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ENSINAR PELO PROJETO TEACHING THROUGH DESIGN

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Exposição TAPE

Pedro Belo Ravara The Academia of practice

Schools began with a man under a tree, a man who did not know he was a teacher, discussing his realization with a few others who did not know they were students.

Louis I. Kahn (Latour, 1991, p.162)

This position of reception, where the difference is closing over between those who teach and those who learn, gains meaning in today's Academy, where, due to its nature and its scientific duties, experimentation and the formation of hypotheses are gaining importance over intuition or the so-called "artistic traits".

Architectural education has been the target of discussion within the academic and professional community, where the latter has always been involved in the former as far as teaching Architecture is concerned.

The Design Studio teacher finds him/herself at an ideological crossroad situated between the position inherited from the tutorial master and the position occupied by the "critical fellow-traveller", or between the "practising teacher" and the "professional academic". In other words, the act of designing differs today, or rather, it swings back and forth between a practice of theory and a sort of theory of practice, where the former nurtures increasing academism and an almost untenable scientific objectiveness, while the latter places a wager on rehabilitating such talents as intuition or art as the redeeming factors of the architectural discipline. However, is this really so?



What should the training of the Design Studio Instructor be? Academic or practitioner?

Directive 85/384/CEE of the Council of Europe of 10 June 1985 (known as the Architects' Directive) is an Act that deals with the mutual recognition of diplomas, certificates and other evidence of formal qualifications in architecture, including measures to facilitate the effective exercise of the right of establishment and freedom to provide services. In Article 3 of the Directive, it says:

Education and training leading to diplomas, certificates and other evidence of formal qualifications referred to in Article 2 shall be provided through courses of studies at university level concerned principally with architecture. Such studies shall be balanced between the theoretical and practical aspects of architectural training and shall ensure the acquisition of:

- an ability to create architectural designs that satisfy both aesthetic and technical requirements,
- an adequate knowledge of the history and theories of architecture and the related arts, technologies and human sciences.
- a knowledge of the fine arts as an influence on the quality of architectural design,
- an adequate knowledge of urban design, planning and the skills involved in the planning process,

1. Manuel Vicente with Students at FAUTL, Fall 2010.

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- an understanding of the relationship between people and buildings, and between buildings and their environment, and of the need to relate buildings and the spaces between them to human needs and scale,
- an understanding of the profession of architecture and the role of the architect in society, in particular in preparing briefs that take account of social factors,
- an understanding of the methods of investigation and preparation of the brief for a design project,
- 8 an understanding of the structural design, constructional and engineering problems associated with building design,
- an adequate knowledge of physical problems and technologies and of the function of buildings so as to provide them with internal conditions of comfort and protection against the climate,
- 10.the necessary design skills to meet building users' requirements within the constraints imposed by cost factors and building regulations.
- 11. an adequate knowledge of the industries, organizations, regulations and procedures involved in translating design concepts into buildings and integrating plans into overall planning.

In looking at these 11 points, we see that the emphasis is symptomatically placed on the way that knowledge is named. Integral rather than specific knowledge is consistently suggested where terms are used such as, "an ability to create", "an adequate knowledge" (and not specific knowledge), "knowledge" as something likely to influence conception. This "knowledge" should also lead to "an understanding of the relationship" between things, or satisfy "the need to relate". Furthermore, "knowledge" should provide "an understanding of the methods of investigation", "an understanding of the structural design, constructional and engineering problems" or yet again, it should develop "the necessary design skills" in order "to meet building users' requirements."

In addition to this, the Directive on Qualifications, 2005/36 EC, deliberates on the equivalence of the qualifications of professionals who are regulated and may circulate freely within the European Community. In Article 11 (e), it stipulates that training courses sat at universities and offering a diploma should have a duration of at least four years on a full-time basis or an equivalent duration on a part-time basis. Moreover the holder of the certificate should have successfully completed the recognised professional training required after the post-secondary course, which each country demands according to the professional accreditation framework, applied by the competent authorities.

In short, the European Directives about mobility of professionals and recent graduates within the EC, as well as about the profession itself, acknowledge the integral nature of training in architecture and its professional practice as the outcome of this same integration, whereby it acts as the basic condition for granting the architect his/her accreditation.

Today, an architect's education, through the tutorial teaching that has been the basis of the Design Studio course, consists of variations in the way this subject is integrated and related to other disciplinary

areas in Architectural education. In other words, variations may come to light in the number of students per teacher. If this number is too high, it may place the tutorial model of education at risk as it has done in some colleges and universities in Portugal. Other possible variations might have to do with the inclusion or the separation of disciplinary areas of study that are essential to Design Studio.

Is the architect-teacher of the future a specialist?

Other issues are raised by the current Bologna regime that questions the traditional tutorial type of teaching involving the subject of Design Studio in architecture. The fact that academic qualifications necessarily have to be up-dated owing to the demands made by the University Teaching Career Rules (as well as by Bologna), requires that the higher-education teacher has to become more specialised by choosing a branch of research and undertaking intensive academic work. This state of affairs has slowly shown that it is incompatible with being a practising architect. Therefore, in terms of teaching Design Studio, what we have seen is the gradual disappearance of the "practising-teacher" in favour of the "professional-academic". This is the reality that throws into doubt the tutorial model of education, replacing it with another model that is closer to being an analytical approach to the subject of architecture. The situation is exacerbated when it comes mainly to the Design Studio courses as they should create the working environment of an architect's workshop or office that was characterised by tutorial methods where the teacher-student relationship thrived in classes of not more than 20 students per teacher. By having to adapt to the Bologna regime and the subsequent mass-availability of education each teacher may now have between 35 and 45 students per Studio.

It is at this point, located between the "practising teacher" and the "professional professor" together with the aggravating factor of having lost the tutorial transmission of knowledge, that the conceptual contradiction comes to light between what architecture means as a discipline, and another resounding academic meaning specific to the field of education – in this case, architectural education. Naturally, the Design Studio Course is taken to be architectural education's most fundamental subject owing to the methodologies and the experimentation it proposes. Although the other subjects given in an architectural course are also considered to be important, none of them are deemed to be so essential to the course as the Design Studio. In other words, Design Studio embodies an essentiality that is common to all architectural courses not only in Portugal but if we may make so bold to say, all over the word. The subject condenses a series of approaches, experiments and know-how, that are generic and all embracing so as to integrate all the other distinct specialised skills that not only concern us architects and future architects, but also the professionals working in other disciplines who range from engineers to consultants in various sectors such as the economy, geography, sociology, history, the environment, and so on.

The wide coverage or the integration of different specialities and know-how sums up the very nature of Design Studio as a laboratory experiment where each student has to opt for a conceptual construct that will allow him/her to deal with a problem raised in a non-specific field. The particular nature of the solution demands that various specialisations (and competences) are brought together in the Design Studio. It also requires an ability to integrate them all into a model which recognises them but which does not completely overshadow them. The possibility of including each of the skills and competences involved, as well as the analytical distance needed in terms of each of them, encourages the student and the architect to continue to strive for a solution which is not based on making any compromises with the most analytical disciplinary areas that Design Studio invariably ends up by taking into consideration. We might well say, therefore, that here lies the real synthesis that Design Studio makes of all the different realities contributing to it so that it not only sums up the technical, social or human specialities involved, but also throws up questions related to urban integration, landscaping features or economic feasibility.

What is the format of a Studio? Integrated knowledge or analytical approaches to Design?

Teaching Design Studio is accepted, in all its possible variations, as a system that allows the education of the architect designer. The definition of the architect designer is somewhat alien to the very definition of an architect. Or rather, the architect is a professional who exercises his/her activity within the field of architecture and where, in order to do so, he/she has been duly qualified according to what the Architects' Directive informs us.

However, in No. 2 of Article 42 in the Rules of the Portuguese Institute of Architects, we read:

The acts specific to the profession of the architect are substantiated in studies, projects, plans and consultancy, managing and supervising work, planning, co-ordination and evaluation, falling within the field of architecture, which encompasses building, town planning, the conception and design of the spatial framework of the life of the population, aimed at the harmonious integration of human activities in the territory.

This definition covers activities where the integration of disciplines dealing with distinct fields of knowledge has been accomplished not only as far as studies, projects, consultancy, managing and supervising work, planning, co-ordination and evaluation are concerned.

The architect's profession has the ultimate goal of "the harmonious integration of human activities in the territory" and "the upgrading of the constructed heritage and the" built or landscape "environment". This means that by definition, the architect is a designer.

For this reason, the complementary connection between practice and teaching is neither new nor alien to Architectural education, and neither was it ever so, nor will it ever be so. Throughout the last century (meaning the 20th century), architectural education always found its support in the teacher who had his/her practical experience as the vital link between academia and this architectural practice. It therefore not only helped to train students but also the educators

themselves because they saw and still see that practice complements and foments a constant critical awareness operating upon their professional and pedagogical competences.

Conclusion

Design Studio should and must act as a bridge between these two proximities, the proximity of practice and the proximity of academia. Only apparently are they antagonistic but in reality, it happens that they are absolutely complementary to each other.

Therefore, while accepting that the "professional academic" is necessary because he/she is the outcome of inevitably making education available to the masses and standardising methodologies and pedagogies (as in the case of Bologna), specifically speaking, in the discipline of Architecture and mainly in terms of Design, it is crucial to count on the presence and participation of the "practising teacher" who exercises his/her profession.

Finally and in conclusion, I would venture to say that the subject, Design Studio, is indefinable as regards contents and aims; it integrates distinct, non-specific knowledge, condenses in its physical and pedagogical space the practice inherent to being an architect regardless of whether he/she eventually spends more time or less exclusively engaged with design work. What is acquired in the process is the ability to understand, question and generate a system that designs a spatial synthesis out of a constructive inevitability.

It is clear that although this appraisal has been limited to the question of Design Studio, we should nevertheless bear in mind the way in which the subject of Design Studio in Architecture has been adopted in the first two cycles of the Bologna framework. I recognise the fact that approaches vary when considering these two cycles. The profile of the educator giving Design Studio varies according to the Goals and Objectives, or the "Idea of a School", chosen and followed by each Architecture School or Faculty. This reflection has merely allowed me to say that if, in fact, if there are differences between the first two cycles in higher education, then there should also and must be differences among the paths that each Architectural School can offer. For example, at the Faculty of Architecture at the Lisbon Technical University, where there are 5 to 6 classes a year, where each class has an average of between 30 and 35 students, the School is big enough and has the required critical mass to offer more or less academic and/or theoretical paths of formation. In other words, the guestion of the "Idea of a School" will end up by being fundamental not only when defining the format of the workshop or the studio for teaching Design, but also for drawing up a profile of the teaching staff involved in it. In the meantime, the question of the essential nature of Design Studio and its relationship with practice is common to all different models and Projects of Schools, considering all the variations in the Design Studio formats or the interschool academic path formation models.

Latour, A. (1991). On Designing schools, in Louis I. Kahn: Writings, Lectures, Interviews.

New York: Rizzoli