

## **Teaching new research questions in political studies: the case of the environment.**

Panel: Quality of Teaching.

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Reflections on how to teach new research questions usually focus too much on those questions rather than on *how to teach them*. Having explored other pedagogical themes in the past, I have been experimenting for the last two years with pedagogical methods on how to teach emerging political science questions in the field of the environment, through a full-year undergrad thesis preparatory course at the institute of political studies in Grenoble, France.

I touch upon several of these new questions, the first being at once theoretical and methodological: how are we to analyse multidisciplinary, multi-actor and multi-scale environmental issues from a political science point of view? At the philosophical level, several authors put forward that the environment requires a non positivistic and non modern approach but teaching is left open for questions.

A second issue addressed is that of the relationship between two fundamental precepts and concepts of sustainable development: participatory democracy and environmental sustainability. While these two are almost always considered to necessarily go together by researchers, NGOs and decision-makers, there are several ontological *potential* contradictions between them. I focus in my course on one, the political-practical level: the rare researches that have directly addressed this issue put forward that when a choice is to be made between a non-environmental decision taken through a democratic procedure and sustainability, the environmental option tends to be rejected. In other words, the democratic imperative takes precedence over the environmental one.

My presentation shows how I integrated these questions into my curriculum; how they were used to bring students to better understand environmental issues; and how they were integrated into students' construction of their own research projects, leading to a 100 page undergrad thesis.

### **A few prerequisites to teaching new questions.**

Teaching emerging or new questions requires a first condition: having completed a good and up-to-date analytical literature review on the subject taught. In my case, this was done for a research financed by the French Ministry of ecology and sustainable development, in which we undertook an

in-depth review of the French literature on the issue of participation in the environment, with a comparison with French Canadian research. In addition, I have been involved in research on the issue of sustainable development for over ten years and just completed another for the French Energy Council on SPD in dams. The questions can be classified into three large groups:

1. a political question: the environmental weight of participatory procedures ;
2. a disciplinary question: the weakness of a French environmental sociology, related to strong disciplinary boundaries and an unwillingness to raise...;
3. philosophical and epistemological questions: how far does the environment questions the Enlightenment project and positivism?

We also address the following transversal themes: how deep really are actors' environmental values? How can we distinguish norms from values and do global norms transform themselves into individual level values and beliefs?

For teaching purposes, these questions translate in the following manner: how can one teach a multidisciplinary issue and approach to understand that issue? What does 'ecological thought' mean politically, epistemologically, philosophically, theoretically and methodologically? What are the implications for positivism and more generally, modernity? Considering the complexity of these issues and the fact that we are teaching *new* issues, there is a certain amount of risks in teaching and exploration, 'live' in front of students, that one has to assume. I first present the way I teach these research questions through a multidisciplinary approach. The way the seminar is structured throughout the year follows closely the different steps of a research: global, general questions are followed by theoretical ones, which are then followed by methodological and empirical considerations and finally, back to theoretical considerations. The reader needs to know that students choose their own subject and actually shop around for the seminar that best suits them, which also means that there is an initial personal contact: students come to a short presentation of the seminar the preceding year, thus coming into personal contact with the instructor. This plays a significant role in their choice of the seminar – especially if a student is not too sure about which subject (s)he is interested in... Thus, the instructor is not in a position to give orders or choose a subject for the student, (s)he can only supervise the work and the process, making sure that it corresponds to political science norms, that it be interesting and understandable.

### **I. Teaching new research questions.**

As mentioned, my seminar « politics and environment » (36 hours, up to 15 students, over the course of an academic year) aims at preparing students for a 100 page undergrad thesis. Students choose this seminar according to their interest. My objectives are to:

- offer students a portrait of the philosophical, theoretical, methodological and political/empirical issues related to the environment in a consumer, liberal and democratic

society where sustainable development is the new regime in terms of decision-making, behaviours at the international, national and local levels;

- train students so they come to understand the interactions between the environment, society and social sciences, so as to;
- help them in the development of their hypothesis and analytical framework for their thesis.

To do so, I have adopted a double-prong approach. There are indeed two phases both within a single session and throughout the year. The first is more theoretical and abstract – as well as more structured and classical pedagogically speaking - and the second more hands-on or empirical. And it is also more free and spontaneous. Thus the second phase puts more emphasis on students' responsibilities for their own learning.

In the first phase of the course and of each session, I present basic notions, issues, theories through the discussion of texts they have previously read. But I go further than just talking about the text's content: I also present the way it is structured, the presentation, its strengths and weaknesses, so as to teach that 'poli sci' way of presenting and developing an argument. I also integrate discussions about the ideas and arguments expressed and how they relate to new questions.

The second phase is more flexible and is made up of either pedagogical activities that aim at deepening the understanding of the theoretical points made in the previous phase. In-class discussions are free in the sense that all points and arguments are allowed as long as they respect ethics and politeness. During this period, I try to disappear as instructor to become a facilitator. This also allows flexibility so that I can adopt my planning according to students' research subjects. These second moments in the sessions also represent a 'learning by practicing and doing' rather than just by thinking. Thus, my class planning aims at equilibrium between rigidity and open, between traditional methods and new ones. But as one goes up the diploma ladder – from undergrad to doctoral thesis, or from the beginning of a one year seminar to the end, I think it best to start with more conventional 'rigid' methods and as the need arises, as students' basic skills and competences improve, one can move toward increasingly space for spontaneity, which has the very real effect of contributing to students' sense that they are more and more autonomous and real researchers who can assume and defend their position. A last comment needs to be made concerning rigidity and traditional methods: part of it also depends on the number of students in a single classroom and the number of hours. The higher the number of students and the fewer the hours, the more traditional I become.

The first, more generalist and theoretical phases, aim at giving students the necessary background and intellectual training that will eventually increase their autonomy in research projects and thus allow them to better engage in their empirical phase. The idea is to transform students into budding researchers. They periodically present their research, after they have handed each of their three

assignments. The first (5 pages) presents a general issue, with the questions and specific issues that interest them. Then, the second assignment (10 pages) answers my questions and addresses issues I raised in the first and also presents a first hypothesis and three main arguments related to it. A few methodological comments are also included. The third essay (20-25 pages) incorporates my comments from the second work and offers a literature review. This essentially represents the skeleton for their thesis: research question, hypothesis, analytical framework and literature review. All they have to do then, is to fill in the holes, and integrate their field research and interviews, and expand on the points made in the third assignment. Students appreciate this method as it forces them to regularly work on their project while always building and improving it. But more importantly, these papers thus act like benchmark moments or steps toward a clearly identified goal with explicitly expressed goals, conditions and rules... It is important to understand that writing is not just like thinking: when writing, there is a process by which thinking becomes clearer or at least reveals its unclarity because one talks a step toward objectifying one's thoughts... Thinking is not linear, while writing and reading are, especially academic writing which has to follow western style reasoning, logic and dualistic reason. Thus, part of the process of writing is to translate non-linear thinking into a linear process that can be more readily understood and evaluated by others.

During the last sessions, we do an oral defence simulation, with me and two other students taking turns at asking questions. We try to be as hard as possible. But before they get there, students engage in a rather complete process that starts with a difficult question: the epistemological implications of the environment for social science research.

## **2. The branch in its total context.**

The first class aims at getting students to understand their epistemological position – i.e., which can be defined as one's position regarding the relation between perception and reality, or even the very existence of reality – through an activity that aims at showing the complex relations between an object and its *total socio-ecosystem*.

I stick a branch in the middle of a blackboard and then give students 15 minutes to list all of the branch's characteristics, including how it interacts with its milieu. Each year, we end up categorising all these elements into four main groups: nature (including biological and chemical elements); economic (cost of maintaining the tree, fruits, branches, monetary value...); political (urban or university legislations in terms of green spaces management, etc...); sociocultural (symbolic value and social and individual representations of the tree).

One needs to avoid making a sequential list without making links between the elements. This follows more closely an ecosystemic thinking that put forward that elements are related and interacting. This implies that, often, categories are not autonomous. The elements are not only put on the board according to the degree of closeness to another aspect (politics close to economics, for

example) but also according to the scale level: the closer to the middle of the board, the closer to the level of individuals. Inversely, the closer to the edge of the board, the more macro the scale.

Table 1. The branch in its total context.

ECONOMY	<b>global</b>	POLITICS
Value of fruits		environmental policies
Value if space		Urban and park policies
	<b>local</b>	
<b>global</b>	<b>local BRANCH local</b>	<b>global</b>
	<b>local</b>	social construction of fruits
Oxygen « B » water		
NATURE	<b>global</b>	SOCIOCULTURAL

Clearly, the goal is not to understand ALL of the environment. One needs to address one specific environmental issue and to concentrate on significant and interesting relations between (sometimes seemingly heterogeneous) elements. So, the question raised here is the same as for any research in any other field but the answer one offers in this specific field is more complex, and the frontiers and boundaries have to be more tightly given: how is one to engage in a research on an issue where relations are so numerous and complex, and especially so multidisciplinary? For some researchers having dealt with these questions, complexity is not an object as such but a reflection of the way we perceive things and thus, it can be constructed so as to be an object of social science analysis<sup>1</sup>. In a theoretical article, Latour, Schwartz and Charvolin<sup>2</sup> also address this issue by asking the following disciplinary question: how can the social sciences be renewed sufficiently so as to be able to withstand the shock of the environment? After a discussion on the relationship between these sciences and modernity, the authors recommend six epistemological measures which we discuss in class. But just taking about the text is not enough, pedagogically speaking.

I thus get back to the board. At this point, the branch represents the students' research object. As with the branch, the issue here is not for students to tell everything there is to tell about that branch is – as you may have noticed, this also represents a way to teach students basic research method. One needs to make a choice, while justifying the choices made relative to the main question, the hypothesis, the arguments and the relations that are to be established between the elements. Main

<sup>1</sup> C. Lafaye et L. Thévenot. "Une justification écologique ? Conflits dans l'aménagement de la nature". *Revue française de sociologie*, 34, 1993. Pp.495-524.

<sup>2</sup> B. Latour, C. Schwartz et F. Charvolin. « Crises des environnements: défis aux sciences humaines ». *Futur antérieur*, été 1991, pp.28-56.



manner. This, to me, raises the question of legitimacy and one of the bases for the persistence in time of an international regime, in the absence of a hegemonic power. Students must then, include in their second and third work a one-page annexe that locates them on the epistemological continuum and a short explanation as to why there is a change or not in their position. Once they have understood the general epistemological question, they can tackle another continuum: ecological positioning.

#### **4. The ecological continuum.**

The ecological continuum helps students clarify their positions regarding the link between humans and nature: are we separate, or totally integrated into nature? Do we master it? Have we evolved beyond nature while being able to destroy it? Are we at the centre of nature? This takes us back to the previous issue, i.e., modernity and positivism: indeed, the enlightenment project first got rid of God as the centre of all things and faith as the way to understand that world, and replaced with Humans at the centre and reason as the perception tool. The question at issue here is whether the environment crisis is not leading us to thinking that we are not at the centre of the universe – which modern science has demonstrated - nor of the natural world, and if so, what are the consequences for the enlightenment project?

Before coming to class, students read a text on the main ecological currents and their radicality level, which rests upon the relationship between humans and nature. We first discuss the text, in this case, Dominique Bourg's « les trois scénarios de l'écologie »<sup>3</sup> and then go beyond it. We make use of the ecological continuum to help deepen the discussion. To summarise Bourg's argument, one can say that the radical ecology current refuses individualism and the economic ideology and adopts a biocentric position in which humans are only secondary (or even further, some authors, arguing that the human population should not be kept to a few millions). Nature as such has an intrinsic value, independent and above human considerations. The main authors are Aldo Leopold and Arne Naess. The second current is the authoritarian one, as put forward by Hans Jonas. The refusal of the economic ideology is less profound, but our obligations toward future generations also include necessarily obligations toward nature. The notion of responsibility thus become central and it is fuelled by fear. Decisions are made by environmental experts. The third and last scenario is democratic and it is represented by Ivan Illich and more generally by the new regime in development : sustainable and participatory development. Human rights are thus at the centre of this approach: a plurality of modes of living, democratic procedures in all levels of decision-making. It is also based on an intuitive understanding of nature, which departs from SPD, and which we highly question in our discussions, as none of my students ever believe that intuition is

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<sup>3</sup> In *Les Cahiers du Germes : L'environnement au XXIe siècle. Les Enjeux*. Vol. I, 1998. p. 581-593.

sufficient to ensure a real environmental behaviour. It may well be that consumerism would be the outcome.

Here, students think about and then express their belief regarding the relationship to nature. It is likely that my groups do not represent the population at large, as they are more interested and more sensitive to environmental issues – some are even members of an ecological students’ party – and thus their ecological level is probably higher than in the general population. But our discussions have made several weaknesses appear in Bourg’s, and many authors’, account of the potential variety of ecological currents. Indeed, we can account for two ruptures in the continuum. The first is between conventional development and SPD, non economic factors having become as important – or almost, this depends on actors - as economic factors. The second potential rupture is more interesting: the spiritual forms of ecologism vary according to region but it exists almost everywhere on the planet: traditional north American native spirituality; animism, Shinto, and the Gaia hypothesis. This is a radical rupture in the sense that we are not dealing strictly with an ideology but with a cosmology, related to an individual’s relation to the unknown, the universe and living entities as-a-whole. We thus go from an economic-centred approach to one open to social, symbolic, cultural and political elements to one that is ‘beyond society’ in a certain manner of speaking, to enter the world of spirituality.

Table III. Ecological continuum.

Ecological continuum.				
I-----/a/-----	-----I-----	-----I-----	-----I-----	-----/b/-----I
Conventional Development	SPD	authoritarian	radical	Spiritual
(SPD: Sustainable and participatory development)				
(Spiritual ecologism: Gaïa, indigeneous spiritualities, etc...)				

This activity helps students to become more aware of their own usually automatic and unconscious beliefs regarding their relation to nature. Obviously, one needs to define, before doing this activity, the three notions of nature, environment and ecology. Another interesting exercise is to see if for your students, there is a positive relationship between epistemological and ecological positioning... Do postmoderns tend to be more ecologically radical? If this holds, you can then go back to the discussion regarding the implications of ecological thinking for modernity and positivism. While on the whole, the match is not perfect, there is a general trend, the more positivistic students usually being less radical ecologically. This could also be related to one’s tendency to be critical generally, an individual more critical of economic development,

consumerism, will also tend to be more critical regarding the Modern way of conceiving humans' position relative to nature, at the centre of one element among many others? Obviously, more research is needed on this point and quantitative methods and surveys would be of great value here.

These different activities, and the explanations of basic notions and issues, always lead to discussions regarding multidisciplinary, which we get back to in a less theoretical fashion, with the help of a bottle of water.

## **5. The water bottle activity.**

After the branch activity, I use a second method to address in a more practical manner the issue of multidisciplinary, by using a human-made everyday, common object. I got an idea from an article<sup>4</sup> – that students have to read – and that presents the French version of integrated management, « gestion patrimoniale ». The author reminds how complex a simple glass of water can be for a research project: its chemical composition raises health issues; filtration and purification raises environmental issues; its distribution raises technical and political and ethical and economic questions, especially in the third world. Each of these issues is linked to different scales of analyses (individual, local, national and international) and influenced by a large variety of actors.

One can go further than just a description and spend a whole class or even an entire course on the water issue. But the important point here is to attempt to offer practical methodological answers to this complexity. You can go back to the first board with the thick and thin traits but while this offers a global view, it does not offer a way of actually doing it. I like using water because of its crucial importance for life as-a-whole, health, food... The idea here is to re-construct the history of a bottle of water, from rain to source to bottle to drinking, and then call forth the different disciplines involved: geology, climatology, hydrology, engineering, manufacture, chemistry (plastic for the bottle), distribution (which involve means of transportation, energy...), publicity, consumption, garbage, pollution... Obviously, by getting into details, a whole course of 24 hours could be devoted to the issue. Have you ever calculated the value of water per litre and compared it to petrol?

A last, transversal issue, which becomes one of the questions students deal with in their theses, is the depth of environmental values in the actors they analyse, an issue that raises another, fundamental, and which takes us back to some of the potential problems inherent to SPD: the environmental value of participatory procedures.

## **6. Is participation necessarily sustainable?**

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<sup>4</sup> L. Mermet. « Le système des relations patrimoniales (long terme, milieu, institutions) ». In Groupe d'évaluation de l'environnement et du patrimoine. *Déterminants de la gestion patrimoniale*. Lettre de commande, Ministère de l'Environnement et du cadre de vie. 1980. 15 p.

It seems to me that the depth of a value is directly related to the legitimacy of the issue related that value – which raises still open questions regarding a regime’s persistence through time: does it, ultimately rest upon individual actors’ values? This would also be directly related to the ease or resistance a new public policy can encounter when first being implemented. This issue of legitimacy and values is also important for another field, that of decision making in public policy: increasingly, decisions are not taken on the basis of whether they are scientifically or technically true or valid but, in democracies, on the basis of their social and political acceptability. Thus, what if, in the context of the Kyoto protocol, more stringent new anti-automobile policies are refused by the population? Are people’s attitudes and values sufficiently ecological to allow the emergence of a sustainable society? This issue of a NEIMBY – no environment in my backyard - is barely ever touched upon by the social science literature, yet it is probably one of the most important barriers to a sustainable society. And, scientifically, it offers an interesting original and thought provoking angle by which to address issues related to sustainable and participatory development.

While researches on this problem are very rare, the few tend to support our hypothesis. Thus, a reading and a discussion regarding the NEIMBY can be undertaken with students, as a concrete example of the theoretical discussion regarding the ecological currents. More importantly, this issue becomes part of our on-going discussions in the classroom and we get back to it in our different discussions and whenever appropriate in their three preparatory papers leading to the thesis. For example, they attempt to see if authors have made the distinction between participation and environmental results in their papers, whether the actors they interview distinguish them.... Most students also find this question crucial and most relate it quite easily to their interrogations and research. Thus, most will bring more or less in-depth answers to the question, thereby ‘feeding’ me with reflections that are at times theoretical and at other, very empirical but very precise. The potential contradictions between these two of the fundamental concepts of SPD have thus become a guiding line throughout the different sessions and a way to better understand the ecological continuum.

After the third paper, we get back to both continua and I ask students to engage in two exercises: first re-position themselves and explain why they have changed if that is the case, and then, position the actors they have interviewed on the ecological continuum, or their different answers to see if there are not, indeed, within a single’s actor’s discourse, different positions. Lastly, I ask them to fill out a questionnaire, which they had first filled in at the beginning of the year, on their ecological footprint. Has there been a change in their behaviours in the nine months we spent together? While I do not believe it is my purpose to deepen their ecological values as individuals, I do feel satisfaction if both their beliefs and behaviours change... On a more reflexive level, noting that their ecological positioning has changed with some behavioural modifications feeds our analysis of the links to establish between values and actions. A last point on this: to me, and after thinking about this for years, good pedagogy rest in large part on the capacity of the instructor to get students

in a process of self-discovery. While this may seem ambitious, in their small ways, this is what both continua aim at: discovering for yourself what you think your relationship to reality and thus to your entire field of enquiry, in this case, political science.

### **Conclusion.**

While, of course, there are many more classical methods such as a literature review to teach new research questions, I find that the ones presented here allow to touch with a greater variety of learning styles (some students are more theoretically inclined than others, and some are very good at making use of empirical material). It also adds a touch of fun and originality to otherwise theoretical and difficult epistemological questions. I found several times that this really helps students understand basic issues but more importantly, it offers them a general method by which they can construct their research project and can talk about different issues. Most have found these activities useful for other courses, which at first sight, did not appear related at all. After all, once one understands basic epistemology and theoretical positioning, it becomes easier to detect and understand criticism, and respond to it, even when one is facing a university professor during an oral defence for one's undergrad thesis...

To finish, one also has to say that there clearly is a strong learning process by the instructor here, a process that is then incorporated into the activities and methods through adjustments I bring to them every year. But one has to be careful about not getting ahead of the process and thus, telling students what is what rather than letting them discover it. It is both important to their learning process and mine. Indeed, if I had attempted to give them the table all prepared to them from the start, I would not have understood certain points and would have missed others entirely. The point here is that the instructor does not know it all and that this collective process of construction teaches and brings to light new ideas, new relations and new understanding to everyone in the classroom, including the instructor. Thus, it is best to not do the work for them, to not always give an already built and too often seen as definitive, answer. Thus, it is important, for example, in the branch exercise NOT TO DRAW it for them: they have to go through the process of seeing those large categories and the different scales through conversations, team discussions or individual reflections. This way individual learning also takes place through collective learning, which also improves and deepens it.