

Towards a Different Approach in Teaching Landscape Design. A Cross-educational, Cultural and Disciplinary Strategy

MARIA FREIRE^{a, b} ISABEL JOAQUINA RAMOS^{a, c}

a) Department of Landscape, Environment and Planning

b) Centre for Art History and Artistic Research

c) Institute for Mediterranean Agrarian and Environmental Sciences

University of Évora

Largo dos Colegiais, 2 – 7002-554 Évora

PORTUGAL

mcmf@uevora.pt; iar@uevora.pt

Abstract: Landscape design education is characterized by a strong inter-dependence and articulation of knowledge and practices. The paper brings some academic, curricular, pedagogical and methodological proposals related with the landscape design education. The methodology followed includes the characterization of the design education and exploration of the theoretical structure that accompanies it (the landscape architecture, the design, landscape design education and the relations between them) – and the explanation of various proposals, illustrated through a special case-study the *Landscape Ambassador*, a cross educational, cultural and disciplinary strategy. It is a two week *ERASMUS* Intensive Course, at master level, involving seven European Universities and students and teachers from different disciplinary areas.

Key-Words: landscape design, landscape design teaching, pedagogical proposals, academic proposals, methodological proposals, curricular proposals.

1 Introduction

Landscape design education is characterized by a strong inter-dependence and articulation of knowledge and practices. This education was, and continues to be, centered in the studios - the soul of the curriculum in teaching architecture and landscape architecture. The studios are the opportunity for practical experience, under the supervision of teachers and with dialogue opportunities. They include moments of research and study projects (case-studies), explanations and demonstrations of teachers with critical review and jury evaluations. Usually with no specific subject matter, the studio courses are linked with the curriculum level, having as main educational objectives:

- The acquisition of knowledge about the design process (including experimentation and development of alternative movements, between general and detailed considerations, synthesis and creative moments);
- The resolution of professional problems (which are unique, uncertain and unstable) [1, 17];
- The application of knowledge acquired in other courses (very occasionally carrying out interdisciplinary approaches and even less trans-disciplinary);
- The opportunity to establish the link between the theoretical and practical components.

Donald Schön [17] observes the studios as places

of experiential learning and reflective practicum, where students, with tutors help, learn and reflect through the realization of a practical activity (an important act for understanding the quality of the action). A reflective practicum, not only in the perspective of students, reflecting on what they do, dialoguing with the teacher, but also in the perspective of teachers, reflecting on the learning activity.

These ideas and the main objectives of studios can be sustained by Jean Piaget [12] theory, when he defended that 'to do' is to understand the situation in the action (in order to achieve the proposed goals) and that 'to understand' is to control the situation in the abstract. Circumstance that acts through the request of the practical work and by the demand of students own design process, as a way of internalize the design process. A dynamic that develops important concepts - related to 'know', to 'learn to see', 'knowing how', 'how to be' and 'knowing becoming' – essential for thinking and for project-oriented process [6].

More recently, Peter Rowe [15] highlights the important relationship between 'Knowing that' and 'Knowing how' - something that cannot be just a matter of theory and practice, but that is a distinct knowledge implicated in design education. The theoretical component, in the extreme of 'Knowing that', developed about general problems, and the

practical component, on the end of 'Knowing how', focused on specific problems. In the interception, a complex area, the 'actionable knowledge'. Central and more extensive, it represent the imprecision between theory and practice, specific examples and the generalized views – a combination of effects that can be better ensured in the 'midfield' - which includes multiple educational strategies (seminars, specific educational methods, studio work, workshops and internships). Peter Rowe [15] describes it as the most powerful in education, a key component in the training of architects.

Maria Freire [6] converges in this idea and makes it stronger. She defends a multifaceted inter-relational domains and educational strategies, as very significant for a different approach in landscape design education. A intricate conception - combining curricular and academic, disciplinary, methodological, didactic and pedagogic levels–sustained in present demands of landscape architecture, in the increasingly global contemporary society (more and more global, dynamic and intercultural) and, as a consequence, in the challenges faced by today landscape architects education.

2 The importance of a cross-educational, disciplinary and cultural strategy

The landscape design education can't be just an execution of a series of different scholar and imaginary projects. There are cultural, ecologic, aesthetic and ethical threads, as well as pedagogic issues, which tie them together [6]. Thus it becomes necessary to promote some changes in attitudes and practices of teachers and students, working with more supported educational strategies, for serve these purposes.

A need for a new approach in educational practice has been pointed out by several authors [4,5,9,10,14,17] and by the different experiences carried out over the years in various landscape architecture schools in the world.

All over the place, the experiments were guided towards maintaining the particularities of the studio as well as their improvement, trying to integrate the theoretical and practical components. For the most part, these changes are related with approaches more or less directed to the project-oriented process, reflecting the disciplinary area and the professional practice. Very occasionally they have to do with different landscape philosophies and, just exceptionally, are linked to specific aspects of

teaching.

The actual challenge, as suggest Maria Freire [6], is the conjugation of diverse domains and components, sustaining and combining various teaching strategies and work methodologies. Ideas founded in some main aspects:

1. The researches carried out by several authors [2,7,11] confirm complementarities between research, teaching and the community services, workable in curriculum development, management of subjects and by promoting the culture of academic research;
2. Dominance of academic exercises, away of the reality faced by professional practice (extensive range rules and regulations, materials and construction techniques, budget constraints, customer expectations, between others aspects), as analyzed by several authors [3,16];
3. The necessary combat against the frequent edition of studio as limited and partial atmosphere, a consequence of the mentioned circumstances above. This valorization of the practice approach is benefic for the theoretical knowledge of discipline (because the practice is the lab of landscape architecture), for professional practice and for the education [6];
4. The exploration of an interrelate approach in supporting the development of human, cognitive, personal and interpersonal competences and the critic reflection - besides the knowledge, the approach should includes the 'how to see', the 'know how to do', the 'know how to be', and the 'ethical knowledge', conceptually engaged in the process of landscape design [6].

So a studio accompanied with diverse conditions: real life and actual problems with working atmospheres more realistic (social, politic, financial, administrative, operational), conjugating tasks validated by authentic constraints and opportunities; a well-support theoretical component timely realized; involvement of the various actors; connection of a range of disciplines; and adequate methodologies and information, with the opportunity of work with students, teachers and inhabitants from others cultures and countries. All this meaning, involvement of multiple educational strategies, authentic opportunities well sustained by practice and theory, and inter-disciplinary context works. Which means connecting various disciplinary areas, institutions, stakeholders and communities in the resolution of an existing problem, with the chance for students to see their work used or published. A conjugation that make the studio work more motivating and, as a consequence, with superior results, being remarkable a greater dedication and involvement of all.

All together, these strategies intend to enrich the student repertoire (visual, cultural, theoretical and

practical) and potentiate the development of syntax, fundamental to the design of the landscape. They are clearly a consequence of the inclusive and humanistic dimension intrinsic to the landscape architecture. We will make it clear through the experiment of the case-study *Landscape Ambassador*.

3 Landscape Ambassador Course

Based on [8,13].

3.1 How did it started?

The *Landscape Ambassador* course – a cross educational, cultural and disciplinary strategy – is a two week *ERASMUS* Intensive Course, at master level.

The course was started by the *PERISCAPE Group*, an informal discussion group of university teachers in landscape education.

The first *Landscape Ambassador* course took place in 2004, in Auvergne region, in France, with the support of regional funds; 28 students coming from 4 countries representing 4 disciplines were involved. The next year, again in France, with the support of regional authorities, 35 students from 5 countries were engaged. After these two experiences with very fruitful results, *PERISCAPE Group* applied to an *ERASMUS* Intensive Course agreement and got it in 2006 (a 3 year agreement funding). Since then, the course is organized each year in one of the different countries involving now seven European Universities – Portugal, Sweden, Norway, Slovenia, Hungary and two from France: 2006-07 in Slovenia, 2007-08 in Portugal, 2008-09 in Sweden, 2010-11 in Norway and the seventh is predicted to Hungary next May-June (2011-12). Students (five from each university) and teachers are from different disciplinary areas – Landscape Architects, Architects, Agronomists, Foresters, Environmental Engineers, Biologists and Geographers.

The aim is to provide students with the tools and skills to find out integrated solutions to real problems and demonstrate that each place has a unique identity, with different potentials and problems, meaning no unique solutions for similar problems.

High priority is given to interdisciplinary group work (working groups mixed by country and disciplines) and to a trans-disciplinary approach (contact with local people, authorities and stakeholders).

Taking into account the different cultural background and disciplines approaches – mainly the linkage between natural and social sciences – and to go beyond theory to integrate people's knowledge is

a major challenge to teachers and students.

3.2 How is it organized?

3.2.1 The organization itself

The course is organized around a case study based on a real local situation, involving the community.

The chosen study areas are multifunctional landscapes, each year with different questions to answer, like agriculture changes, forest exploitation, tourism pressures, urban expansion, nature conservation in protected and non-protected areas or cross border landscapes, among others. Before the course, teachers visit the place to get a better knowledge of the area and of the main issues around it and to prepare carefully the course in general and their own lectures.

Much importance must be given to the logistics of the course. A place where everyone can be installed, near to the place where meals will occur as well as to the room where students and teachers will work – a large and pleasant room, with space enough to work on group. Also important is the preparation of all the materials students will need like maps, data, literature, software, pictures and the contacts with people and institutions important to the development of the work to be done. Once the time is short, the program should be very well structured and all steps must be planned in detail.

3.2.2 Students before the arrival

Before the course begins, students are asked to read some theoretical framework reference literature, provided by teachers. Some information about the area is also sent to the students (literature, web sites, data and maps) for them to get a first overview of the place.

Also before the arrival, students are asked to reflect about their own landscape, through an exercise called 'My Landscape'. They are asked to take some pictures and make some comments according to the following:

1. The landscapes of the places or areas where I study;
2. A beautiful landscape in my surroundings from my own point of view;
3. A landscape problem in my country that I want to fight;
4. The landscape that illustrates my roots;
5. The landscape where I go to recharge my spirits.

This exercise is important to a better understanding of each student background. All the pictures and comments are posted on the wall at the very beginning of the course and remain during the two weeks.

3.2.3 The groups

On the arrival, students and teachers present themselves and their universities, to get familiar with each other.

According to the various thematic involved in the case study and main issues to answer, students groups are formed by theme. Students are very welcome to choose their own group, according to their knowledge, preferences and sensibilities but some conditions must be taken into account that each group must have:

- someone from the place, that speaks the mother language – the language of the course is English but it is important to have someone who can communicate with the local people in their own language;
- someone from each country;
- someone from a different discipline.

3.2.4 The lectures and field trips

During the first week, in the morning, there are two kinds of lectures. In one hand, teachers from the course give the needed theoretical background to the specific case. It can vary every year, but related to landscape ecology and landscape planning, forestry, agriculture, landscape aesthetics, landscape representation, how to make formal and informal interviews or the main policies to address. In the other hand, invited speakers from the place give a more precise view of the local problems. They can be people from the local or regional government, non-governmental organizations, investigators, entrepreneurs or other actors with importance to the case study.

In the afternoon, some visits to the place are made, to different areas covering the range of questions to study, accompanied with teachers and people from the place (Fig. 1).



Figure 1 – Visit to the place, course realized in Sweden, 2008-09.

Usually on the second day, students are asked to another exercise: ‘The blind landscape’. Each group goes to a different place. One of the group stays in front of a landscape, describing what he/she sees to the others, while the others turn back and try to draw what they understand from the description. At the end, they compare the results with each other and with the reality. The aim is to raise awareness about the way each of us perceives landscape, and the importance each gives to different aspects according to each background, and the difficulty when trying to describe in an accurate way what we see. In the end, the results are discussed between teachers and students, reflecting on the different results, having in mind that each knowledge is as important as the other – something to be aware when talking to the different actors involved.

3.2.5 The development of the work

The work starts with a ‘hands-on’ and ‘participatory-lead’ inventory of the landscape [8]. Each group develops its work by itself, under the supervision of teachers – each group have a ‘resident’ teacher but all teachers are involved in all groups, in order that each group have a shared vision of the different disciplines and that, in the end, the final work is a common integrated one (Fig. 2).



Figure 2 – Work group, inside, with the exploration of various tools and work methodologies. (Image used by permission of Filipe Barroso, student from course realized in Norway, 2010-11).

The methodology followed by the groups is a mixture of inside and outside work, based on previously booked interviews to e.g. land owners, politicians, entrepreneurs or institutions. The interviews can be structured or semi-structured, prepared inside with the help of teachers. Students often feel the need to go outside (alone or with teachers) to feel the place or

to make some field recognition, moving around by car, bicycle or by foot, talking with people, drawing or taking pictures, making block diagrams or taking notes. Some time is devoted to collect statistic data, e.g. demographic. Every day, in the end of the day, students and teachers get all together, to analyze the development of the work and discuss how to proceed.

3.2.6 In the end

In the middle of the second week, students should start to integrate their work – something that takes time, and to prepare the final presentation. A draft final report is also written. In the end, the presentation is made in a public place – the Municipality or some Association, to everyone involved in the course as well as to the local people and local and regional authorities and stakeholders (Fig. 3). All the interviewed people are invited to the presentation. Press is also invited to participate. Flyers are distributed to local stores inviting people to participate.

The last half-day is devoted to a general meeting of students and teachers, to get an overview of the course and a general conclusion on it. After the course, students are asked to fill in an evaluation form. Both are very important, in order to improve the course each time.

All the material of the course – lectures and work developed by students – are distributed to the ones involved in the course. The final report is concluded by the responsible for the course and sent to all the participants.



Figure 3 – Final presentation to everyone involved in course. (Image used by permission of Filipe Barroso, student from course realized in Norway, 2010-11).

4 Conclusion

The development of trans-disciplinary approaches based on real life and present situations as shown significant positive results concerning the

improvement of personal skills of students and teachers, as well as a positive response from the different community actors involved. A mutual understanding and learning processes is built up based on scientific and artistic domains, together with empirical knowledge, connecting a range of disciplines and using different methodologies and techniques according to each situation.

The opportunity to mix students, teachers and inhabitants from others cultures and countries, in such a cross- educational disciplinary course has proved to be highly motivating for all, namely for students who have the opportunity to deal with real situations, in a European globalized context, and present them to the responsible authorities (and not only to teachers inside classroom), who validate their attitude, solutions and global proposals.

References:

- [1] Akin, O. Variants in design cognition. In C. Eastman, M. McCracken, & W. Newsletter (Eds.). *Design knowing and learning: cognition in design* (pp. 105–124), Amsterdam: Education Elsevier, 2001.
- [2] Cachapuz, A. In defense of the pedagogic development of higher education teachers. In C. Reimão (Org.). *The teacher training in higher education*, (pp. 55-62), Lisboa: Edições Colibri, 2001.
- [3] Chen, J., & Heylighen, A. Learning design teaching. In J. Al-Qawasmi (Ed.). *Changing trends in architectural design education. International Conference of the Center for the Study of Architecture in the Arab Region*, Rabat, Morocco, 2006, pp. 577-588.
- [4] Dutton, T. (Ed.). *Voices in architectural education. Cultural politics and pedagogy*. New York: Bergin & Garvey, 1991.
- [5] Eaton, M. Revisiting philosophy and education in landscape architecture. In *Proceeding of Design Research Society, International Conference, IADE, Lisbon, Portugal, 2006*.
- [6] Freire, M. Towards a different approach in teaching landscape design, Doctoral thesis, University de Évora, Évora, Portugal, 2011.
- [7] Marsh, H., & Hattie, J. The relation between research productivity and teaching effectiveness: complementary, antagonistic, or independent constructs? *Journal of Higher Education*, 73 (5), 2002, pp. 603-641.
- [8] Michelin, Y., Gustavsson, R., Pinto-Correia, T., Briffaud, S., Geelmuyden, A. K., Konkolyne-Gyuro, E., Pirnat, J. The Landscape Ambassador Experience: towards a new educational approach for improving landscape planning and

management with farming systems and the European Landscape Convention in mind. Presentation held at the *8th European IFSA Symposium* in Clermont-Ferrand, France, 6-10 July, 2008.

- [9] Ochsner, J. Behind the mask: a psychoanalytic perspective on interaction in the design studio. *Journal of Architecture Education*, 53 (4), 2000, pp. 194-207.
- [10] Owen, C. Design thinking: notes on its nature and use. *Design Research Quarterly*, 1 (2), 2000, pp. 16-27.
- [11] Patrício, A. Teacher training in higher education: urgency, problems and perspectives - from training of teachers in higher education to teacher training in higher education. In C. Reimão (Org.). *The teacher training in higher education*, (pp. 73-82). Lisbon: Edições Colibri, 2001.
- [12] Piaget, J. *Réussir et Comprendre*. Paris: Presses Universitaires de France, 1974.
- [13] Pinto-Correia, T. (Coord.), *Final Report of the International Intensive Program Landscape Ambassador – New Insights for Old Rural Landscapes: the multifunctional challenge*. Montemor-o-Novo, Portugal, 2008.
- [14] Roncken, P. New academic trends in landscape architecture. In S. Herlin (Ed.). *Proceedings 20th International Annual Conference of European Schools of Landscape Architecture ECLAS: New landscapes New lives. New challenges in landscape planning, design and management*, University of Agricultural Sciences, Alnarp, Sweden, 2008.
- [15] Rowe, P. Professional design education and practice. In A. Salama, W. O'Reilly, & K. Noschis (Eds.). *Architectural education today. Cross-cultural perspectives*. Lausanne: Comportments and authors, 2002.
- [16] Salingaros, N., & Masden II, K. Intelligence-based design: a sustainable foundation for Worldwide architectural education. *International Journal of Architectural Research*, 2(1), 2008, pp. 129-188.
- [17] Schön, A. *Educating the reflective practitioner: toward a new design for teaching and learning in the professions*. San Francisco: Jossey-Bass Publishers, 1987.