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## Environmental Sociology in France (1984-2014)

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**Abstract** – This article analyses the fragile emergence of the research in the field of environmental sociology in the past thirty years in France and its gradual recognition and visibility from the early 2000s. Through existing reflective assessments and selected research papers, it offers a retrospective of the ideas produced by environmental sociology in France, addressing the themes studied and the theoretical frameworks used in relation to science and, followed by scientists' positions, a sensitive aspect with regard to the place taken up by environmental issues in the public space.

**Keywords:** environment, science, risk, epistemology, interdisciplinarity

**JEL Classification :** Q1, Q5

It is hardly surprising that to mark its 30 years of publication, *RAEStud*, the *Review of Agricultural and Environmental Studies*, is asking for a retrospective of environmental sociology. Like the other academic journals on rural issues in France, it very soon began to publish articles in this field because of the strong filiation in France between rural and environmental sociology. This period saw the research field's fragile emergence followed by its gradual recognition and visibility from the early 2000s<sup>1</sup>. If judged by the thematic networks and the French Association of Sociology's most recent congresses, the collections, journals and the titles of research teams and units, it could be said that environmental sociology is now well-established as an academic research field in France. However, this does not mean that it is easy to find an editor<sup>2</sup> or to publish in renowned journals (such as the *Revue Française de Sociologie*). This visibility is a recent development and there are still certain hurdles to overcome in the recognition of this new field. Whatever the case, it is time to review the situation. This review has already begun<sup>3</sup>, and

<sup>1</sup> The 26 articles that we have categorised as environmental sociology published by the review appeared as follows: 5 in 18 years (1984 to 2002), given that between 1995 and 2002 there were none. There were 12 in the following 8 years (2003-2010), then 10 in the last 4 years (2011-2014).

<sup>2</sup> The *Manuel de sociologie de l'environnement* (Barbier *et al.*, 2012) was finally published by the Presses Universitaires de Laval in Quebec, four years after the contributions were written.

<sup>3</sup> First and foremost, there is the PhD thesis by Boudes (2008), reports (Kalaora and Larrère *et al.*, 1986; Mormont and Mougenot, 1993), then several articles (Deverre, 1998; Aspe, 2003; Charles and Kalaora, 2003), and lastly, recent works offering retrospectives

criticism has been harsh. Most of the sociologists who participated lament that in France, studies are belated and receive less recognition than elsewhere (“elsewhere” often being North America and Germany)<sup>4</sup>. More fundamentally, they lament that the research topic lacks specificity insofar as natural elements are rarely considered when constructing the issue or in the variables selected as explanatory factors. After Boudes (2008), Kalaora and Vlassopoulos (2013) lament that the environment is usually addressed through the prism of sociology’s legitimate categories—risk, social mobilisation, argumentation, *etc.*—instead of being subject to an innovative conceptual construction based on the interactions between human beings and their surroundings. In other words, most studies fall under the category of classical or “established” sociology. For there to be a sociological field devoted to the environment, it needs to be able to root itself in a specific and significant theoretical framework and a definition of the environment that is conceptual.

This critical assessment, which can be found in publications until the 2000s, is presented, expanded upon and discussed in this article. To do this, we have decided to focus on the history of ideas, less often addressed than the institutionalisation of the field (sites of publication, information, research units, professional networks, funding, *etc.*) even though the two aspects are connected. What are environmental sociologists doing and not doing, and what should they be doing? Is it possible to identify generations of studies (rather than generations of sociologists)?

For us—authors working in this field with, however, two very different filiations—this article gives us the opportunity for a reflective assessment like those mentioned above. We have drawn on our knowledge of the field to carry out this retrospective assessment. Apart from when it is the result of our experiments, our material is strictly bibliographical and made up of two types of publication, the retrospective analyses previously mentioned (and quoted in Note 3) and collective studies—which are very often conference proceedings—and papers published in journals. Each work presents studies in environmental sociology (or social sciences) at regular intervals between 1985 and 2014<sup>5</sup>, only one year different from the period covering the *RAEStud*’s

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(Charles *et al.*, 2014; Kalaora and Vlassopoulos, 2013). Critical reviews established for other countries (Buttel, 2005; the fourth section of the *Manuel de sociologie de l’environnement* Barbier *et al.*, 2012; *etc.*) enable us to situate the specificity of this field in France.

<sup>4</sup> “The environment currently appears as an unidentified object of French sociology [. . .]” write Charles and Kalaora (2003: 31) “sociology has been late to analyse the environment and recognise its analysis capacities.” (Boudes, 2012: 113). This observation of delay and its comprehension are one of the central issues in the recent study by Kalaora and Vlassopoulos (2013).

<sup>5</sup> Specifically, these works are: Cadoret (1985), Mathieu and Jollivet (1989), Abélès *et al.*, 2000, Boyer *et al.*, 2001, Aspe and Jacqué, 2012, Barbier *et al.*, 2012 or Barbier and Rémy, 2012, Charles *et al.*, 2014. We should also add to this list the conference “Sociologie et Environnement”, organised in 1999 by the journal *Natures Sciences et Sociétés*,

publication. Their chapters and journal articles are all studies that allow us to see the themes and questions addressed and the analytical tools used<sup>6</sup>.

Through existing reflective assessments and selected research papers, we offer a retrospective of the ideas produced by environmental sociology in France, addressing the themes studied and the theoretical frameworks used 1. in relation to science 2., followed by scientists' positions, a sensitive aspect with regard to the place taken up by environmental issues in the public space. Lastly, we should specify that we have chosen to confine this retrospective to scientific production in France for reasons of precision, bearing in mind, of course, that it is fuelled by studies and conceptual elaborations from outside the country, which we shall not neglect to indicate.

## 1. From nature to the environment—between continuity and change

*De la nature à l'environnement*, this well-known title from French environmental sociology (Cadoret, 1985) expresses the progression from one subject to another, marked by a diversification of issues and also by an overhaul of theoretical influences. The aim of this first section is to retrace this progression and take stock of the change of subject that occurred in the 1990s.

### Nature through the prism of evolving societies and social classes

The founding research in environmental sociology developed in the 1970s around the issue of relationships with nature. The modernisation or intensification of French agriculture gave rise to new relations with natural environments and with the constraints that their use imposes. These new relations intrigued sociologists “even before concerns about the environment became involved” (Mathieu and Jollivet, 1989). In France, therefore, as was also the case in Italy (Beato, 1999), rural sociology impregnated environmental sociology with issues concerning the “end of peasant farmers” (Mendras, 1967), and the transformation of agricultural practices and industries. From the 1980s, this was enriched with an avenue

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which we attended although the proceedings have not been published. It was the first conference exclusively to address sociology, and a pioneer of the conferences organised every two years from 2004 by the thematic network “Sociologie de l'environnement et du risqué” during the Congress of the French Association of Sociology.

<sup>6</sup> Because each text is situated in a genealogy of environmental sociology studies, this does not mean that it is representative of all the author's work or his or her customary approach. Moreover, in an article of this format, we cannot take into consideration every sociologist who has published in this field. We cannot, therefore, consider this article as a showcase for the environmental sociology community in France. Many academics are absent from this article (including peers who were important in our research trajectory), and others are quoted at length because of choices that have made while collecting our material.

of research into the “naturalisation” process of the countryside and its effects (Chamboredon, 1985; Larrère and Nougarede, 1990). Cities’ development and the simultaneous rise of a social demand for nature contributed to the spread of an urban and relatively elitist conception of nature (Fabiani, 2001), a benchmark by which the countryside found itself symbolically re-appropriated (Aspe, 2003). In conjunction, rural society was re-composed owing to the “neo-rurals” “return to the village” in search of a “quality” lifestyle and “space of sociability” (Léger and Hervieu, 1985: 154).

Many studies in the 1970s and 80s, most of them requested by the administrators of natural areas such as the French Forestry Commission, examined the social demand for nature (Kalaora and Larrère, 1986). They aimed to determine the volume and type of frequentation, and urban populations’ expectations with regard to “green areas”. These studies involved the cultural representations and practices of nature and its landscapes, identified the socioeconomic profiles of users and gave an account of the distribution of their uses in these areas (Kalaora and Larrère, 1986: 2). Nature was also examined through the conflicts arising from the varied uses made of rural and forested spaces—conflicts of interest, of skills and more broadly, of representations (Aspe, 2003). These conflicts set productive activities against recreational activities, modes of inhabiting (farmers and neo-rurals) and even diverging conceptions of protecting nature and its landscapes (Luginbuhl, 1989). Studying representations of nature—the legacy of a history, and variable depending on social groups (Fabiani, 2001)—led sociologists to update the plural definitions of nature (Billaud and De La Soudière, 1989). It then became a question of examining the social identity of the actors who contributed to it (farmers, hunters, foresters, scholarly ecologists, environmental activists and nature organisations), and their trajectory as well as the factors influencing their engagement (Cadoret, 1985; Kalaora and Larrère, 1986). These studies shed light on the paradoxes of scholarly ecology (Fabiani, 1985) and updated the compensation practices (of graduates “downgraded” by their professional status) that feed the naturalists’ networks (Buhot, 1985). They also jointly examined the underlying ideologies of nature protection (Cadoret, 1985), their imaginary dimension (Bozonnet and Fischesser, 1985) and religious influences (Viard, 1985). The dominant ideology of “love for nature” is defined as the product of the social transformations of western societies and their increasing capacity to free themselves from the constraints of nature (all the more “beloved” the more it is mastered). National disparities in implementing nature protection measures echo other national disparities regarding industrialisation and urbanisation processes (Fabiani, 2001). In the same way, an explanation of local disparities can be found “by understanding local societies, themselves subject to the particularities of the physical surroundings” (Lecomte *et al.*, 1985). Picon’s analysis of the construction of the Camargue (heavily artificialised) as a natural space and its early protection measures compared with those applied in the Marais Poitevin (marshlands of the Poitou region) (Billaud, 1984; Picon,

1978) will, for a long time, symbolise sociology's unprecedented contribution to understanding these processes.

This contribution also criticised nature policies such as the “natural parks” policy. It claimed that, far from calling into question nature's exploitation, this policy, inherited from colonialism, was based on logics of land-use planning, aiming “to reconcile modernity and nature”, for the benefit of an elite wishing to develop its spiritual and physical capacities (Kalaora, 1998). And when the naturalist ideology was gradually deployed in this field, taking advantage of the “science, spectacle of nature and rise of sporting activities” alliance, it was in order to impose itself at the expense of the local populations, excluded or reduced to the role of “landscape gardeners or caretakers”. Kalaora and Savoye (1985: 20) set this against a “social conception of protection” as championed by the Leplaysian foresters (Kalaora and Savoye, 1985: 23). This criticism is more widely aimed at nature reserve management practices, divided, for forests, between a dominant, centralist and authoritarian vision of reforestation, and another, closer to users and their socioeconomic concerns (Kalaora and Savoye, 1985). This criticism is also that of the pervasiveness of a “naturalist” definition of nature in the name of which “conservation priorities” are defined for the benefit of “natural nature” and at the expense of “ordinary nature”, whose destruction may then follow (Fabiani, 1985: 86).

The environmental sociology of the 1970s and 80s can, therefore, be defined as a critical sociology under a dual influence – the influence of rural sociology, perceptible in the enduring significance given to farmers' working and living conditions or to the transformation of rural societies, and the influence of the theory of distinction. Foraging, hunting (Bozon and Chamboredon, 1980) and other leisure pursuits in nature are analysed as cultural practices. The constitution of a “tourist perspective” (Kalaora and Larrère, 1986) and measures to protect nature are seen through the prism of the transformations of society and relations between social classes. The “nature facilities” that have been flourishing since the 1960s are analysed as “devices of power producing and secreting standard behaviour”, according to Foucault's grid<sup>7</sup>. Nature, despite its materiality that is unusual in sociology, has entered into the field, without completely disrupting its ordinary interpretative frames. In fact, it seems to confirm their relevance. However, the shift that occurred in the 1990s towards the environment meant that they were once again called into question.

### **The advent of the environment. . . and of risk**

The first signs of this shift can be seen as early as the 1980s under the still rare and innovative title in sociology of “ecosystem” (cf. Section 2 of this article). The advent of the notion of the environment reflected the growing

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<sup>7</sup> cf. the studies by Cerfise taken up by Kalaora and Larrère (1986).

concerns in the 1980s and 90s about the ecological consequences of human activities, also known as the “*revers de la modernité*” or dark side of modernity (Kalaora, 2000): water polluted by agriculture, air polluted by industry and transport, the harmful effects of urbanisation on soil and water quality and biodiversity, global climate change, *etc.* The advent of this notion corresponded to a diversification of the scientific issues that were gradually addressed: some extended their investigations that had already begun with regard to nature (the practices, representations and stakeholders involved) and by rethinking interpretations; others emerged (risk, scientific expertise, governance, *etc.*), while in environmental sociology, new dominant influences began to spread.

The shift from nature to the environment did not take place without controversy. In the 1980s, the Association des Ruralistes Français (ARF) made a distinction between the “issue of nature” and the “issue of the environment”, by linking the first to the register of practices and the second to that of public debate and political action: “The issue of nature is conclusively decided at the level of economic and social stakeholders of all kinds who affect actual natural surroundings [...] the notion of environment thus appears to be a practical category, a category of administrative action” (Mathieu and Jollivet, 1989: 17). Not without ambiguity, the issue of nature was “deemed to be scientific” while that of the environment was thought to fall under a “practical discourse of the State on the issue of nature” (Mathieu and Jollivet, 1989: 18). A few years later, however, Picon formulated the opposite proposal, close to the conception of Kalaora (Kalaora, 1998) and Charles (Charles and Jeudy, 2000) with reference to the French and Anglo-Saxon etymology of the term “environment”. Anxious to get rid of the implicit (and conflicting) values conveyed by the words “nature” and “environment”, Picon (2003) advised all sociologists to examine environmental issues in the sense that this designates the interdependent relations that a social collectivity has with biophysical elements. From this perspective, “relationship with the environment” is a pleonasm. It is thus necessary to distinguish the material subject and the environmental subject: acting between the two is the mediation of the society that designates this subject as problematic for it. An environmental subject is therefore inherently a cultural subject and a natural-material subject (Picon, 1999). Because of this, it is comprehensible only through the representations that we have of it; consequently, it cannot constitute “an *a priori*” (Charles and Jeudy, 2000).

Representations thus remain a subject central to environmental sociology, studied through the prism of the history of societies. Germany can be used as a yardstick for comparison because it developed an “environmental conscience” very early on (Rudolf, 1998), fuelled by a powerful ecological discourse. According to analyses, its strength, shortly after the ordeals of Nazism, was its construction as a social critique, a new ideological field to oppose State authoritarianism (Rudolf, 1998; Charles *et al.*, 2014; Eder, 2000). In France, on the other hand, this increased awareness was hampered by State centralism, the industrialisation of agriculture and the urbanisation

of the countryside (Charles *et al.*, 2014). Other explanatory elements are undoubtedly due to imposing, with regard to management, a too-technical vision of the environment (Eder, 2000; Theys, 2002) and a “typically French” scientific ecology excluding the register of sense and experience (Charles and Kalaora, 2008). By virtue of its different factors, in Germany, the environment constituted “a subjective, experienced reality” while in France it remained “an institutional and political reality” (Charles *et al.*, 2014: 220).

The determinants of French adherence to ecological values were the subject of ongoing quantitative surveys. According to the Credoc (Research Institute for the Study and Monitoring of Living Standards) this adherence does not extend beyond culturally-privileged social categories despite the spread of “awareness of the danger that environmental degradation has upon the planet” (Hatchuel, 2001). In the same way, the discrepancies observed between the internalisation of ecological principles and households’ actual practices (consumption, sorting waste, *etc.*) are not attributed to living standards but to the value systems to which individuals adhere (conservatism, altruism, *etc.*), variable according to age and cultural background (Maresca, 2001). Reference to the distinction became rarer—is “social class” reductive (Fabiani, 2001)? For some sociologists, the time has come to individualise relationships to nature and the environment (Kalaora, 2001), making analytical frameworks from classical and critical sociology obsolete. However, Dobré (2002) uses Bourdieu’s theory to show that only certain categories, those of high “cultural capital” and lower economic capital, develop practices of “ordinary resistance” in order to limit the harmful environmental effects of domestic life (overconsumption, waste, *etc.*).

Thus, from nature to the environment, the attention paid to collectives of cooperating stakeholders remains intact, but assumes different modalities. Farmers remain central to many studies but essentially with regard to the responsibility attributed to them in the degradation of water quality and agro-environmental measures to which they may decide to subscribe, as well as the rhetoric they develop (Mormont, 1996; Candau and Ruault, 2005; Deverre and De Sainte Marie, 2008; Granjou and Mauz, 2009). The diversification of the professional or recreational actors involved in the process of society’s greening (Arpin *et al.*, to be published in 2015) and forms of environmental activism have become subjects for study. Micoud (2001) thus makes a distinction between organisations to protect nature (in the tradition of learned societies) and organisations qualified as environmental (consumerists, anti-nuclear or connected with local land-use and planning projects, *etc.*). Lascoumes systemises the study of these organisations based on four aspects (the nature of the issue, the chosen strategy to settle the issue, the type of interest defended and the structure of the network within which they operate) (Lascoumes, 2001: 138). Likewise, Mermet, Dziedzicki and Laurans (2001) compare French organisations with “rising” actors—NGOs such as Greenpeace, WWF and Friends of the Earth—according to their positioning (or field of action) and the way they operate internally.



With regard to the topics and questions addressed, all these studies on the environment are part of a certain continuity, which cannot, however, erase the overhaul of problematisations and theoretical filiations. The withdrawal of critical sociology can be seen throughout the discipline, while other theoretical fields and bodies of work are gradually brought into play, such as collective action and public action.

The shift in orientation brought about by “moving on to the environment” is more tangible in the growing interest shown in emerging topics. The topic of risk soon became a major area of study influenced by the sociology of risk (Beck, 2001) and of modernity (Giddens, 1994). A large number of studies developed on the perception of this “hybrid” risk—industrial and natural—and to the role of scientific expertise. The distance between the layperson’s perception of risks and their assessment by the experts became the subject of debates. Some sociologists, influenced by social psychology, sought the causes of this distance in the different ways of experiencing and conceiving risk (between valorisation and denial) on a day-to-day basis, in an exposure situation (Duclos, 1987; Perreti-Wattel, 2001). Others, influenced by the sociology of science and innovation, examined the construction of expertise and, more broadly, of scientific knowledge. Their studies exposed the “limitations” of scientific expertise and the potential role of lay knowledge (until then delegitimised) in developing knowledge for decision-making. Callon, Lascoumes and Barthe (2001) outlined the new sociological situation of “hybrid forums” and their capacity to reduce the uncertainty at the heart of contemporary socio-technical controversies. Chateauraynaud and Torny (1999) brought to light another situation, that of the whistleblower, the essential role and “qualities” of which they highlighted. Still others studied different participative science experiments (Larsen *et al.*, 2014), the status of lay or local knowledge (Barthélémy, 2005) and interactions between scientists and citizens to manage public problems such as GMOs or invasive species (Claeys, 2010; Joly and Paradeise, 2003; Post and Da Ros, 2003).

German and Anglo-Saxon environmental sociologists, influenced very early on by the sociology of sciences and techniques, became a point of reference in the overhaul of French environmental sociology marked, in particular, by the rise of scientific and technical issues. Latour and Callon were the sociologists who went furthest in challenging the theories of classical sociology. Based on the analysis of scientific controversies, they defined a “principle of generalised symmetry”. This principle encourages us to examine the agents, human and non-human, involved in the existence of scientific controversies. They thus suggested restructuring sociological analysis, moving beyond the reified boundaries between the social and the natural in order to take into consideration the networks, the heterogeneous associations of humans and non-humans interacting with one another. It was the responsibility of sociologists to make tangible the networks active in producing scientific fact, the translation operations thanks to which

heterogeneous activities and interests were combined with the addition of new agents. This pragmatic sociology of innovation or translation influenced many environmental sociologists (Gramaglia, 2002). The application of the principle of generalised symmetry still raises questions, however (Barbier *et al.*, 2008), and the influence of pragmatism on environmental sociology assumes other modes (Ginelli, thesis to be defended 2015) in the wake of studies by Chateauraynaud on health threats and environmental alerts (Chateauraynaud and Torny, 1999) or Akrich *et al.* (2010) and Barbier and Rémy (2012) on the citizen's role in public environmental controversies.

This question simultaneously leads that of the citizen's role in public action. The profound challenging of the State as sole repository of the public interest, and the participative imperative that runs through public environmental action (Barbier and Larrue, 2011) arouse a double interest: do they contribute to the implementation of decisions that encourage the protection of the environment and to the improvement of the democratic process? Whatever the chosen angle, the balance established in sociology, as it is in other disciplines and fields such as land-use planning, remains mixed (Mermet and Berlan-Darqué, 2009; Blondiaux and Fourniau, 2011). This can be seen in studies examining consultation procedures (Claeys-Mekdade *et al.*, 2009), their interactions with other, more spontaneous forms of participation (Deldrève and Hérat, 2012), the issues debated on "local stages of biodiversity" (Pinton *et al.*, 2012), "grandeurs" or justification regimes that are brought face to face (Lafaye and Thévenot, 1993) or the prevailing principles of justice (Deldrève and Candau, 2014).

More broadly, this involves questioning the manufacture of public environmental action, the construction of the norms on which it is based (Candau *et al.*, 2007; Deuffic, 2012) and the principles it calls upon for sustainable development: responsibility, precaution, and adapting to global changes. It also involves analysing its effects. The Common Agricultural Policy, Common Fisheries Policy, water and nature policies as well as urban and transport policies are measured against their environmental effectiveness (Salles, 2006), performance demands (Mermet, 1999) and justice issues (Lewis *et al.*, 2010). The theory of ecological modernisation is the focus of a great many analyses and critiques (Dobré, 2002; Fabiani, 2013; Rudolf, 2013). Formulated in northern Europe in the 1980s, this theory relies on innovation and individual responsabilisation to solve environmental problems, reconcile economics and ecology with a view to sustainable development, and to change the "regime of modernity" by reforming institutions.

Has the evolution of the themes, problems, theoretical bodies of work and positions observed in the field of environmental sociology in France led to the environment being better taken into consideration? For La Branche (2014), the recognition of environmental studies in sociology remains partial, exclusively legitimised through the use of classic notions such as participation. We could also cite, in this capacity, the notion of expertise. . . Thus, according to La Branche, the environment remains relatively un-theorised in sociology.

This harsh observation, which echoes that made by Kalaora and Larrère in 1986, relativises the scope of this evolution and omits the conceptualisation of the environment, notably in the work of Picon and Latour and the debates sparked by environmental sociology from the other side of the Atlantic (*cf.* below). Authors studying participation, such as Claeys or Barbier, also make use of this conceptualisation. The question is then to know if addressing environmental issues using the topics and tools of sociology causes the “environment as a subject” and its specificities to disappear, or if it constitutes sociology’s original contribution to understanding the environment. What does it mean to put “the living at the heart of social facts” (Micoud, 2014), if it is not to rethink the boundaries of sociology and its relations to life sciences?

## 2. Dramaturgy in nature, dramaturgy in science

Catastrophism marks the ecologist accounts that challenge our societies’ development modes, while ecology scientists often dramatise the research issues at stake (Fabiani, 1985). During the shift from nature to the environment, sociologists began to wonder if they were still studying sociology. Not those who analysed the cultural representations and practices of nature, but those whose work involved the protection of the forest, acid rain, protected areas, *etc.* – one of the topics that has both a social and a natural dimension (Jollivet and Pavé, 1993). Some went as far as saying that the foundations of their discipline could not tolerate questioning and explanatory models integrating biophysical factors. Other, more moderate sociologists advised collaborating with colleagues competent in life sciences. Whether a question of the founding principles of sociology or the line between disciplines, the environment’s entrance into science resembles a dramaturgy. How did this dramaturgy unravel as these lines of research became recognised? It was played out on two fronts—a hypothetical epistemological departure and cooperation with life sciences.

### A hypothetical epistemological departure, in France and the United States

Some sociologists advocate an epistemological departure while others, on the contrary, esteem that the founding fathers offer satisfactory analytical tools. In the United States, this debate was an integral part of environmental sociology when Catton and Dunlap (Catton and Dunlap, 1978) denounced sociologists’ human exceptionalism, *i.e.* considering human beings as cultural rather than biological beings. In order to move beyond the socio-centric regard of sociology, they proposed the *New Ecological Paradigm*, which tackles head on the limits of natural resources without fear of sliding into biological determinism or of being outside their disciplinary field. A controversy developed with Buttel (1978, 1986) who refused to define an environmental sociology that was autonomous and *a fortiori* a departure for the discipline,

showing that certain classical studies integrated biophysical factors into their multi-causal explanation of the social, but that nevertheless, this explanation can sometimes be reduced to the social. They agreed, however, to recognise the biological dimension of human beings and therefore societies' dependence on their environment.

This debate also arose in France a decade later, without always citing the discourse from the other side of the Atlantic, and continued until the early 2000s: "Certain [sociologists] are trying to move beyond the conceptual limits of their discipline and define new subjects [...]" (Kalaora and Larrère, 1986: 1). It was more significant in France than in other European countries because of the strong influence of Durkheim and the lack of theorists such as Beck or Eder in Germany, or Giddens in Great Britain, who put forward ideas in the 1980s "in tune with the dynamics of societies extremely concerned about ecological and environmental issues" (Charles and Kalaora, 2003: 39). The first conference devoted to sociology (and not social sciences) organised in 1999 was thus subtitled *La sociologie au risque de l'environnement* (Sociology at risk of the environment).

This debate is now outdated, at least partially, for there still persists in certain recent studies the denunciation of the explanation of the social by the social<sup>8</sup>, the founding methodological rule of Durkheimian Sociology that marked so many generations of students. Several dynamics contributed to making this debate obsolete. Firstly, in response to the adepts of "departure", a re-reading of the discipline's founding texts was initiated and continues<sup>9</sup>, demonstrating that biophysical factors are indeed present in the explanatory models, but often subordinate to social factors and rarely taught. This re-reading puts these texts back into the historical and scientific context in which they were written. It stresses the fact that sociology had to distinguish itself from biology in order to establish itself and that it was impregnated with the Modernization rhetoric of the time, *i.e.* a society liberated from any biophysical constraints (Leroy, 2001). This undeniably led to methodological pitfalls<sup>10</sup> and also gave rise to discussions and theories about the changing regime of modernity (Rudolf, 2013).

A different path taken by some sociologists consists in referring to more marginal trends in sociology than those of the classic founders. This

<sup>8</sup> We can cite, for example, Kalaora and Charles (2014: 278): "We find, therefore, in Durkheim, as we do in Marx, the occultation of the individual as a biological being and subject in search of meaning and freedom in favour of a purely social and cultural vision of humankind based on the nature/society divide. With, in addition, the occultation of the environment in the geographical and physical sense of the term".

<sup>9</sup> See, for example, Buttel, 1986; Leroy, 2001; Boudes, 2008; Candau and Lewis, 2012; Foster, 2011; Larrère and Larrère, 2012.

<sup>10</sup> "This led to the affirmation of an intangible boundary between the human and non-human spheres that hypertrophied the inter-human link at the expense of any other relationship. Faced with complex subjects [...] combining nature, techniques and values in networks of multiform meanings, sociologists inevitably find themselves in an awkward position." (Charles and Kalaora, 2003: 35)

is the case of Kalaora and Savoye (2012) who rehabilitated Le Play and his followers in France because they already challenged interdependences between human groups and their environment. This is also the case for numerous sociologists who, studying the rural world or agriculture, have addressed environmental questions without any qualms about disciplines. In the proceedings of the (multidisciplinary) conference organised by the ARF in 1986, there was no trace of an ill-adapted legacy of the classics although, however, the organisers noted that their usual exchanges between social sciences should be widened to include life sciences (Mathieu and Jollivet, 1989). The theoretical orientations mentioned earlier, which had emerged in the 1990s (the sociology of translation and more broadly, the “French” pragmatic influence), contributed to rehabilitating the importance of objects and materiality in understanding social issues.

Does taking biophysical elements into consideration in explanatory models lead sociologists to abandon sociocentrism, wondered the participants of the conference *La sociologie au risque de l'environnement*. Most of them disagreed on the grounds that demonstrating the social construction of environmental problems and explaining it through social processes falls well within their competence. This competence does not extend to the biological processes inherent in natural factors. Others, in this case, preferred “no longer to practise sociology”<sup>11</sup>. But how can a “socio-centric drift” be avoided, *i.e.* considering environmental problems solely as a social construction without taking into account the transformation of natural elements (Larrère and Larrère, 2012)? Even though the topic of risk has been analysed since the 1990s, this “‘drift’ leads sociologists to reveal social conflicts and encourage politicians to address them at the expense, lamented by some, of resolving the environmental risks”. If this debate is not totally closed, it is because it also challenges the stance adopted by or expected of sociologists, particularly when they work with ecology scientists.

During this process, environmental sociologists abandoned the “original dogma” of an exclusively social understanding and opened up more broadly to other disciplines (Kalaora, 1998). This disciplinary opening-up represented another challenge for sociology to be recognised in the scientific field of the environment.

### **Interdisciplinarity with life sciences—advocated but rarely accomplished**

This other challenge is no longer internal to sociology but lies in its relationship to the other disciplines that dominate the scientific field of

<sup>11</sup> This is the position of Larrère whose work now falls within the domain of philosophy. We should specify that this trajectory took several disciplinary paths from zootechnology to sociology and now philosophy.

nature in which the environment has gradually begun to stand out. This domination of life and Earth sciences is in line with the division of scientific study in modern societies. Nevertheless, despite incorporating the resulting naturalist conception of the environment, the State played a key role in the emergence of sociology studies by regularly “commissioning” a report of the research conducted in social sciences during the 1970s and 80s, instigating new programmes, and helping structure the research community and the international exchange network through the GERMES organisation (exploration and multidisciplinary research on the environment and society group) established in 1975 with the backing of the Ministry of the Environment. The aim of these various initiatives was to move beyond the limitations of the naturalist approach to “problems”, limitations that appeared as soon as actions to regulate them were envisaged<sup>12</sup>. Environmental sociology in France is “tout contre l’État” (hand in hand with the State) was the title of an article by Kalaora and Charles (2014).

This environmental research had to be for management purposes at the same time as bringing together the competences of several disciplines. These two priorities were imposed on the programmes launched by the Ministries of Agriculture, Public Works and the Environment and even those of the Ministry of Research such as the programme on renewable resource management proposed by the Délégation Générale à la Recherche Scientifique et Technique (DGRST – Office for Scientific and Technical Research) in the 1970s. They also, in a second phase, guided the creation of structures within research organisations such as the CNRS’ *Programme Interdisciplinaire de Recherche sur l’Environnement* (PIREN – Interdisciplinary Environmental Research Programme) in 1978<sup>13</sup> and the INRA’s *Systèmes Agraires et Développement* (SAD – farming systems and development) department in 1979 (Jollivet, 1992: 25).

The conceptual definition of the environment in sociology that considers social groups in their interactions with physical surroundings, and, in parallel, the change of paradigm in ecology, in which humankind is integrated into the ecosystems (Larrère, 2009) were coherent with interdisciplinary practice. When these various programmes were carried out in the 1970s and 80s, however, they rarely achieved everything they set out to achieve, according to Jollivet: “the results are limited [...] from the simple juxtaposition of

<sup>12</sup> Jollivet (2012: 41) writes of “the social polarisation of the scientific field” when the question of research embraces a practical purpose (reducing a specific pollution, reintroducing or protecting a specific species, etc.).

<sup>13</sup> PIREN was launched on the joint initiative of the CNRS, the INRA and the Ministry of the Environment’s study and research mission in 1978 and 1989. It was followed by the PE (environment programme) 1990-1994 and then by the PIREVS (environment, life and society programme) from 1994 to 2002. Its philosophy, hence the interest of social and human sciences, took up that of the UN *Man and Biosphere* programme (advisors took part in the drawing up of both) (Boudes, 2008: 380).

studies [...] to a veritable divorce between social sciences and ecology [...]” despite “attempts to construct a subject and an approach in common” (Jollivet, 1992). He concludes: “if this experiment has contributed to a better laying of foundations for cooperation between disciplines, it generally and primarily did so by making disciplines withdraw into themselves in the work carried out in common”.

This withdrawal enabled sociologists and other social sciences to legitimise their place alongside the ecology scientists by establishing that the relationship to “natural” objects is the result of an eminently social, cultural and economic history. Thus, at the end of the 1990s, the explanatory power of the “social construction of nature [...]” seems exhausted once it has contributed to dissipating the ecologist illusion of pure nature, in which even the most naturalist of academics now no longer believe”, wrote Fabiani in his commentary to the retrospective offered by Deverre (1998). This first generation of studies was necessary to rebalance somewhat the hierarchy between disciplinary fields and clarify the position that ecology scientists demanded of sociologists.

During the *Natures Sciences Sociétés* conference in 1999, controversy arose with regard to the two contrasting positions of realism and constructivism. For Leroy, a scientist can opt for one or the other depending on the issue being analysed: if examining the resolution of an environmental problem, the scientist will adopt a realistic perspective whereas this will be constructivist if seeking to understand how the problem arose. Jollivet, on the other hand, esteems that this debate comes from experts or life science researchers who, as part of multidisciplinary programmes, require sociologists to “pass on a message, and therefore to produce a normative science” (Jollivet, 1992). The “realist” position is untenable, he claims, as does Billaud, “because, from the point of view of sociology, both technique and nature are not autonomous or neutral but reflect hybrid processes that tend towards the alignment of social conducts” (Billaud, 2012: 108). These authors, along with others, extend the critical position forged during the dialogue with agricultural sciences by rural sociologists, and since then have been eager to cooperate with life sciences<sup>14</sup>.

During this time, the timid attempts at real cooperation were facilitated by the use of the systemic approach, familiar to rural sociologists who produced monographs of villages or analysed the peasant farming issue with economists and agronomists (Billaud, 2012). In addition to the notion of system, the notion of ecosystem from ecology was adopted, including by some sociologists (such as Fabiani) who considered the social space as a “super ecosystem”, whose organisation is multipolar, according to Morin,

<sup>14</sup> “Enabling dialogue between two scientific worlds - natural sciences and human sciences” (Cadoret, 1985: 1); when reporting on the 1986 conference, the coordinators wrote, “Social theory takes into account the multiplicity of human-nature relations, but it can say nothing of their effects on the environment without a strong connection with natural sciences” (Matthieu and Jollivet, 1989: 347).

and an enigma for sociology, according to Luhmann (Rudolf, 1998). This notion of ecosystem inspired “integrated studies” in social science on the relations between agricultural and rural activities and new uses of nature, and encouraged modelling<sup>15</sup>. However, Kalaora and Larrère (1986) note their lack of theoretical ambition and application difficulties in fieldwork.

The 1990s saw a less utopian quest that relativised the generalisation of concepts such as systems (Kalaora and Vlassopoulos, 2013). The interdisciplinary project with the CNRS’ creation of the Desmid<sup>16</sup> in 1993 was based on an experiment between researchers in human and social sciences and life sciences (hydrobiologists and ecology scientists in particular). They based their collaboration on the study of material objects “from nature” for which society’s mediation is essential when they are said to pose a problem. Despite this, the systemic approach was not abandoned. The prospective trends using modelling extended it by updating the concepts. Some global and essentially ecologically-inspired concepts translate the planetary scale of the environmental issue (the biosphere) or focus on a specific compartment (hydrosystems, *etc.*). Others integrate the dual biological and social dimensions (socio-ecosystem, anthropo-system) (Jollivet, 2012), sometimes going as far as to propose a conceptual and heuristic scope (ecosystemic service, environmental service), which gives rise to debate. In order to study risk, it was also the necessary interdisciplinarity that inspired sociologists and geographers to mobilise the notion of vulnerability; it enabled them to formulate a twin notion to the notion of hazard used by their colleagues in Earth sciences<sup>17</sup>, and to be heard by them (Becerra and Peltier, 2012).

Better adapted to the particularity of each object studied, these concepts are of intermediate theoretical scope and lead to the multiplicity of disciplinary perspectives. Their development is without question a characteristic of the environmental (including sociological) scientific production of the 2000s and 2010s. It was accompanied by a clarification of the place that sociology can occupy, a place that varies according to the research question, explains Jollivet, who has been following the attempts to cross disciplines since they began, and which led to his creating the journal *Natures, Sciences et Sociétés*. If examining the effect of human activities on a natural object (or a compartment

<sup>15</sup> They supply grey literature, and many of them were not published. An example would be the study by Blandin and Fabiani (1980) quoted by Kalaora and Larrère *et al.* (1986).

<sup>16</sup> The DESMID (Dynamiques Écologiques et Sociales en Milieux Deltaïques – Ecological and Social Dynamics in Deltaic Environments) was, when it was created, an autonomous research team within the URA CNRS 1874 (Laboratoire d’écologie des grands fleuves – Laboratory of the ecology of great rivers in Lyon). Pont (a hydrobiologist) and Picon (a sociologist) were responsible for running it. In 2014, it became part of the UMR ESPACE, a joint research unit combining the CNRS and the universities of Aix-Marseille, Avignon and Nice.

<sup>17</sup> From the 1990s to today, collaborations with Earth sciences have been rare. The laboratory where Becerra works is an exception although it is less unusual to work with ecology scientists (issues concerning flora and fauna).



of an ecosystem), the sociologist could suggest the sociohistory of this object and analyse the confrontation of expert knowledge with lay knowledge with regard to the object. If the question involves the technical object that causes an environmental problem, the sociologist could, in this case, seek to identify the knowledge and skills integrated in the object and endeavour to identify the broader appliances in which the object participates, including the power relations between actors (Jollivet, 2012: 48).

These notable gains should not lead us to believe that interdisciplinarity is more frequent than it was in the 1970s and 80s. Admittedly, environmental sociologists are often part of multidisciplinary teams such as the one at the IRSTEA (National Research Institute of Science and Technology for Environment and Agriculture), but these are predominantly human and social science teams (with the exception of agronomy), without ecology scientists of whom there are, however, a great many in the institute. As for the Desmid, it has retained few life scientists—in 2006 there was only one ecology scientist). Furthermore, research programmes no longer systematically demand multidisciplinary, with some even proposing issues specific to human and social sciences (e.g. *Landscape and Public Policies*, and *Consultation, Decision, Environment* from the Ministry of the Environment). During the successive calls for *Society and Environment* project proposals coordinated by the Agence Nationale de la Recherche (French National Research Agency), priorities were inverted between life and Earth sciences and social sciences without, however, conferring the same status to the latter. Although the environment has weakened the hierarchy between these two major disciplinary fields, it has not totally abolished it.

## Conclusion

Where has the environment led sociology? In 30 years, it has become a field in its own right, and in so doing, has resulted in new key issues, theoretical reflections and disciplinary positions. Controversy about “classical” sociology’s limitations in analysing environmental problems has not led to the emancipation of the field of the environment. “From the point of view of its integration into sociology,” the environment “revolutionises neither sociology nor the understanding of the creation of scientific domains” (Boudes, 2008: 28-29). Nevertheless, it represents a major innovation, an innovation that still raises questions. Admittedly, the status of the environment as a subject is no longer debated, in view of the progress of collective reflections and conceptualisation efforts. The sociological approach of environmental issues no longer has to prove its contribution. Nevertheless, there is no consensus as to what constitutes the interest and specificity of this approach, as seen, on the one hand, in the endless discussions within the discipline about the relevance of classic subjects and tools in sociology to comprehend environmental problems and, on the other, the relatively modest concrete advances of interdisciplinarity with life sciences.

From behind this lack of consensus emerge the terms of another debate, more rarely addressed as such in sociological literature. This debate concerns the sociologist's positions with regard to environmental concerns<sup>18</sup>. The critical view of environmental policies, their underlying ideologies, and natural science, is without a doubt one of environmental sociology's contributions, present since its conception and constant even though the mobilised theoretical *corpus* has been overhauled. Nevertheless, since the 1990s, this has been accompanied by a more assertive engagement in favour of resolving environmental problems. In addition to this critical regard, sociologists have to participate in a social learning process in environmental risk management, contribute to constructing engagements (Mormont, 1996), build bridges "between knowledge and action" and the "political and scientific worlds" (Kalaora, 1998), and intervene "in the development of human societies" (Jollivet and Pavé, 1993; Aspe, 2003). This position can go as far as the "enlightened catastrophism" (thinking the worst in order, through reflexivity, to give oneself the means to avoid it) advocated by Dupuy (2002). However, it is still challenged by the legacy of rural sociology, more critical with regard to the social effects of ecologisation (Billaud, 2012). Ultimately, the development of studies in France, influenced by American *Environmental Justice* and *Political Ecology*, reformulates environmental problems through the prism of social inequalities. If these influences, new in French environmental sociology, also encourage researchers to engage, this is to contribute to tackling in priority the degradation of the poorest people's environment. The reflexive confrontation of these positions and the joint framing of environmental questions may highlight the specificity of sociology in the field of the environment.

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<sup>18</sup> In 2014, the journal *Communications* devoted a special edition to sociologists' and ethnologists' engagement, coordinated by Bobbé and Alphandéry (2014), which was very enlightening about the definition and diverse forms of engagement. This debate is effectively not addressed.

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