first one is that the old term "territory" represents an appropriate modern concept to address current development requirements because of its regulatory capacity. The second is the fact that the territory could be a complementary concept to that of "Socio-EcoSystem" (SES) in making regulation and therefore resilience an effective option, as it pays explicit attention to the spatial dimension and to a politically and socially designed governance. The third

points out the main differences between the concepts as regards resilience, thus helping to characterize their capacity to study nature-society relations and to identify their originality and utility.

My arguments will lead you through three stages. In the first, we will consider why it may be relevant to rely on an old word, i.e. territory, to address current challenges. We will then look at the territory as an essential path towards regulation. In the concluding part, we will

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Voir, dans ce même numéro, les autres contributions au dossier « À propos des relations natures/sociétés » : le texte d'introduction de Xavier Arnauld de Sartre, Bernard Hubert et François Bousquet, le texte de Michael Schoon et Sander van der Leeuw et le texte de Thomas J. Bassett et Alex W. Peimer.

look at commonalities and similarities between SES and territory.

Let us first remember that translating the word "territory" from Latin languages (*territoire* in French, *territorio* in Spanish, Italian and Portuguese) into English is in fact quite difficult. In English, the word refers much more to a national scale, to control by the state, sometimes to colonial history, which is not necessarily the case in Latin languages. And, as we will see further, I would suggest that in Latin languages, the word "territory" is the concept that establishes the connection between the land-scape and the community.

## Territory: an old word to address current challenges

Let us move back to the main definitions of the word "territory" and remember first that this word was particularly used to wage wars. In this sense one spoke about the empire's territory, or the lion's territory in ethology as usually being the part of an area dominated and controlled by a particular power structure. But in no case does this involve a geographical scale. For example, the national territory brings along a strong identity basis in modern States, as evidenced during sport competitions. The territory may exist at the national scale; it does not necessarily refer to the local scale.

In fact, the word "territory" is highly polysemic even within the same discipline. Geographers have paradoxically made use of this word quite late, as a way to move away from a purely biophysical dimension of space and to integrate ecological, social and institutional dimensions (Brunet et al., 1992; Gumuchian and Pecqueur, 2007). Along with its increasingly frequent use, it refers to different issues and intentions. It may be considered as an administrative unit, the one where a State-led organizational process is taking place. It may also be the area considered by public stakeholders as the target frame for a development project to be implemented and resources to be transferred (e.g. Latin American authors which look at it as a support for new institutional regimes; Schejtman and Berdegué, 2004; Sepulveda et al., 2003). For others finally, it is the product designed by a collective action that expresses an identity motivation (Antheaume and Giraut, 2005; Vanier, 2009).

As a social design (Lévy, 1999), resulting from a historical anchorage and process and attached to a specific identity and symbols (Lévy and Lussault, 2003; Di Méo, 2001; Di Méo and Buléon, 2005), the territory becomes a resource. It is not just a passive frame for designing and implementing an action. Vanier (2008) for instance identifies it as a "socially designed and owned space that represents in the same time an identity reference, a

regulation framework and a perimeter for public action<sup>1</sup>". The territory itself contributes to change.

In economics, it may also cover widely different issues (Angeon *et al.*, 2006; Pecqueur, 2004; Courlet and Pecqueur, 1992). It is sometimes used as the resource which is mobilized to decrease transaction costs and risk. It may also be considered from an economic perspective as an important resource to improve learning among "agents" or the quality-control production process.

Apart from this polysemy, one can try to look at the different characteristics that are always involved when one speaks about territory. I will mention three key elements of the definition that are generic and acknowledged by all disciplines (Caron, 2011).

The first is that "it is a part of space", which is continuous and bounded and as such very different from a network. The second particularity is that it is owned by a social group which identifies itself with the territory. However, it does not necessarily match with administrative limits. The third element of the definition is that it acknowledges specific forms and mechanisms of governance and control over the territory. Yet, it is not necessarily managed: in many cases, there is no government of the territory and its transformation results more from cross-scale interactions among stakeholders. In many cases, it may also not lead to sustainable changes (Ripoll and Verschambres, 2002). With these three elements in mind we can begin to investigate what a territory is.

We have all seen pictures illustrating the deforestation in the Amazonian forest. But such landscapes are not territories. It is very different from what can be observed in the Republic of South Africa, just a couple of years after the end of apartheid in 1995. On pictures one can see clearly what a territory may be (see Fig. 1). At the back of the picture, landscapes evidence extensive livestock production areas that do not belong to the Homelands in the forefront but to the Republic of South Africa. These landscapes look totally different in the Homelands, the vegetation cover being the most visible mark. Farm density, farm size, livestock density and species, activities, infrastructure, etc.: everything differs. The Homelands are a bounded part of space characterized by the existence of a clear border, specific ways of living and governance mechanisms.

The word territory has not appeared by chance in our agricultural sciences vocabulary (Caron, 2005). The expectations from agriculture go actually much beyond the production of food and fiber by demanding the provision of public goods to address "threats to" and "fears in". These days we talk very often about conflicts, environment unsustainability, food insecurity, health crises and so on. For most of these issues, agriculture is

Personal translation by the author.



Fig. 1. Ex Bophutatswana landscape in the forefront, Republic of South Africa at the back (photo by Caron, 1999).

challenged; it lies at the heart of a great many of society's expectations and of our planet's burning issues. Even if the word has been taboo for some time, it is useful to acknowledge that agriculture is multi-functional (Caron et al., 2008). The word "territory" makes it possible to account for a spatial organization and scales that have been ignored so far to address these agriculture related issues. It is relevant for supporting new decisions and action.

In such a context, the word "territory" has sometimes been used as an alternative model to support rural development. In that case, the territory refers to a lot of other words or items, such as integrated development, looking at a holistic dimension of development and linking agriculture and rural issues as well as urban and rural issues, connecting public and private initiatives. When considering coordination among stakeholders (Lardon, 2012), the territory is sometimes synonymous with participatory development and the ways to promote innovation through specific institutional arrangements. In this case, it presents a risk of turning into a fuzzy word and some authors then prefer to refer to territorial development. According to Deffontaines et al. (2001) and along with Amartya Sen's theory (Sen, 2002), this type of development may be considered as the increase in the stakeholders' capacity to anticipate future change and adapt to a changing environment. In that sense, the concept of territorial development could be very similar or very close to what is meant by resilience. However, I do not wish to create the idea here that the territory, being small and

beautiful, is necessarily rosy. As said earlier, the word has been abundantly used to make war. It is not synonymous with sustainability. It is very often the ground for conflicts (Kirat and Torre, 2008). It is sometimes the tool for strengthening local identity and excluding "foreigners".

In fact, a look at world history throughout the twentieth century shows that until the 1980's, the nation and state control played an important role in the transformation of society. Towards the end of the century and during the Cold War, the world was divided into two blocks: one that was mainly regulated by the state and the other where market was promoted as a central driving force. At that same time, one noticed the emergence of the theory and ideology of development which were considered as a way to breach the gap between the rich and the poor nations. This situation prevailed until the 1980's when two completely different processes contributed to state failure and sometimes to a state collapse. On the one hand, the Washington Consensus, which was simultaneous with the collapse of the Eastern Bloc, put regulation by markets on top of the agenda, based on liberal ideology and the welfare theory. On the other hand, civil society organizations saw the state as a corrupt or top-down entity that did not pay the necessary attention to citizens' requirements. The participation of civil society was then promoted as an essential road to development. These two completely contradictory movements led to the withdrawal of state during the eighties and nineties. As a consequence, a lot of failures, collapses and problems



Fig. 2. Tadla large irrigation scheme in Morroco (photo by Caron, 2006).

emerged at the forefront of the agenda in terms of regulation at the end of the 1990's. On the one hand there was a need to look for supranational regulation frameworks for the provision of public goods. This was precisely how the 1992 Rio environment conventions and agreements came into being internationally. On the other hand, this led to rediscovering infranational spaces and considering decentralization in a completely different way.

Why is it so interesting to consider infranational spaces and attempt to prove the importance of new models of regulation? Firstly, the objective is to boost private initiatives by taking advantage of the social capital and by lowering transaction costs as a way to minimize risk in entrepreneurship and as a way to improve learning processes and value traditional knowledge. But simultaneously it is viewed as a way to guarantee the local provision of management of public goods and to solve problems that appear to be state or market failures. This is precisely how and why the concept of territory emerged as an entity to address all these expectations.

This is the reason why the territory is promoted by many authors and stakeholders as an artefact to approach development. It is then considered as a space for coordination between scattered and asymmetric stakeholders, driven by divergent stakes in order to strengthen the consistency of actions on a wider scale (Gumuchian *et al.*, 2003). It is seen as a vector for sustainable development because of the opportunity to integrate environmental, social and economic objectives (see for example in *Natures Sciences Sociétés*: Mégie, 2002; Caron, 2005; PEVS, 2002), of the capacity to negotiate priorities

for action based on coordination between stakeholders and of the strengthening of local collective action (D'Aquino, 2002). It is then expected to serve to articulate society's expectations and answers from the agricultural sector with the perspective of bringing together local and global interests.

### Territory: an essential path towards regulation

The path toward regulation that relies on the concept of territory is based on the fact that the territory makes it possible to connect public and collective action, and therefore to look at public regulation on the basis of collective action.

Let me start with some examples. The first one, from Morocco, deals with government investment in large irrigation schemes in the 1950's and 1960's (see in Fig. 2 the Tadla irrigation scheme). In such schemes, agricultural production was organized by the state, i.e. the land tenure system, the provision of water for irrigation, the choices of cropping systems, the organization of the commodity chain and marketing systems and the technical support for farmers. In the 1990's, the state began to withdraw and farmers started to organize at both the household and the collective level in order to provide services and goods that could no longer be provided by the state organizations (see Fig. 3 where farmers are pumping water from a drainage channel). From that moment on,



Fig. 3. Farmers pumping water from a drainage channel for irrigation (photo by Caron, 2006).

farming systems became totally different from the previous ones (Kuper *et al.*, 2009). The main innovation dynamics are due to private entrepreneurship at the margin of public schemes: pumping from groundwater, high added value products (e.g. strawberry, milk and dairy), water saving techniques, etc. Collective action designed new patterns for production, but also for rural development (e.g. distribution of drinking water, education).

The second example relates to the deforestation front in Amazonia. The map of Brazilian Amazonia shows that the state set up a series of different protected areas that form a barrier which totally hinders the progression of soy cultivation on the pioneer front (the large ellipse on Fig. 4) in the north of Mato Grosso state. Local studies have shown clearly that when farmers cannot move forward into the forest, they then invent new patterns and new ways of organizing themselves to make agriculture a viable activity (the small ellipse on Fig. 4; Caron, 2011). By implementing techniques in which soil fertility is an essential driver, by creating farmer organizations to negotiate public support, improve marketing conditions and invest in collective learning, such a process then gives rise to new rural territories. And in return this strengthens collective action and farmer organizations.

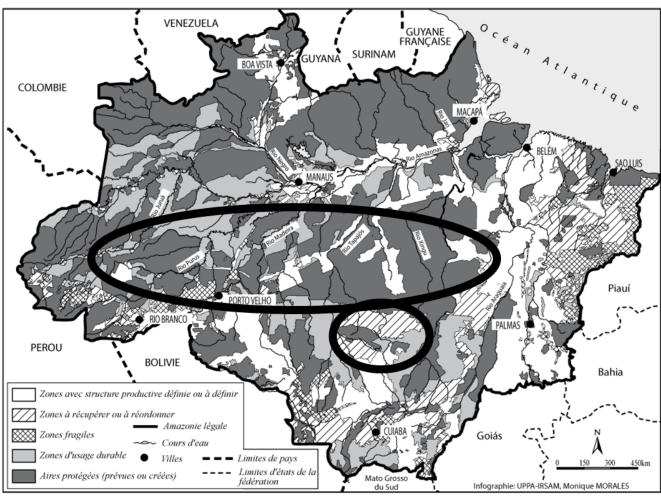
The third example deals with geographical indications. The rooibos (*Aspalathus linearis*) in the southwest of South Africa is a cultivated herbal tea. There has been an attempt from American and Australian companies to plant rooibos outside of South Africa. But the plant is specific to the Fynbos ecosystem and it proved to be impossible to grow it elsewhere. Nonetheless, because of this threat, the farmer organizations in that part of South

Africa organized themselves to prevent other countries and regions from growing rooibos and competing on the international market because of the success of this plant. And then the farmer organizations demanded recognition and labels of geographical indication for rooibos. This move was apparently supported by the local government even though South Africa as a nation once opposed the geographical indication principle within the global regulation and negotiation framework (Biénabe *et al.*, 2009). In return, the new farmers organizations became key stakeholders for local rural development.

There are some common features between these three cases, whether they relate to water for production, to deforestation and biodiversity or to the marketing of a particular resource. First of all, they question connections between public services and collective actions with the perspective of providing new institutional arrangements. Such connections rely in fact on community based institutions (cooperatives, farmer associations, marketing boards, etc.). The new coordination patterns among stakeholders make it possible to envisage conflict resolution. The subsequent provision of rules, norms and acts go along with the redefinition of the role of the state.

These examples all raise one main question: how can a new territory support regulation that aims to provide public goods?

This also questions the process through which a territory emerges and acquires the capacity to interfere in the development process. Grossly speaking, I would defend the idea that there are two different processes when one looks at territorial development or at the territory as a way to sustain and support development.



Source: Gouvernement fédéral du Brésil, Plan Amazonie durable

**Fig. 4.** Protected areas in Brazilian Amazonia (in grey). Source: Federal Government of Brazil, Sustainable Amazon Plan. Design: UPPA-IRSAM, Monique MORALES.

The first relies on the emergence or strengthening of the territory as a social set-up. In that case, the territory's stakeholders usually seek the support of local and national governments. The second one, which is very frequent within the donor community, is to try and promote territorial development. In that case, the territory is not necessarily a social design, but a "figure" that is viewed by the local government as a way to promote development. The state is then the one who decides what territory is to be supported. And I would very strongly question the legitimacy and the capacity of creating collective action in this way, and therefore its efficiency and effectiveness.

When one considers promoting territorial development, one should look at how these two processes can match each other. How to make sure that "government-decided territories" meet "socially constructed territories" toward territorial development? What should be the conditions for ensuring articulations between the

public intention of developing territories and the territorial dynamics that result from social and historical processes?

As a consequence, my opinion is that the territory is not just a landscape and the territory is not just a community. It is not only a form of coordination for addressing state and market failures. The territory plays a role in forging political objectives and action. It is not passive. It is not neutral. It participates in development because of the social construction and the collective capacity which are its foundations. It actively contributes to the strategic orientation of rural development, whether it further proves to be sustainable or not. And when state and market failures are to be addressed, it makes it possible to review the relationship between these two main regulatory bodies.

It is therefore an institutional arrangement that makes it possible seek new ways of promoting regulation at the interface and through the connection between collective and public action. It is not, and that is a main point here, a mere tool to account for, compensate or alleviate market and State failures. In other words, the territory can be considered as a third regulatory path, just like the State or market.

Nobel Prize recipient in economics Elinor Ostrom presented in Montpellier in 2011 a conference entitled "Neither the State nor market: organization of community resources". This focused extensively on community. I would argue that territory refers to the same theory of institutional capacity to impact development. The main difference being that in some cases this process has a spatial dimension and that the concept of territory might then be relevant. By the way, the subtitle of her conference was "Toward a third way between State and market for collective and solidarity management of environment and resources", acknowledging other forms and vectors of regulation, just as I am suggesting about "territory".

To make it short, the territory contributes to the provision or management of public goods at the local level. It is a relevant and actionable entity for impacting development. It is not a passive framework for organizing production, a marker for previous transformation or a set of resources: it has the capacity to generate changes. If it can be used to make war or to maintain a mafia regime, it could well also provide an analytical and operational framework for addressing public regulation needs through the strengthening of targeted collective action, through the partial resolution of market and state failures, through the connection between collective and public action and through the resolution of contradictory processes.

## As a conclusion, commonalities and specificities between SES and territory

I have tried to show why the territory is a concept that makes it possible to approach sustainable development. It is my conviction that territorial engineering and development can only be addressed by research where three interconnected components are involved. The first is to provide, build and share information that is relevant for understanding what is going on and making decision. The second is the strengthening of the capacity of stakeholders to be part of the decision-making process at the territory level. The third is the contribution to platforms where decisions can be made toward the provision of public goods and toward sustainability at the territory level. As a consequence, forum, information and capacity building are the three necessary components to look at for research involvement in territorial development. The territory may be useful to implement each of these three components, both analytically and operationally.

However, the territory is only one of the many concepts for doing so and there is a need to further explore

the diversity and complementarity of such concepts and of their application. Let us consider more specifically the commonalities and specificities between SES and territory.

Both concepts have in common that they rely on systems approaches. They go beyond the traditional dichotomy between society and nature and link them in systemic terms by offering a vision of nature-human relationships based on adaptive cycles that operate at different scales, for different times and in different spaces. They both address regulation within the systems that are being considered or between systems. They all pay much of attention to resilience, through the capacity of these systems to evolve and through the capacity of stakeholders to manage such changes. In this perspective, they both have analytic and normative dimensions.

They differ, however, because of some of their components and implications. The first main and obvious distinction relates to the explicit attention paid to the spatial dimension. Similarly, the politically and socially designed governance is consubstantial of the territory concept. These two dimensions are not absent from the SES concept, but making them explicit could be useful when looking at regulation processes.

As shown, common points are largely dominant and one should look at the comparison of both concepts from two angles. As there is no incompatibility, they both signal that such concepts were really needed to address current challenges, including the one of promoting new science organizations and focus. Such differences should be viewed as a richness which offers opportunities for dialogue and widens the spectrum of methodological possibilities, all the more since the disciplinary roots of each are different.

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