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1. Introduction

Since the 19th century, a modern movement promoting the protection of nature has been developing - first in the USA and then worldwide - as the negative consequences of human activity on nature were revealed. Institutions have come up with a wide range of possible solutions: the conservation of forests, the creation of national parks, the development of green zones in cities etc. The increasing promotion of nature as a central value for human establishments since the seventies has been an opportunity to question the relation between nature and society in the western world. This chapter aims at giving a portrait of the major anthropological, sociological and philosophical contributions that fuelled the ongoing debate concerning the distinction between nature and society - and the many social repercussions of this debate, in France and elsewhere. The different positions have important pragmatic implications for the management of natural areas for example. We will first introduce the works of Bruno Latour who, we believe, launched the debate we are interested in. We will then present the works of Philippe Descola, whose work aims at proving that our concept of nature is a construction of the Moderns, a construction that is contextualized as any other cultural construction might be. But apart from these scholarly concerns, and even without any normative arguments against the properly modern dualism that is at stake here, one might say the ecological critique of modernity finds its roots in the nature-society distinction. What principle, other than this dichotomy, could be the basis for a proper ecological criticism of modernity? What could be the criterion for a denunciation of the human-non human arrangements? In light of these issues, how can we build a new commonplace, a new ethics? Must we build a new cosmology, a new epistemology, or can we simply modify our present ones? It is through these questions that we see Latour’s attempt to reintroduce political sciences.

2. The controversy around Latour’s essay on symmetrical anthropology

In the early 1990s, the French academics are structured around the study of advanced modernity. It is in this context that Latour publishes his controversial essay on symmetrical anthropology (Latour 1991). The controversy will organize itself around the modern nature-
culture dichotomy and the taxonomies it justifies; other modern dichotomies are also questioned, subject-object on the one hand, and the fact-value dichotomy on the other. Nevertheless, it is clear that Latour’s provocative style did play a role in the development of this controversy, as did the sociological community’s disposition to welcome such a thesis.

The controversy created by Latour’s thesis quickly escalated into an intellectual conflict. The different fundamentals at the basis of the controversy still exist, and this difference is interesting because of its practical consequences. Latour’s thesis triggered serious reactions on the part of the academics structured around an epistemology of rupture, inspired by naturalistic and positivist positions- a structure that was already perceived by some as a weakening facade. The intervention of progressive scholars who accepted to enter the discussion with Latour solved the crisis. Claude Gilbert1 addressed the issue in his multidisciplinary seminar on collective crisis. Michel Callon, Pierre Lascoume and Yannick Barthes2 collectively published on the subject. Finally, Philippe Descola’s3 work contributed to give Latour’s thesis the acknowledgement it deserved. As support builds up, Latour manages to create a network of scholars interested in his work despite the adversity4. But his thesis will first gain real support from outside the sociological institution. His papers will circulate through prestigious institutions such as l’École des Mines, l’École des Hautes Études en Sciences Sociales (EHESS) and more recently the Collège de France. His thesis definitely penetrated sociology through disciplines such as the sociology of sciences and techniques, political science and the sociology of organizations. From that point on, the interest in Latour’s thesis will grow and make it to a larger public. From this point of view, Philippe Descola’s publication, Par-delà nature et culture, confirmed the relevance of the controversy structured around the theoretical distinction of nature and society in France.

3. Purifying of the world and its consequences

Proposing to disqualify the dichotomy between nature and society, Latour criticises the substantionalistic approach proper to the modern sciences in the method used to define and describe the phenomena as “objects”. According to Latour, this modern structuration of the world is related to certain practices which he qualifies as “purificating” (pratiques de purification), in reference to the many conceptual cloistering it creates. But Latour also insists, in conformity with the main tradition of sociology which situates the birth of modernity in synchronization with a certain alienation of the world, on the importance of these practices of purification as a major constituent of modernity itself. His position is nevertheless singular as he establishes the link between these practices and modernity’s perpetual revolution: the perpetual destructive and creative dynamics of modernity depends on its capacity to continuously transform or replace the previous social

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4 The controversy correctly confirms Latour’s thesis. According to him, the construction of scientific facts relies on the formation of alliances and on the creation of actors’ networks. The shock created by the publication of Latour’s essay on symmetrical anthropology actually faded away as a network of scholars organized itself around the controversy concerning the question of nature.
arrangements with new ones, which are the product of the practice of purification proper to the modern western sciences.

To give an example of such practices, one can take the case of the policy of renaturation in France. Natural reserves follow a different path from national and regional parks. While the regional parks are managed according to a cultural, patrimonial approach of nature and while the national parks are managed according to an aesthetic concern for the landscape, natural reserves are meant to preserve nature and be devoted to scientific research. The specialization of the natural reserves' territory raises many issues and results in different conflicts. The delimitation of space can be controversial, because locals and scientists will usually not agree on where to set the boundaries of the reserve. How to use this territory also turns out to be problematic, because every alternative (non-scientific) way of using it becomes forbidden. The need of specialists (ornithologists, environmentalists etc.) thus prevails, to the detriment of the representations and usual practices of the locals, therefore deprived of a territory.

Latour's main argument can be summarized in the following way: the generalization of the practices of purification is an obstacle to the emancipation project of modern society. This is largely due to the social distribution of practices of purification, for they are only accessible to specific parts of the population, which special interests become the dominant and trusted reference for all social practices. The project of modernity- that society can achieve a capacity to govern itself by itself- is threatened by modern western sciences as they exclude practices of purification and the definition of nature from the public and political space. As nature is defined as a separated, distinct world, it is excluded from the political space and the knowledge of it, as well as its stewardship, is reserved to an elite of specialists. Thus, according to Latour, modern society deprives itself from a formidable potential of self-determination. The constitution of modernity opposes the project of modernity: society's capacity to govern itself is taken away and the distinction between nature and society is at the roots of the conflict.

Precisely, what is at stake is to show how the misguided constitution of modernity finds its roots in the myth of emancipation common to the Moderns. One of the perverted effects of modernity, according to Latour, is the conceptual confusion between self-determination and avulsion. Social emancipation should not be condemned to be associated with an avulsion from nature, and in a general fashion, from the multiplicity of affiliations which make us members of a society at a given time. The error of the modern constitution lies in the way it describes the world as two distinct entities separated from each other. More precisely, its main flaw is to promote the opposition between “natural” entities and “cultural” entities, thus contributing to the denial of the obviously hybrid structure of our historical establishments. To reverse this effect, Latour proposes to replace the “natural” and “cultural” categories by “human” and “non human” categories. Latour claims this new distinction allows to think beyond the nature-culture dichotomy, two concepts logically opposed until now. Moreover, it offers a larger theoretical horizon from the point of view of “human” and “non human” establishments.

Latour proposed a new vocabulary in replacement of the term society, which implicitly involves the distinction between nature and society. First adopting the term “middle empire” (Latour 1991), then “collective” (Latour 2006), Latour searched for a terminology
that would illustrate the world as being a construction of different entities. This new terminology seemed to thwart the distinction between nature and society and therefore open the possibility to define the world as a series of associations between “human” and “non human” entities. The term “middle empire” correctly described the world as a hybrid reality, in continuous transformation. Latour claims that hybridization is the result of imbroglios of science, politics, economy, law, religion, technique and fiction (Latour, 1991: 9). This position is also compatible with the theory of socio-technical networks. To summarize, it is through a proper deconstruction of the nature-culture dichotomy that Latour was able to come up with a new description of the given world. But more, this method also questioned other oppositions such as subject-object and fact-value.

Bruno Latour’s thesis involves an epistemological rupture that also supports the concept of intertwined facts and values. This new rupture brings to light a similarity between the present debate on epistemology and the 19th century debate over methods (Methodenstreit). What methods should we use to encounter the world and define it? As Latour made it clear, the essential hybridity of the world demands that we find new methods of investigation to encounter the world and qualify it. The new methods, characterized as “practices of mediation” (pratiques de médiation) are at the heart of Latour’s ethnographic work (Latour 2006). To give an example, one can observe how a same object endows - or does not - a human being with new skills, depending on the context or network in which this association between a human being and a technological artefact is working. The term of agency is required to talk about the power of transformation or the potential of action of these kinds of associations.

Following this methodology, Latour launches a true crusade to rehabilitate the status of “non human” entities, which he believes are currently ignored by social sciences (Latour 2006). Social sciences, claims Latour, are guilty for not considering many “objects” as constitutive of society. They must therefore be rehabilitated through a process of qualification. To solve this problem, Latour goes further in his exploration of new vocabularies. From “hybrid” entities to “faitiches” (a conjunction of fait (fact) and fétiche (fetish)), Latour will finally adopt the terms “human” and “non human”. This new duality presents two main advantages. First, it prevents a return to the correlation between the subject-object dichotomy that undermines the modern constitution. Secondly, it guarantees the qualification, case by case, of the “non human” entities’ behaviour until now ignored. This distinction also rejects any essentialist theory to support a constructivist view of the world. The qualities given are the result of identities acquired in a network of relations. Thus, the behaviour of a “human” or a “non human” entity is considered as the expression of a configuration.

This new perspective proposed by Latour would involve, according to many scholars, a more vigilant regime (Roux, Rudolf, 2006). Latour’s constructivisms can only accept an

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5 The term middle is to be understood here in its French meaning: environment.

6 This distinction must be understood in phenomenological terms: it is built from practical informations gathered from the lived world. The difference between humans and non humans is the result of a basic structuring made possible through a process of typification, although not as culturally invested as the distinction between subject and object. As explored by Habermas and Luhmann, we can identify this distinction with the notion of structuration of the world developed by Piaget, although Latour does not venture in this direction. According to this approach, ego identifies alter-ego as different but nevertheless similar. This process would justify a distinction between humans and non humans.
ontology that would be of the second order, an ontology based on acquisitions\(^7\). This distinction demands that we look at our social obligations in a different way - that is- that we question the effects of the context in which our social obligations are formulated. In other words, each situation will determine what relevant feature in each entity will be resorted to. This may be extremely variable and does not have to do with nature or culture. One may consider development projects such as the construction of a hydroelectric dam: the river will be involved as the power which flux, tides and environment are a key to the success of the project. But the traffic of ships, the influence of men, the wildlife and lands surrounding the river and a lot of other preoccupations are also important. The nature-culture dichotomy cannot take all the meanings of an ecological question into account.

4. Philippe Descola: Perspective from an anthropology of nature

Descola’s work represents another strategy of dissociation from modern taxonomies. Formulated as an external critique based on a comparative method of ethnography, Descola’s work is a continuation of Latour’s criticism of modern dualism. His major book, *Par-delà nature et culture*, summarizes his theory.

As a starting point, Descola claims the comparative method of ethnography invalidated the pretensions of a universal modern ontology. This conceptual rupture between nature and culture, according to Descola, is not necessary in any way to human thinking. Its origin can be found in a particular western idea concerning the structure of the world. This western classification of “existings” can be named naturalism. In consequence, anthropology must not make the mistake of projecting this typically western dichotomy on its inquiry subjects. The method of investigation cannot simply rely on relativism anymore for this relativism still bears the traces of a dichotomy, which universality has proven false. In fact, the relativist method presupposes a universal nature only interpreted differently by different cultures. Descola’s aim is to search for basic principles of world organization in different cultures. His position relies on the thesis according to which it is possible to find basic resemblances in the different human organizations of experience, called schemes of practice. Observing these schemes should allow us to build a less ethnocentric view on the indigenous perception of non human beings, always remembering that their cultures might not share the same rigid conception of nature and culture. This method is the basic approach of ecological anthropology.

According to Descola, there are, up to this day, three major schemes on which cosmologies can be built, or what we can call maps of “existings”. These are: categorization, relation and identification. To demonstrate the efficiency of this method, we can associate the last two schemes with four different ways of relating to the world: totemism, analogism, animism and naturalism. Identification, the process of identifying borders between the self and the other, and relation, the interactions between those beings, condition each other, which forbids certain combinations. Totemism, which postulates a resemblance on the spiritual and physical levels between the totem (object, natural species or geographical element) and its counterparts, defines particular essences to the totemic groups, from which are derived proscriptions on food consumption and killing. Conversely, analogism is based on a

\(^7\) It would be interesting to compare Bruno Latour's and Nicklas Luhmann's epistemologies on this very point.
fundamental difference, both physical and spiritual, between a person and its counterpart, to establish analogical relations about the events affecting the two. Their mutual influence is only conceivable from the point of view of their difference. According to this, the way animals are treated always carries the risk to affect human condition and destiny. Animism functions in a totally different way. It involves a similarity on the spiritual level, but a difference on the physical level. This relation can emerge as a reciprocal relation, actualized as an exchange of services, souls, food or life energy. For example, in certain animist systems, not only can humans feel indebted to non-humans because of the taking of lives through hunting, but the hunters will admit that non-humans take back from them by stealing body parts, food or vital energy. On the other hand, naturalism identifies nature as a completely separated world, heterogeneous to humanity. It does not identify any relations of reciprocity between the two worlds. In fact, although naturalism accepts a certain physical continuity between humans and non-humans, it postulates a rupture on the spiritual level, which makes any notion of communication between them impossible to accept.

A first remark must be made: in these conditions, can an ecological project be suggested in regard to naturalism (as defined by Descola)? If any notion of communication between humans and non-humans is absurd and if human interest is the only limit to a subjugation of nature, is a preservation or only a conservation of nature conceivable and practicable? Environmental ethics are concerned by this possibility. They generally answer negatively. They affirm that the metaphysical dualism developed by modernity limits morality to cultural beings, namely humans. This prevents any kind of moral recognition to non-humans, but it is necessary to take care of them.

Looking at these different cosmologies enables us to see how naturalism is no more than a certain way of interpreting the world. It is a singular ontological formula, like the other ones (totemism, analogism, animism), that is organized from the practice schemes common to all cultures. Descola’s work proves that no theoretical argument can justify the dominance of the western conceptual framework.

5. Ecological critique of modernity

It now looks as if all the conditions are set for a proper redefinition of the modern paradigm. Modernity deconstructs itself both internally and externally, but the ecological critique also attacks dualism. Nevertheless, although it seems that all is in favor of this change, it seems analytically impossible from an environmental perspective. The ecological critique of modernity will allow us to measure the implications and contradictions involved in the attempts to step out of the modern framework. In relation it is important to consider that Latour situates his work in the horizon of political ecology to be built.

Why the ecological theory is incapable of rejecting the modern paradigm is quite simple. The ecological crisis consists in the degradation of the natural world. Now, as we see, the

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9 Domestic animals seem to be the exception on this case. Generally, the owners develop a close relation to their pets and thus develop a certain morality in regards to them, limiting their behaviour in regards to them (although many counter examples are available).
The Nature-Society Controversy in France: Epistemological and Political Implications

definition of the crisis in itself is dependent on the dichotomy that is named as responsible for the crisis. Also to change the ontological paradigm would mean to cease the interpretation of environmental problems as dysfunctions affecting the natural world. Many problems are involved in this issue. As mentioned earlier, nature is the central theme to the environmental philosophies, their goal being to give nature moral value on account of an intrinsic value. Theoretically, it would be naive to give up the scheme that defines the object of their main research. Furthermore, the dichotomy is at the source of the creation of modern sciences, which reject any explanation of the phenomena in relation to final causes and defines space through geometry. Thus, to abandon the western cosmology is to abandon modern epistemology. But if the mechanist conception of nature has evolved, modern sciences not only possess extraordinary powers to explain phenomena, powers that are necessarily useful, but they are also the main if not the only tools we possess to come in contact with Nature, that is the biosphere. This is why it is so easy to build social controversies over global warming and the collapse of biodiversity for example. For non scientifically educated people, it is quite impossible to evaluate the extent of the damage of human activities on the ecosystems and the biosphere. It is then clear that the role of science must remain somewhat important unless we adopt, as certain branches of ecology do, a very different definition of the natural environment which is at stake. For André Gorz\textsuperscript{10}, the naturalness of an environment refers to an organisation of the common world which functioning and structures can be intuitively and easily understood, without any kind of prerequisite learning. One can orient oneself and act relatively spontaneously in it. In this perspective, the ecological concern is a political one: it is about the colonization of the lifeworld by systems (technical-industrial-capitalist systems). But if the main issue is to care about biodiversity, and not only to resist to the expropriation of a common world that the systems destroy, we need to enter into scientific reasoning because we have to measure the impacts of our way of life on ecosystems. Common knowledge, intuitions and political concepts are not sufficient to build a representation of the anthropogenic damage caused on the ecosphere. In fact, scientists were the first ones to ring the bell after overseeing the extent of the degradation that was going on.

We are consequently facing a paradox. On one side, we are in front of a metaphysical paradigm that implies an unacceptable action in regard to our natural environment, but on the other, this paradigm is the only way leading to an understanding of this aberration. The paradigm is both problematic and helpful. Are we mistaken? Must we after all keep the modern metaphysic? Or must we really abandon all references to modern nature? Is a practical knowledge of nature better suited to understand the problem? In brief, is it necessary to break down, in a radical way, modern naturalism and reject once and for all the categories of nature in opposition to society?

To understand this problem, we must understand the link between politics and ecology, for the problematic character of the nature-culture dichotomy is at the source of this environmental debate. To care about the depletion of natural resources involves being dependent on nature, not being outside of nature. Furthermore, the concept of a responsibility towards the planet supposes a relation of dependency of the planet in regard to human activity. Its state is modified by human activity and technical interventions necessary

\textsuperscript{10} André Gorz, \textit{Écologie et politique}, Galilée, 1975.
to the shaping of human societies. To summarize, we must admit that the understanding of the environmental crisis has challenged the theoretical apparatus of modernity because it involves new categories incompatible with the nature-society dichotomy.

6. Two philosophical perspectives

Philosophy answers the problem from two different perspectives: environmental ethics and political ecology. They both propose to reorient human activity in reference to two philosophical themes, namely ethics and politics. Environmental ethics, a North American movement, try to question our relation to the environment from the standpoint of morality and more precisely, the legitimacy of a protection of the environment. Why, morally, should we protect our environment? The main goal is to define our duties towards nature. To reach this goal, an ethical control of our technical abilities is insufficient; environmental ethics are dedicated to giving the natural element moral value. Their basic intuition is that non human elements must have something like an intrinsic value and must be considered for themselves. This value must be considered apart from the instrumental value of nature, which is easily definable by the many services that nature procures to humanity: resources, food and even aesthetic beauty. In this case, it is said that the environment is not synonymous of nature, an autonomous entity, because environment is still attached to the interest of the being surrounded. Such criticism leads to the proposition “Think like a mountain” for example, which means that environmental ethics should adopt the perspective (and represent the interest) of an ecosystem and not a human collective point of view.

The other philosophical movement, political ecology, started in Europe and has now become an international theme. It developed around the anthropocentric project of protecting the natural environment of human societies. In this perspective, nature is considered as an objective condition of existence for human societies and this is the basic reason why it should be considered as a new object of research and political inquiry. It is accepted that the modern State has the responsibility to protect its citizens. Therefore, the State must protect the citizens from natural disasters, but also from pollution and the degradation of the environment. Because actions on the environment affect others by transforming the physical world, public policies should regulate these activities of transformation in order to protect society in general. What is at stake here is the regulation, by the State, of our actions on the environment.

Nevertheless, the practical objective of these two philosophies might not have been reached. For example, in regard to environmental ethics, although the American orientation towards a valuation of nature for itself has questioned the relation of the modern man with nature, it is still burdened with the problem of man’s natural origin. A promotion of the respect for the absolute Other does not break down the borders between “humans” and “non humans”, but only affirms the existence of the dichotomy. North American natural parks (including the Canadian ones) are the best example of this: the visitor must not leave any traces of his visit, which suggests that he is not at home in the natural environment. The park system

11 For a presentation of the environmental ethics, see Catherine Larrère, 1997, Les philosophies de l’environnement, Paris, PUF.
12 The well-known expression is from Aldo Leopold, A Sand County Almanac, 1949.
does not promote any real “direct” experience of nature (the opening schedules of many installations restrict this in a formal way), nor does it allow any beneficial co-evolutive human practices (like transhumance in the Alps). The dichotomy still remains, the conditions of normativity have simply been reversed and we are in the presence of a natural subsumption.

But also, if the environmental ethics’ goal is to ultimately enact new policies capable of changing our relation to the environment, their efforts are concentrated on justifying moral interdictions and obligations in order to transform our ideological universe. Nevertheless, focusing on a moral dimension remains a vague enterprise. It does not imply to question the political and economic aspects of the situation that it questions. For this reason, we can fear that this project will remain inefficient because it fails to grasp the environmental crisis in its totality. Furthermore, it does not identify the social forces interested in considering nature as a pool of unlimited resources. Ignoring these considerations, environmental ethics must then rely on the only theoretical view left: an authoritarian imposition of new moral rules, only justified by philosophy, to modify our behaviour in regard to nature. An acceptance of their point of view by the concerned citizens is not considered.

The perspective of political ecology is somewhat different, it is not concerned with a submission to the natural order. It can be seen as an extension of the Enlightenment as it promotes the construction of a society based on the moral rule of reason. It simply adds to the original political project of the Enlightenment new aspects of human activities. In this perspective, the logic of political ecology presents itself as pragmatic. It asserts the dominant economic paradigm, as noted by Catherine Larrère, by confusing interests and values. In other words, it shares the same presuppositions concerning the economic paradigm. We can therefore doubt the capacity of political ecology to modify our society’s inscription in nature.

It is obviously clear that this project is in opposition with environmental ethics: nature is left aside to promote the cultural framework; we are in the presence of a subsumption of the natural order under the cultural order. As Descola remarks, a rational management of nature is at the end not profitable to its enactors as it leads, potentially, to the transformation of the world into a gigantic zoo; in this perspective, the survival of the blue whale or the preservation of Antarctica is carried out but only tributary to human conventions. But is there not an essential difference, although difficult to grasp, between knowing oneself to be living in a managed, constructed environment and living in a world not conditioned by human activity? Does ecological concern lead to living in a zoo? What is at stake is the confrontation, more or less direct and more or less intense, with a human intention; and the possibility to avoid it. For the western world, this difference is essential because it relates to the concept of the Other, the Alterity, a concept which is described by Descola as a human constant. But unfortunately, political ecology has left aside the theoretical means to understand, or simply grasp, this Alterity.

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In a similar way, Jean-Paul Curnier developed in *L’Écologie politique au miroir* the intuition according to which ecology would be the end of the political project. Human being has become the work of human being, and this means that the goal of politics has been reached. But this humanization does not have a humanist end; it is not a process of emancipation in which human being would be all together creation, creator and object of his work (in a Marxist view), but it serves a new form of reflexive control (human being facing his city, his nature, his world: producer, product and condition of his production; man in charge of his self-production). Thus, ecology brings the end of politics, because there isn’t any collective choice anymore. What is left of political action is no more a production of the world, in reaction to possible conflicts, but a possibility to complain to a system that cannot be accused in itself, but only considered as an irreducible fact. Curnier claims that we are moving from a political consciousness to the complaining consciousness (one can observe this phenomenon in regard to the increase of the legal sphere). This position shares many aspects with Latour’s diagnosis. For both authors, the submission of politics to nature causes the ruin of politics. In response to this diagnosis, Latour works on a practical research program aiming at opening up another perspective.

### 7. For a control over the moderns’ excessive hybridization

Latour’s epistemological position has political implications: it leads to the deconstruction of the many biases resulting from the practices of purification. For instance, formal democracy can be criticized. Although it seems obvious that a truly equalitarian society must address issues concerning the situations that create inequalities, formal democracy does not take these situations into account. Furthermore, the true democratization of society requires a double rupture, both epistemological and institutional. Latour has made political propositions, redefining the ecological question in the following manner: how is it possible to find the right place for science in a democracy? His political propositions can be interpreted as an attempt to reach a compromise. He will not do without modern science, since it is quite relevant to qualify human and non human entities in some specific contexts, but he also refuses to give it as much political weight as the modern paradigm does when dealing with environmental issues.

In his book *Les politiques de la nature. Comment faire entrer les sciences en politique*, Latour addresses the issue of the Moderns’ excessive, because unconscious, hybridization. The author suggests a reorganization of public debates and decision making processes built around two “moments”, symbolized as two chambers, “moments” from which are constituted the participants to the common world. The first chamber’s function is to identify the entities implied in a problematic situation. The second chamber classifies the different scenarios. In other words, the first chamber is built around the questions: “how many are we?” and “who are we?” and the second around the question “how can we live together?”. Essentially, bicameralism does not properly break away from the fact-value distinction, but it organizes distinct procedures susceptible to guarantee its legitimacy. It aims at separating the actions leading to the production of the different facts and values. This theoretical

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proposition might seem strange coming from a man whose position was officially against practices of purifications and the dichotomy of nature and culture. In fact, Bruno Latour proposes a sorting device that allows to think and build new associations between humans and non humans. More precisely, he does not object to certain practices of purification given that they allow to think the hybridization of the world and follow it. Instead of putting trust in the difference between facts and values, Latour proposes to operate the distinction between facts and values\textsuperscript{17} on a temporal scale.

Latour uses the distinction between facts and values to build two tests necessary to Democracy, each one associated with a chamber. The first is the identification of the candidates to the collective; the second is an exploration of the possible assemblies. The existence of the first chamber shows how a certain practice of purification is necessary when a complex situation is being resolved, creating a climate of perplexity. The second chamber, for its part, puts into light the existence of propensities that condition each one’s perception of the different assembling. This second chamber stands as a moment of classification, or consultation that makes it essential to the construction of Democracy. According to Latour, this model’s main strength is to prevent the establishment from assembling on the basis of presuppositions. As a safeguard measure, the tests make sure a regime of equality is put into action in respect to all the candidates to the new assembling. This device also promotes a principle of precaution in regard to our typifications and presuppositions preceding the consultation of “human” and “non human” participants. In this manner, a dispute becomes an occasion to question the nature of our partners and, if necessary, to reconstruct alliances from “human” and “non human” entities. All conflicts are then potentially related to a question of legitimate recognition.

But practically, one might ask, how is it possible to organize a consultation about a collective composed of cars, humans (drivers or not) and frogs? Latour’s answer is straightforward: the factoring of “non humans” is done with the help of consultation devices proper to them. It is no more extravagant than to think about democratic consultations for humans. The factoring of “non humans” must be done with devices that allow them to appear as reliable testifiers -that is- that allow them to express their preferences\textsuperscript{18}. This position involves the possibility of a direct consultation and the creation of a device adapted to this task. According to Latour, it is worth attempting, as many experiences have shown. When frogs are confronted to a new adapted device, for example a new pond or a frog-adapted overpass, they are able to express a choice. This observation gives a new responsibility to science- and also to research, as it elevates this activity as the major resource for technical Democracy. When science is applied to equip “non humans” with proper devices for the expression of their preferences, it is then possible to talk about an alliance of science and

\textsuperscript{17} What is really contested by Latour’s reconstruction efforts is not the distinction between facts and values, but the establishment of two distinct classes, a practice that prevents from exploring many possible compositions from candidates to integration into collectives. This theoretical limit seems to be an obstacle to Democracy.

\textsuperscript{18} In another context, Isabelle Stengers (1993, 1996, 1997) establishes a relation between consultation devices for non humans and laboratory experiments. She proposes to consider the extreme scarcity of successful consultations, from the point of view of the devices making them possible, in both human and non human history. Facing such a rare incident, we should celebrate the successful consultation.
Democracy, and about technical Democracy (Callon, Lascoumes and Barthe, 2001). This experience shows how much a consultation can be achieved along with “non humans”. It testifies that we can negotiate with “non humans”\(^\text{19}\). It also testifies to the role of science in the processes of representation. Science is therefore political by extension.

From this point of view, political and scientific institutions have a common goal, to participate in the representation of collectives in the public space. Both these institutions explore different forms of representation. Hence, they are precious resources for the formation of collectives. Nevertheless, they are not organized around a separation of nature and culture, a structure that usually gives the final word of truth to science, but around the entities they represent. Their alliance can be qualified as equalitarian. This it justifies the new collaboration between science and politics for the construction of the new democratic state as proposed by Latour.

8. Conclusion

When dealing with the ecological question, modern dualism has repeatedly been the target of critical attacks, whether from hermeneutic and comparative perspectives or from supporters of political ecology and environmental ethics. However, this critical point of view should be questioned as well in regard to the adoption of an ecological perspective.

First, the difficulty to think beyond the modern dichotomy remains. In fact, the theoretical propositions dedicated to the ecological question we have analysed (environmental ethics and ecological policy) both seem to value one of the terms over the other instead of finally considering them as a unity. Secondly, both theories seem to move away from a fundamentally renewed political project, although for different reasons. They both address the ecological issues without a radical questioning. Looking at these two theoretical issues should allow us to better understand Latour’s work, whose efforts aim at transforming the theoretical apparatus of modernity without depleting it from modern sciences. Finally, Latour’s work should be understood as an attempt to bring back political action in the construction of the common world.

9. References


\(^{19}\) The difficulty to communicate with non humans, according to Isabelle Stengers, offers many advantages from the point of view of the organization of democratic consultations. In fact, it seems more difficult to survey humans than non humans. According to Stengers, humans are known to be inconsistent and versatile, making it harder to build a steady representation of them. This can be observed by considering the numerous philosophical, political and anthropological considerations on the creation of the democratic state and representation of the people. According to this view, technical Democracy presents two main difficulties, representing ‘humans’ and ‘non humans’.


More than the usual academic textbook, the present volume presents sociology as terrain that one can virtually traverse and experience. Each version of the sociological imagination captured by the chapter essays takes the readers to the realm of the taken-for-granted (such as zoological collections, food, education, entrepreneurship, religious participation, etc.) and the extraordinary (the likes of organizational fraud, climate change, labour relations, multiple modernities, etc.) - altogether presumed to be problematic and yet possible. Using the sociological perspective as the frame of reference, the readers are invited to interrogate the realities and trends which their social worlds relentlessly create for them, allowing them in return, to discover their unique locations in their cultures’ social map.

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