Design Education between Past and Future –
Pedagogical Actions towards Heritage Preservation

Jorge Brandão Pereira¹
Polytechnic Institute of Cávado and Ave
ID+ Research Institute for Design, Media and Culture, Portugal¹

Abstract
Design is an activity with the ability to creatively engage with other fields in its education process. As an active agent in communication and society, it must assume a role of responsible citizenship, contributing with its actions to improve its contexts and its communities of intervention. The following paper develops the research of design education between past and future, starting from a global outlook that deals with methods, strategies and creativity, and copes with new and more complex challenges and work forms, and describing pedagogical actions in higher education in Design, in Portugal, focused on heritage preservation in order to achieve these goals. As a pedagogical field that extends beyond visual mediation, it acknowledges and promotes alternative expressions of knowledge, addressing possible design roles in terms of overall cultural change, and in particular in the case studies presented in the paper, towards local heritage preservation. The successful implementation of this bridge also brings more cognitive maturity do students, combined with a deeper understanding of pedagogical processes in general, providing an accentuated view of the role of design, and learning process built with the understanding of the world and of real issues. It focuses in a teaching-learning-research bias, focused on heritage preservation identities, traditions, and systems of knowledge, establishing a mediation pedagogy that opened up territories for further expansion of theory and practice.

Keywords: Art and design education; higher education.

1. A starting framework
Heritage preservation is a trending topic in current scenario of creative education and research. It’s knowledge and corpus present a sustained potential to become a territory for design action and design pedagogy, contributing towards its inscription and, consequently, preservation. In recent years, there has been a growing interest on how design can augment cultural development, create meaningful links between culture, economy and society, and bridge gaps between its own theory and practice [1, 2]. In present times of accelerated technological development and changing educational contexts, design has also been playing an active role in the maintenance of localised practices, products, and industries through the use of contemporary media as a means of identity and value addition [3, 4].

There are changes occurring in the global economy driven by globalization, technological innovation and communication paradigm shifts. The new set up drive the adoption of development strategies by institutions and organizations for their general improvement. Globalization of society promotes changes in citizens’ social behaviours. Design, designers and design educators, as active agents in communication and society, must assume a responsible citizenship role, contributing with their actions to the improvement of their contexts and communities of intervention, and in this context design may have an important role to play. The integration of design research projects with heritage preservation can enhance instructional methodologies and strategies, requiring educators to build upon their role in a teaching-learning dialogue. This also contributes to adding new contexts to the dynamics of the classes, enriching the activities, and inviting students to explore, take risks and actively engage in the search for primary information, which refers to the themes at work.

The International Council of Design (ico-D) aims at “advocating for design as an effective way of advancing the best interests of humanity and the environment” [5]. Design is promoted as an efficiency and differentiation tool, to create and deploy an organizational culture, integrating all stages of product development. It takes up a narrative of optimism that is passed to organizations and to the collective discourse. This shifts the discussion to the preservation of cultural heritage, articulating global culture with local culture, while seeking to, simultaneously, universalize and localize.
2. A pedagogical action

The pedagogical actions presented consist of a global interpretation of project development in graphic design, in a practice-based research process towards cultural and heritage preservation. Cultural heritage has universal value for all of us, as individuals, communities, and societies, and it is an opportunity to communicate culture. “Through cherishing our cultural heritage, we can discover our diversity and start an inter-cultural conversation about what we have in common. So what better way to enrich our lives than by interacting with something so central to who we are?” [6]

Integrated in the process of higher education in graphic design, namely in the degree (BA) in Graphic Design of the School of Design of the Polytechnic Institute of Cávado and Ave, within the structuring curricula of Design Project, the pedagogical process of this action identifies as main objectives: (i) to explore the grammar of communication design; (ii) to identify attitudes and methods used in the project environment; (iii) match the aesthetic objectives of design to the effective possibilities – methodological, technical and productive – of graphic production, using in particular the appropriate technological tools; (iv) to develop reasoning and creative stimulation in project, substantiated in the history of visual communication and in the praxis of contemporary graphic design; and finally (v) to develop the capacity for critical thinking regarding the different perspectives of Design, its role in society and tangencies.

The work assignment consists of the design and development of graphic communication of a cultural heritage with a view to its promotion and dissemination, emphasizing its local and regional importance, proposing the development of integrated communication in multiple media. As a case study, design students have to choose a specific topic, within a proposed global set.

The methodology is based on Bruce Archer’s “3 stage design process” [7], developed in three moments of the project development. The design and the methodology related to its constitution, as a scientific activity, fomented a search in the theorization about the specific “doing” of design, attributing to all the stages a meaning of their own resulting from the objectives determined in an initial and exploratory phase. Archer defends the specificity of design as a dimension of human action in general, and not only in a professionalized dimension. Archer’s contribution is particularly relevant for the constitution of design as a territory of “communicable knowledge” [7], whose problematics can be investigated, analyzed and concluded as mechanisms of knowledge search. Archer was fundamental in leading the designers of his generation to face the discipline of design as, precisely, a discipline, with its own demands in terms of methodological rigor and systematized research, placing it in the center of a dialogue of rigor, proper of science and academia, with freedom and intuition, characteristic of art and creativity.

Archer promoted the use of systems-level analysis, in a design process based on evidence and evaluation through experimentation. The starting point, also promoted in this proposal presented and related to the theme of heritage preservation, will always be the expression of a need, and therein lies the rationale and importance of determining the reasons for creating a design process, as well as managing the expectations of its scope and its relationship to the artifact developed. In this development, Archer systematizes his proposal in the so-called 3 Phase Model, where the design process would be this creative mix, the limitations of the objectives and the systematic analyses, always having the creative act as a structure:

1. Analytical Phase, from which information is compiled, organized and evaluated, conditioning factors are defined and the hierarchy is structured, detecting the problem, programming and obtaining information.
2. Creative Phase, in which analysis, synthesis and creative development are applied.
3. Executive Phase, in which a critical appreciation of the previous phases is developed, ideas are adjusted, and the design process and the interactive process with other players are developed, in the definition of the proposal and solution. Communication also becomes part of the objectives inherent to the development of the result.

By applying this methodology to the pedagogical action, and by its success, a learning ladder is established between understanding, meaning and action, which is added here to the students' training process, by active processes and pedagogical construction, that are not previously observable or susceptible to experimentation.
3. Design outputs and discussion
We consider the appropriateness of Archer’s methodology and of great value in the process of higher education in design, because it defined Design as an activity that combines the intuitive with the cognitive and, thus, contributed to transform the Design process into a science. “His method was based on critical path analysis, a model of operations research, and gave design research examples” [8]. Thus, rebutting the methodology described about the teaching/learning activity, student’s assignment is organized as follows. In the first phase (Analytical Phase) the cultural heritage case study to communicate is identified. It foresees the development of research on site or in related and tangential projects and their critical reflection to the concept to work on. In the second phase (Creative Phase) is developed the study and implementation of the graphic component of the project. It foresees the methodological phasing in moments of analysis, synthesis and practical development of the communication supports, and here the visual graphics are developed. In the present paper we’ll highlight some of these outputs accordingly. In the third phase (Executive Phase) the project is concluded, in terms of communication and dissemination, including its final presentation.

Given the characteristics of the assignment, the examples are very diverse in terms of graphic language, which is developed in the process of research and particular investigation. The starting point is poster design, in 50x70cm format, to which three additional communication supports are added, accordingly to the topic and research options conducted by the students. Considering the success achieved in the assignments, in the learning process, and, above all, in the implementation of project methodology, the pedagogical actions are an interesting contribution to the discussion about graphic design training in higher education.

Fig. 1 Poster project (top left) and visual research on the case study “18th century pipe organ from the Church of Misericórdia in Barcelos”. © Inês Rocha / IPCA.
The developed activities and the dynamics of practical work in class allowed students to consolidate knowledge and skills on research and experimentation processes related to graphic and visual communication, through motivating work assignments. It was also integrated, as proposed in the program, the identification of the historical and semantic capital of graphic design as fundamental ingredients for the creation of a reasoned visual discourse and autonomy in the development of projects. The overall results are very satisfactory, meeting the expectations created, with many cases of outstanding quality of responses. The development of a project structured and organized into
different phases and supported by this methodological model of Archer is highly enhancing the capabilities of students and motivating for their training.

Although there is a great heterogeneity in the graphic language of the answers, it can be observed in most of the works developed a concern for exploration and creative experimentation, seeking to prove specific skills linked to the various areas that are part of the curricular structure of the degree. By exploring and discussing the bases of design language, the proposed training presents the creative possibilities of graphic design, exploring the limits of the discipline in parallel with reflection on its methodological activity. Educators, as mediators between students and research projects, and also acting in the fundamental role of a researcher, are in a prominent position to reflect on learning, collecting and interpreting data and propose decisions regarding teaching, and constructing an applicable pedagogical model. It is important that classrooms are also living laboratories for research and are also able to transform and be transformed. The educational resources that are built have a lot to do with writing and reflecting on the pedagogical activities themselves, in the form of scientific contributions to the higher education community involved in design.

References