

Projets de paysage

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What is a doctorate concerning landscape ?

Qu'est-ce qu'un doctorat en paysage ?

The Origin of the Question

Definition of the title of doctor and of the doctorate

If we were to stick to an historical point of view, taking as an example doctors in theology that European universities trained from the 13th century, giving the definition of a "landscape doctorate" would seem simple.

This title of "doctor" identifies persons who, according to the institutions that trained them, are authorised to transmit the knowledge they received and to develop it further. Since the "doctorate" marks the successful end of university studies it authorises the holder to teach and conduct research intended as universal.

This title retains, apart from in a few cases¹, this dual vocation of teaching and research, even though one sometimes takes precedence over the other. Since the reform of Bologna of 1999, which was aimed at harmonising studies in Europe by creating cycles of three, five and eight years of studies after the end of secondary school - either the Bachelor's, the Master's or the Doctorate -, this degree therefore marks the end of university studies.

A "landscape doctorate" would therefore be a diploma which, referring to the activity as a teacher and/or researcher of the person possessing the title of "doctor", would mark the end of eight years of studies following the end of secondary school. However, this transposition raises a few problems. The "landscape" does not refer to a university subject similar to what used to be theology or what history is today, for example. It would be preferable to talk of the activity of designing or organising space, in other words, landscape design. But this pseudo-discipline is not always taught at university and it does not concern a specific disciplinary field in all countries. For example, in France, researchers preparing a thesis on the landscape register in history, geography, sociology, ethnology, etc.²

What is more it cannot be compared to a professional doctorate. Unlike general medicine, for example, the landscape or rather landscape design is not the sum of techniques and of the knowledge that a landscape project requires. Landscape design cannot either be understood as a historical origin from which an arborescence of specialities would be born as knowledge developed. Nowadays, geography and sociology concern the landscape, namely through public policy issues to do with a given area. But we can't admit that these two disciplines derive from landscape design.

It is possible to question the scientificity and the universality covered by landscape design as a simple hybrid of technique and knowledge. Or what landscape designers or architects call a concept, in other words the inception of a landscape project. Isn't it a guiding notion transposable, *mutatis mutandis*, to another area rather than a general idea *stricto sensu*? In fact, the landscape doctorate, called for by the Bachelor/Master/Doctorate reform applied to European landscape architecture schools, runs the risk of representing a simple expression devoid of any meaning, a degree that does not exist and for which the possible existence may be in doubt.

Research into Landscape Research : Typology of Documents

However legitimate it may seem such scepticism is not acceptable. Firstly, this scepticism may stem from a lexicographic difficulty. Practitioners, in Europe and all through the world, maintain a difference between landscape architects and landscape designers. Only

the first ones are institutionally registered. But in France, the order of Architects opposed to the title "architecte-paysagiste" : so the students of the École nationale supérieure du paysage de Versailles, which diploma is recognized by the government, can't use this title. Otherwise, they can be considered as "landscape designers", since the formation they receive is not an engineering one. If we keep this distinction in mind, even if we will use one term or the other considering the context, a reading of the report of LE:NOTRE network entitled "European PhD in Landscape Architecture" is sufficient to convince us of the very existence of a landscape doctorate³. Secondly, few documents concern the doctorate relating to the landscape. But many documents bear witness to active research into what the study of the landscape is or should be, of the landscape project, landscape design and the academic disciplines relating to the landscape. Such has been the case at the École nationale supérieure du paysage of Versailles, since the 1980s.

Among the archives of this school of landscape design are widely circulated reviews concerning the origins and the changes in the profession of landscape architect, more scientific reviews focusing on a problem encountered by the profession - the change in scale linked to the passage from private commissions of gardens to public commissions for parks and town planning, for example -, monographs dedicated to landscape architects and, more specifically, to the founders of the school - namely, B. Lassus, C. Courajoud... -, the writings, sometimes unpublished, of these founders, the pedagogical programmes of the school that give an insight into the importance of research, the theses (often linked to an area) and, what is most interesting in this case, memoirs concerning the landscape and the landscape project - and reports and proceedings of seminars -, that were only published for internal purposes⁴.

Although we are not able to define the degree of "landscape doctorate" any more than the title of "doctor" in landscape architecture, it is clear that research in these subjects does already exist.

A subject and a disciplinary field difficult to define

To answer our question, we must therefore look for the reasons of such inadequacy. The argument of the social and political context may be used. Ill defined thirty years ago, an aspiration on the part of society gradually emerged expressing, albeit clumsily, a need for nature, urban parks and an improved living environment (Donadieu, Périgord, 2005, p. 173-193). It is therefore inevitable that local, national and European public authorities should relay this aspiration. It is no less inevitable that national and European training institutions should wonder as to the number of landscape professionals to be trained in order to address this need on the part of society, that they should want to train managers, and that they should have the teachers and researchers able to address this challenge, in other words doctors in landscape architecture. The inference is that it is still too early for research on the landscape to have acquired the historical legitimacy enjoyed by other disciplines⁵.

But a less contextual hypothesis may be proposed. The documents concerning landscape research at the ENSP in Versailles, and which are apparently similar to those that other documentation centres possess, have raised questions the relevance of which needs to be

acknowledged. They show that the landscape concerns a material reality as well as representations of this reality, which can therefore be understood as an environment or a territory, a common asset to be protected and bequeathed, a source of amenities and aesthetic enjoyment and the object of an artistic representation. These documents suggest that this polysemy of the term alludes to the plurality of disciplines that relate to it: ecology, agronomy, geography, sociology, the history of art and cultural history... They bear witness to the fact that the specificity of the "landscape" as an object, of the discipline and of the methods to be deployed remain difficult to define. It is unity of "the" landscape and of the "landscape" doctorate which remains difficult to conceive of due to the variety of disciplines involved. Even if it was not raised in such terms thirty years ago it was already acknowledged that the object of this doctorate - the landscape - posed a problem, and the unanswered question remains, which discipline should this degree be based upon ? In Germany, for example, the landscape PhD is called "Doctorate in Engineering" and under this head title are gathered all the other possible majors. This could appear a bit strange, but we could add that it could be explained referring to the historical heritage in which landscape architecture is rooted. The question of the reference discipline is not really solved.

Can we go any further? That is the question that all senior lecturers in a landscape architecture school should ask. How would they define the doctorate they will one day be in charge of ? As researchers they have one solution. If they wish to benefit from research and accomplish the task of propagating and furthering the knowledge transmitted to them, they can study the documents at the documentation centre of their establishment, problematize the question of the doctorate based on the analysis of these writings and, on the mode of the essay, hazard an answer.

This is precisely the approach we shall adopt here. The documents, dating back from 1978 up until today, have not been studied and, in the present article, we shall essentially base our work on the most significant ones. This article is the first part of a long-term research and it is written in the mode of the essay. It should be necessary to confront a bit more our hypothesis with the way this doctorate question is considered in other countries, particularly to take into account the analysis developed by Anne Coste, Pierre de Coninck, Alain Findeli and Xavier Guillot⁶.

This comparison is based on three ideas. Firstly, A. Findeli teaches at the University of Montreal, in a department that brings together design, architecture, urbanism, landscaping. It is interesting because he pays a special attention to the project that gives unity to all these professional practices (Coste, Findeli, Guillot, 2005). Likewise, the project is at the heart of the landscape architects training at the ENSP and other European schools. Alain Findeli and his colleagues came up against the same problem as us : how can we complete a professional training with an education in scientific research (Findeli, de Coninck, 2002) ? Secondly, this comparison is interesting as far as our differences are concerned. These teachers possess two advantages on us. They belong to the university and the Bachelor/Master/Doctorate reform was applied more easily than in French landscape architecture schools which often consider the university teaching as being too academic. Moreover, they have conceived their design training in relation to the German Bauhaus

pioneers, the new Bauhaus of Chicago, the Ulm Hochschule, Herbert Simon and Jean-Louis Le Moigne (Findeli, de Coninck, 2002). They wanted to point out that design is a complex act, at once theoretical and practical, scientific and artistic. In France, we have kept these dichotomies that prevent the advent of a doctorate in landscape architecture.

Thirdly, their works set the problem of the doctorate in a larger philosophical context. Their analysis is founded on the philosophers of action - Aristotle, Arendt, Gadamer - as ours (Coste, Findeli, Guillot, 2005). Taking into account this proximity, we will be able to emphasize the specificity of our solutions.

Research in Landscape Architecture : Questions and Tentative Answers

Practically all of these documents focus on the same issues. They seek to define what is meant by "research" on the landscape. They also raise the issue of the role and the purpose of research in landscape design schools - at ENSP in Versailles or in similar schools providing professional training -, in other types of training - university - or in different research establishments - the CNRS in France. In the same way, they attempt to take into account research linked with society. Lastly, these documents seek to define the aim of landscape research and identify the disciplines that share this field.

What sort of research are we referring to?

It is difficult to give a single answer to this question. A school of landscape design or architecture brings together teachers who are practitioners - professional landscape designers and visual artists -, and teacher/researchers from different disciplines. Moreover, each of these categories seems heterogeneous.

It is evident, for example, that sociology does not cover the same area of expertise as ecology. One may think, according to Yves Luginbühl, that landscape architects are divided between the ecological/societal and the scenographic considerations (Luginbühl, 2002, p. 43)⁷. In the same way, Gilles A. Tiberghen makes a distinction between "transmitters" (landscape architect mediators) who adopt a knowledge developed upstream from the landscape project by others - namely the human and social sciences -, this therefore concerns fundamental and applied research, and the "inventors" (landscape designers) who produce a special knowledge, involving an authentic research approach. Jean-Luc Brisson, as a visual artist; situates research within the landscape project itself even though, beyond this practise, other more scientific and technical disciplines are involved. He acknowledges the fact that human and social sciences are useful for mediation, they make an agreement possible upstream from the project (Brisson 2002, p. 30). But he points out that, in the project approach, "which concerns us, the issue of form must come first and permeates the whole project process structuring it from its inception (Brisson, 2002, p. 30)". Research is therefore one thing and the approach of the landscape architect is another : this consists of capturing the lasting quality of the general appearance of the landscape, even if this doesn't really exist, in other words to "show the land from an imaginary point of view, [...] to procure images for it". This is unlike the conception of the landscape architect as a transmitter or mediator who must reveal the landscape from points of view that have a

meaning for the users. Lastly, landscape designer, Gilles Clément, explains the need for an "analytical base" to a project in which an assumption is rooted. But this in itself is not enough: he makes the distinction between "archive research" (analytical, therefore linked to the past, sometimes close to compilation), and prospective research (turned to the future) (Clément, 2002, p. 6 et p. 32).

The term of research, the focus of which shifts between the landscape, the landscape project and the form - we shall come back to this - is polysemic. Its meaning changes according to whether you are an academic (researcher or teacher/researcher), a visual artist or a landscape architect. The first group is quite prepared to use the term "research" - fundamental or applied research -, the second and the third groups prefer to use the term of "approach" or, exceptionally, of "prospective research". The choice of the term "research" or "approach" also involves the distinction used among the category of landscape architects that find themselves between the poles of design and of mediation. In any case, the practise of an approach or of research concerns the opposition between that which relates to science and that which relates to art.

What is the role and purpose of research in landscape architecture ?

Here again, answers will vary according to whether they come from a professional landscape architect, a researcher and/or teacher speaking from the standpoint of fundamental research or, in the third case, as an expert, in other words a specialist in research applied to the evaluation of a landscape project.

According to Gilles Vexlard, the landscape architect is expected to "take into account the complexity of the issues", but here instead of research the issue is more that of taking a decision, "We have no choice but to answer (Vexlard 2002, p. 6)". Gilles Clément answers in the same way, "we aren't asked to search for answers but to find them (Clément, 2002, p. 6)". It should be noted that both teach at ENSP in Versailles, but that they answer here as practitioners. This is to say that there is no room for research on the landscape in the practise of a profession the purpose of which is to respond to a commission and to conduct an assessment rather than to emit a value judgement.

The teacher/researcher, answers by clearly distinguishing himself from the professional. He stresses the diverse nature of the public commission (economic) which shifts between "the amenity landscape, the heritage-landscape and the tourism landscape (Fortin, 2002, p. 11)". From that moment on, he makes a distinction, as Monique Toublanc does, between the market that regulates commissions (economics) and social aspirations (politics) that research must take into account. The same author denounces the negative effect for research of no longer having to answer practical questions from professionals directly concerned by the urgency of a project, in other words with the market (Toublanc, 2002, p. 50). The final purpose of research in landscape architecture cannot therefore be the same as that of practising landscape architects. If they teach in a landscape architecture school, the aim of which is to train professional landscape architects, researchers will therefore have to claim a certain degree of autonomy, their own space, within the training establishment.

Yves Luginbühl says the same thing. Even if research in landscape architecture must take into account social expectations, and if the moral objective is to be concerned about "social

welfare", it must also remain "academic" and linked to an independent academic discipline within the schools, or even to go beyond these schools, focused on a training package, and remain, in itself, "free" (Luginbühl, 2002, p. 5).

Although such principles are not respected in terms of the final objective and of institutional role, which is the case in landscape architecture schools, according to Monique Toublanc, teacher/researchers are torn between teaching and research. In the worst case, they conform to an objective which is not theirs and, overtaken by tasks that divert them from their vocation, they will not gain any more recognition from the professionals, from whom they will remain apart, than they will obtain from their peers : they will no longer find the time to write or to publish. At best, they will tend to find other avenues for research, thus obeying a centrifugal process which drives teacher/researchers away from landscape architecture schools to other research institutions (Toublanc, 2002, p. 49).

It is striking to note that professionals and teacher/researchers claim, independently from one another, the same thing based on considerations linked to society : the professional objective being separate from that of research, there is little room, if any, for research in landscape architecture schools. And this is all the more remarkable since the figure of the expert, who might be expected to be a mix of landscape architect and researcher remunerated for academic knowledge, confirms this divorce : is it not true that some complain about (academic) research only intervening afterwards, once the project has been realised, to assess it (Barthe, 2002, p. 10) ?

This closeness in the answers suggests that, here again, they are organised around the same opposition. The purpose and role of research is determined as a function of the opposition between what is useful and what remains disinterested.

What is the purpose of research in landscape architecture ? And which disciplines does it concern ?

Visual artists (Jean-Luc Brisson) and some landscape designers (Gilles Vexlard) answer this question as teachers since, from a strictly professional point of view, there is no room for research. They argue that the purpose of research or, of an approach rather, is the form in the landscape (Brisson, Vexlard, 2002, p. 6). Jean-Luc Brisson states the following, "We propose to focus on the landscape project not as an object of research in itself, but rather to look into the landscape architect's approach in his capacity to survey, extract, present, produce and manipulate forms in the landscape (Brisson, 2002, p. 30)". The aim of research in landscape architecture is not therefore the project in itself, so to speak, but the material substrate (the landscape) and the communicational substrate of the project. To understand forms or shapes in a landscape thanks to the mastery of the representation of forms - sketching, aquarelle... - is a way of departing from strolling, from the point of view of the "walker (Brisson, 2002, p. 31)" who moves within a setting he will leave behind him, for the professional "point of view" of the landscape architect who must "take the site along with him (Brisson, 2002, p. 6)", because he will have to be able to work on it without necessarily being able to go back to it easily. Form is also a way of embodying a thought and communicating it as a cultural fact. In other words it is the tool, under the form of a sketch, of layouts, of plans and of all the graphic documents which constitute the substrate

of the transmission of the project to a third party. But it is also what results, in a landscape, from the succession of phenomena, the materialisation "of invisible forces" or the visible traces of the past of a landscape which must be understood. "It encompasses much more than the simple aesthetic choice and the representation techniques that translate it", writes Jean-Luc Brisson (Brisson, 2002, p. 6).

For Gilles Clément, the answer appears to be different. Research must concentrate on the "driving force" that creates situations and places subjected to time: immanent to the project, the approach does concern something which is "living, its continued existence and its fragility (Clément, 2002, p. 33)". The object of "prospective" research, inherent to the landscape project, is not the form but the concept of sustainable development (Clément, 2002, p. 33). However, this answer re-asserts the fact that the project is not in itself an object of research. And although this answer highlights the concept which innervates the landscape project, it has to be pointed out that the living does indeed deploy itself in space and is embodied in a spatial form.

Finally, for all visual artists and practitioners, there is no independent object of research from the object of the landscape project : the form is the point of departure, the tool and the result of the project. There is therefore, no discipline upon which to base landscape research : it is the creation and the production - the practise - that fills this function.

However, teacher/researchers insist on the passage from the landscape object to the landscape project. Monique Toubanc analyses this change : with the transformation of many rural landscapes into urban landscapes, social aspiration, for a better quality of life has evolved at the same time as the landscape architects' scale of intervention evolved from that of a garden to that of a park or of an area, the number of actors involved in the project changing as the intervention tool, the landscape project, became more complex (Toubanc, 2002, p.50)⁸.

However, this change and this increasing complexity in the landscape project may have another source. According to Michel Viollet, "the landscape approach replaces the project not in the simple expression of a product, but in that of the principle of a change in a place or an area and of its uses. Considering the landscape as a cumulative process, the designing of a project involves time and is based on the existing structuring lines [...] Doing a landscape project or an urban development is to enter in a flow, in a movement that embraces you (Viollet, 2002, p. 46)". The growing complexity of the project, which extends over time, is related to the fact that it constitutes a gesture placed within the landscape, that is itself caught in the flow of time. In other words, the complexity of the landscape project and of the landscape is the same : we are dealing with evolving processes. And it is this dual complexity inherent to time that is one of the challenges for research and for the disciplines it involves.

As far as the disciplines involved are concerned, Monique Toubanc raises the question of whether "the project approach" is an intellectual posture generating a theoretical questioning and whether in itself it produces new knowledge. This theoretical posture seems difficult to maintain for landscape architects, it consists in a sort of self analysis aimed at "formalising and theorising" that which "informs" this practise, in questioning « the presuppositions, the values, the convictions, the assumptions » and the "justifications"

for what they do (Toublanc, 2002, p. 50-52).

This difficulty then refers to a disciplinary and theoretical field that remains to be invented at the meeting point between the natural sciences and the human and social sciences. But she also believes that three academic disciplines are also needed : history, which would make it possible to put the choice of projects back within the realm of the history of ideas and to conceive the project as a process, and geography and sociology, which would analyse the societal consequences of passing from the scale of the garden to that of an entire area, in other words to that of public landscape policies.

As far as history is concerned, this position is shared and has been defined. Bernadette Blanchon-Caillot, who presents herself as a practitioner and a researcher, believes the landscape project may be studied from an historical point of view and thanks to a method that involves interpreting and critically analysing landscape works. She proposes to conduct a field investigation and an exploration of the archives of landscape architects, to produce a history of projects and designers. She suggests that there is an urgent need to study landscape projects from this dual point of view : the aim is to reconstruct "a recent memory that has disappeared", the "memory of a craft, of its figures, of a profession, of its theories, its practises and of its achievements; but most of all the genealogy of a competence". There is a need, she says, to "write the history of the history (Blanchon-Caillot, 2002, p. 23)".

There again, it is striking to note that these two visions of the object of research and of the disciplines involved bear the marks of the same opposition. They all identify with the opposition between the creation of the landscape as a work of art and that of the production of new knowledge. This stops short of trans-disciplinary attempts which finally don't acknowledge it and relegate the problem. In the eighties, ENSP conducted an experiment involving a visual artist, an archivist, a philo-sociologist, two landscape designers, an agronomist-economist, two ecologists and an historian : F. Blin, C. Bou, M. Chopplet, M. Corajoud et P. Dauvergne, P. Mainie, M. Rumelhart et P. Donadieu, S. Hoog. Based on an area - the valley of the Mauldre -, the objective was to understand what contributions might be made by the natural sciences and the human and social sciences to the project approach in the improvement of landscapes (Blin *et al.* , 1981-1982, p. 4)⁹. This experience appears as an answer to the theoretical construction of a new field of knowledge, at the crossroads of different sciences, a hybrid of practise - of an approach seeking to identify the form, what is visible in the landscape - and of interdisciplinary research. This attempt combined three approaches which shared a search "for what is hidden behind the visible elements of a site, so as to start up an ordered dialectic between the perceptive and the explanatory (Blin *et al.* , 1981-1982, p. 26)". However, this attempt, of which the actors recognise the value, nevertheless remains limited in their view. This type of investigation is limited in terms of the possible use of its findings: the risk of "deviation", in other words, the clumsy use of the pattern provided by the specialist, or the risk of a scientific "alibi". These may lead, depending on the prevailing discipline, to a freezing of the landscape process: of referring to its heritage to the point of trapping it within mythical, legendary meanings, of making it a culture reserve, to be kept as a place of nostalgia or as a genetic reservoir to be preserved from pillaging (Blin *et al.* , 1981-1982, p. 67).

But this type of investigation also has inherent limits to it. First of all, it suffers from a

common definition of the landscape upon which the project is affixed. It concerns the landscape as a "living environment" distinguished from the landscape as a form and of the landscape as a natural environment, as a quantifiable object (Blin *et al.* , 1981-1982, p. 25). To go beyond this polysemy, to go from the word to the notion and the concept, to be able to really communicate with people of different cultures and different disciplines, "it would have been necessary to develop a common language and concepts, which has not been possible yet (Blin *et al.* , 1981-1982, p. 4)", to go further in the elaboration of conceptual distinctions, or to invent more concepts such as that of "landscapeness", for example, which designates the signified of the landscape distinct from the material landscape taken as a signifier. Lastly, to avoid trans-disciplinarity and pluri-disciplinarity from transforming into a juxtaposition of distinct scientific discourses and practises, before conducting any experiments it would have been necessary to raise questions on scientific knowledge and on nature, "What knowledge about plants would best serve the cause of landscape architecture ? (Blin *et al.* , 1981-1982, p. 58)". In other words, what is needed is a combined epistemology of all of these fields of knowledge and practises in their relation to the landscape and the landscape project. The task seems huge and even if this prerequisite were fulfilled, would it not be equivalent to renewing the opposition between the design of a landscape and the production of new epistemological knowledge ?

The Aporias of the Landscape Doctorate

Senior lecturers recently appointed to a landscape architecture school asked to define what could be a doctorate in landscape architecture would be confronted with the three oppositions we have just identified, with what could be called the three aporias of landscape research torn between : art and science, seeking a purpose and claiming a form of disinterestedness, the creation of a work of art and the production of new knowledge. Two avenues are open to our senior lecturers according to whether they think these oppositions are insurmountable or not.

Avenue One : Two different doctorates

- A professional doctorate

If these major oppositions are indeed insurmountable, in other words truly aporetic, it would be necessary to define a professional doctorate obtained based on landscape projects commented, criticised and replaced in an historical perspective, etc. By definition, any doctorate supposes, beyond the experience and the approach of the project, a knowledge that can be taught and a furthering of that knowledge, in other words, the production of new knowledge. It implies, as Jean-Marc Besse and Gilles A. Tiberghien claim, a sort of reflexive looking back at the landscape project with, as a result, the production of a memoir (Besse, Tiberghien, 2002, p. 15). In this passage from a craft to a profession it is indeed the mode of evaluation and the evaluated object which change. No longer is there a validation of the perpetuation of a skill, of a craft and the creation of a work of art by an apprentice's master, but instead there is the universality of a knowledge and a capacity to further this

knowledge through a scientific community. Taking the stance of art, of the useful and founded on the analysis of the landscape projects he made himself, the landscape doctorate would be more appropriately named "landscape design" since it would be the crowning qualification, for a curriculum of professional training which would not go so far as to exclude a final theoretical reflection.

- A doctorate with a Landscape Art or Sciences Major

Our senior lecturers might imagine, based on a more academic model different from this professional doctorate, opting for an opposition between art and science : a doctorate with an "art" major would be distinct from one with a "sciences" major. The first one, which would concern candidates who are landscape architects as well as candidates who are not landscape architects, would be based on the analysis and the comparison of landscape projects and of the visual artwork produced, it would involve a memoir proposing a critical interpretation and it would belong to a theoretical field in which the history of the landscape and the practise of landscape design in projects would play a decisive role (Donadieu 2002, p. 35). Focused on two types of projects, of perceptible signifiers of which the signified is to be identified - the landscape design and the work of visual art within the landscape -, this landscape doctorate would be more appropriately named "doctorate in landscape criticism".

Alongside this major in the doctorate, would feature something that already exists under the heading of "landscape sciences". Resulting from classic academic training, adopting a scientific approach, the future doctors would approach the landscape or the landscape project based on one or several natural sciences or human and social sciences. There could be doctorates in ethnobotanics dealing with the role of hedges in farmland landscapes criss-crossed by hedges and trees (in French "bocage"), in ecology dealing with the landscape taken as an ecosystem and in sociology dealing with the relevance of a given public policy (Toublanc, 2002, p. 52). Analytical methods, based on surveys and participating in a form of quantification, would involve each of these disciplines or a hybridation of them. This major of the landscape doctorate could be referred to as a doctorate in "landscape sciences". We must precise that this major concerns the landscape applied sciences, but not only in an engineering way : in this proposal, the aim of these sciences is also to bring us new knowledge.

Avenue Two : A new Landscape Science Doctorate

The second approach, more complex, would consist of thinking that these oppositions are not aporias and can be overcome. Our senior lecturers would be supported in the idea that the assumption of this resolution has been formulated by landscape architects as well as by teachers and researchers. Alain Mazas, for example, writes that a sensitive approach as a landscape designer involves "being interested in the life and the quality of the places and landscapes (Mazas, 1985, p. 13)". However, since these sensitive qualities in the landscape bear witness to "an organisation, a structure and internal dynamics, which are precisely the object of study of the researcher or the technician", a doctorate in landscape science would

hinge around the approach of the landscape architect and scientific research. Registers of sensitive and scientific appreciation are considered as naturally linked (Mazas, 1985, p. 13). More recently, Anne Coste, Alain Findeli and Xavier Guillot insist to not dissociate fundamental and applied research, in what they called a "theory of landscape integrated project" (Coste, Findeli, Guillot, 2005, p. 5). They insist on the idea that the world is a complex system for the understanding of which it is necessary to supersede the phenomenological, the technical and the scientific points of view. So, they consider that the project must contribute to fundamental and applied research : it has to enhance the corpus of some sciences (geography, sociology, aesthetics, history), and practices like architecture, landscaping, art, design, urbanism, engineering. They call this conception "project-grounded research" (Coste, Findeli, Guillot, 2005, p. 6).

Several solutions may be envisaged in regards to overcoming these oppositions, that is to say several ways of conceiving the unity of the diversity of meanings of the doctorate we have just identified. How to proceed ?

- First possibility

An existing science could become dominant, the landscape doctorate would adopt this special feature. For example, agronomy would make it possible to describe and regulate the transformation of rural and urban landscapes based on the urban population's market for natural products (Blin *et al.* , 1981-1982, p. 50). The limits of this solution are obvious : it doesn't take into account the symbolic nature of the landscape, its aesthetics... Because of this, a solution relying on ecology has been proposed (Blin *et al.* , 1981-1982, p. 59): a cognitive, normative and technical approach which would also introduce a "humanistic dimension of private and social life (Blin *et al.* , 1981-1982, p. 68)". Lastly, it could be "artistic, sensual and paradoxical", provided it included the competencies of semiology. This would be a "semio-ecology of the landscape". The idea would be to adopt together an approach involving the natural sciences without excluding a human dimension, an understanding of the landscape in its material aspect (signifier) as well as in its signified aspect (its landscapeness). The problem is that ecology has developed more on the side of the natural sciences, placing man aside, and that it is hard put to include an aesthetic dimension. What is good, that is to say healthy from an environmental standpoint - fallow land, abandoned urban land, the quality of air or of unpolluted water for example -, is not necessarily pleasing in aesthetic terms.

It would be possible to refer to other disciplines, but that would serve no purpose in defining a landscape doctorate. These disciplinary postures of agronomy and ecology resemble those of geography at the beginning of the 20th century. Although geography was able to consider itself, since Vidal de la Blache's school, as the "science of the landscape", and that it witnessed the birth of cultural geography (Jackson, 1984, Cosgrove, 1998), it was not truly able to overcome the distinction between the natural sciences and the human and social sciences, the opposition nature/culture, this "great divide" that the anthropologist Philippe Descola recently demonstrated as having occurred in the modern West only at the turn of the 19th and 20th centuries (Descola, 2005). This sharing between nature and

culture functions in the same manner and has had the same consequences as the three oppositions we have defined à art/science, usefulness/disinterestedness, creation of a work of art/furthering of knowledge.

- Second possibility

From that moment on, the ultimate solution might be for our teacher/researchers to attempt to elaborate a new science of the landscape and a doctorate in this landscape science by adopting the Aristotelian distinction between the so-called poetic, practical and theoretical sciences. This solution has already been considered, but only in a partial way. Massimo Venturi Ferriolo thinks this unity under aesthetic primacy, favouring the poetic sciences (Venturi Ferriolo, 1997, p. 23). Alain Findeli envisages this new science under the direction of both the poetic and practical sciences. He adds to Aristotle, the philosophers of action : Hannah Arendt, Paul Ricoeur, Hans Georg Gadamer (Findeli, de Coninck, 2002). But the design project remains the purpose of this approach. According to these conceptions of a new landscape science, the theoretical sciences are not considered for themselves, but rather as means, and never as disinterested sciences. We have to mention that, considering the theoretical sciences and not only the *poiesis* and *praxis*, the solution I propose is different from Massimo Venturi Ferriolo or Alain Findeli's one.

These sciences diverge according to whether they examine the creation of a material object or of a work exterior to the agent (poetic sciences), they examine the moral or political action aimed at perfecting the agent (practical sciences), or they focus on knowing about things in themselves and for their own sake, in a disinterested manner (theoretical sciences).

Applied to contemporary disciplinary fields concerning the landscape, this classification suggests that the theoretical sciences involve history, geography, ecology, anthropology, aesthetics (according to an ontological perspective) and, more widely, the disciplines that may be understood as the fundamental sciences of the landscape. It suggests that the practical sciences concern the moral and political sciences, the economic, social and legal sciences, and any discipline that relates to the sciences of action from the moment that the landscape is involved. The poetic sciences correspond to the "production" of the landscape and of its representations, that is to say a history of art, to a criticism of the landscape project and, in general, to any criticism concerning engineering, namely ecological, agronomic, forestry and urban engineering. By transposing this Aristotelian distinction, only a theoretical science of the landscape, different from disciplines that have taken in charge the object of the landscape, is able to consider the landscape for and in itself by distinguishing itself from the poetic sciences, which study the landscape designers' works, from the practical landscape sciences, for which it becomes the object of a mediation and the tool of an area's identity.

To be able to demonstrate the unity and the principles of the theoretical science of the landscape, it would be necessary to engage in a critical history of the disciplines that have dealt with the landscape, from a systematic if not exhaustive epistemological perspective. To conduct this overarching research, the tenants of the sciences of man and those of the

sciences of nature should build together this critical history of the disciplines which, alone or together, have attempted to study the landscape based on the nature/culture opposition. It would be necessary to examine the problems, the concepts, the theories and the paradigms that these disciplines have forged and conveyed in relation to the landscape in order to identify the epistemological obstacles that have postponed the advent of this science and, inversely, to identify the moments when this discipline almost came into being by attempting to overcome the nature/culture opposition. In a nutshell, for the theoretical science of the landscape to have a chance of existing an epistemology of the disciplines in question must first be constituted by considering these as attempts to bring into existence a science of the landscape, *i.e.* as "protosciences" of the landscape.

The landscape doctorate by choosing to go beyond the art/science, usefulness/disinterested, creation of the work of art/furthering of knowledge aporias would contribute to elaborating this epistemology and to the development of knowledge. In order to identify more easily this new discipline, which can't be confused with the other already known landscape sciences, we propose to call it "landscapetics" in French : "paysagétique").

The Landscapetics

The origin of this new science

We have written in this paper that our reflection on the doctorate has to be considered as an essay. We have just established that the doctorate could be associated with a landscape science not yet developed. Is my reader founded to draw the conclusion that all this matter is nothing but a fiction ? If we think that the question of doctorate is part of a larger research concerning the landscapetics, we can also give some clues referring to the working out of this new landscape science.

An ethical problem motivates our reflection. In human history, we are living the moment when, having at our disposal a technical power never seen before, we no longer belong to the Cosmos - a harmonious whole - but we live as if we were opposite to nature. In the same time, we are now conscious of this situation and of our responsibility in the transmission of landscapes to the future generations (Jonas, 1979). For example, this historical moment appears to us every time we have to decide where to implant a waste reception centre ; in other words every time we have to determine the value of a landscape.

We have judged that this value determination of landscape was insufficiently enlightened because the landscape as a subject was scattered among several sciences and practices. Pluridisciplinarity seemed not to be equal to this issue : so, we formed the hypothesis of a unitary, theoretical new landscape science (Chomarat-Ruiz, 2008). The precedent paragraphs have explained how this hypothesis was supported from a philosophical point of view.

The possibility of a preliminary epistemology

This hypothesis of a new landscape science was also authorized by the possibility to elaborate a preliminary epistemology. During the last thirty years, international research concerning landscape gave us the material to do it. For example, to think how to overtake the nature/culture opposition, we can now refer to the books written by Augustin Berque.

His concept of médiance signifies that landscape lies in between objectivity and subjectivity (Berque, 1995). To express the relational value of landscape, that is to say the connections that link the temporal with the physical dimension, the theory of *Archéogéographie* is useful. Taking this material into account, a team of researchers set itself as an objective the constitution of this preliminary epistemology, as far as history, geography, sociology, economy and agronomy are concerned. Hervé Brunon, Pierre Donadieu, André Torre and myself - the members of the team -, have also founded with Jacques Leenhardt a seminary devoted to this epistemology at the École des hautes études en sciences sociales (Paris) that begins in February 2009.

All our matter is not a fiction. We are at the dawn of a research of which the question of doctorate constitutes one facet.

Based on the major issues which have concerned research, to answer the question of what a landscape doctorate is, we may propose several possibilities : A - professional - landscape design doctorate, a doctorate in the criticism of landscape art, a doctorate in landscape sciences and a doctorate in "landscapetics". It should be noted that only the second and third majors exist today. The first and last ones are yet to be invented. The doctorate in landscapetics would imply a period during which doctorates would participate in the elaboration of this future epistemology and period during which they would involve this landscape science once it was created. But whether one refers to what exists or what is possible, the sole coexistence of these majors leads to the renewal of the oppositions for which we tried to think of possible solutions. From that moment on, provided one is thinking of a work in progress, should we not preferentially think in terms of landscapetics ?

Notes

1. Doctors in medicine, for example, have a doctorate and do not necessarily teach.
2. Inter-disciplinarity is required at the École des hautes études en sciences sociales, for example.
3. In the rest of our article, the École nationale supérieure du paysage de Versailles will be referred to by the acronym of ENSP.

For LE:NOTRE, see <http://www.le-notre.org>. The main authors of the "European PhD in Landscape Architecture" are Corinna Clewing and Karsten Jørgensen of Norwegian University of Life Sciences.

The report points out that "the specific competences for a PhD in Landscape Architecture has still to be defined" : but in the same time, it shows that there are a high number of doctorates.

4. Let us quote a few titles: *Espaces verts* (from 1968 to 1982), *Pages Paysages* (from 1987 to 2002), *Le Visiteur* (from 1995 to 2003), *Les Carnets du paysage* (since 1998).
5. Concerning this question, it is possible to read Barthe-Deloizy, F. ; Berque, A. ; Besse, J.-M. ; Blanchon-Caillet, B. ; Briffaud, S. ; Brisson, J.-L. ; Clément, G.; Donadieu, P. ; Fleury, A. ; Joliet, F. ; Luginbühl, Y. ; Racine, M. ; Tiberghien, G. ; Toubanc, M. ; Varcin, A., *La Recherche et les chercheurs dans les écoles de paysage en France*, actes du séminaire du 6 décembre 2002, Versailles, Laboratoire de recherches de l'ENSP, 2003.

Two examples are the research laboratory of Versailles which was created in 1990 and CEPAGE (Centre of research in the history and culture of the landscape) which dates from 1991.

6. It could contribute, in the form of a book, to the direction of research.
7. The same comment is made in writings in Besse, J.-M., Tiberghien, G., *La Recherche et les chercheurs dans les écoles de paysage en France*, actes du séminaire du 6 décembre 2002, Versailles, Laboratoire de recherches de l'ENSP, 2003, p. 7-15.
8. Some landscape designers confirm this increased complexity of the landscape project : Pierre Dauvergne defines it "as a complex process to manage, a chain of contributors to be deployed", Dauvergne ; 1985, n°14).
9. Blin, F., Bou, C., Chopplet, M., Corajoud, M., Dauvergne, P., Donadieu, P., Hoog, S., Mainie, Ph., Rumelhart, M. 1981-1982. *Lecture et amélioration des paysages, recherche exploratoire autour et sur la démarche de projet. Le cas de la vallée de la Mauldre*, convention d'étude avec le ministère de l'Urbanisme et du Logement, direction de l'Urbanisme et des Paysages, mission de la Recherche urbaine, convention n° 81 31 070, Versailles, ENSP, 1981-1982.

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