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Ernesto Echeverría Valiente *Editors*

Architectural Draughtsmanship

From Analog to Digital Narratives

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 Springer

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Preface

The book presented here is a compilation of articles collected under the title *Architectural Draughtsmanship: EGA (Architectural Graphic Expression) From Analog to Digital Narratives*. It is the result of the International Congress EGA (Architectural Graphic Expression)16 held in Alcala de Henares in June 2016 with the subheading: “Teaching and researching in architectural graphic expression.”

This was the 16th edition of the Congress, and it was again centered on the exchange of knowledge of what is taking place within the arena of architectural graphic expression inside and outside of our country.

The implementation of a successive curriculum over a short period of time (BA in Architecture, BA in Fundamentals of Architecture, Master of Architecture and Ph.D.) has led to the necessity of restructuring all areas of study within this field, and for that reason, it seemed the right moment to turn our attention to the work of professors and researchers. As the last Doctor Honoris Causa of the University of Alcala Kenneth Frampton said in his acceptance speech, we have to reclaim innovation by starting from tradition, both in terms of architecture and educational disciplines attached to it.

This book is organized into two major parts:

A/ Research into the field of architectural graphic expression, including related areas of education, in which innovative experiences have been presented in the new curricula,

B/ and how to teach research methods that are essential to the work and experiences found in the field of postgraduate studies.

The editors have grouped the articles into four major chapters, according to their individual subjects:

1. Innovation Teaching Strategies (Teaching experiences applied in EGA).
2. Design and Education (General education concepts in EGA).
3. Design and Architecture (Design issues related to current architectural practice).
4. History and Cultural Heritage (History of a particular designs and/or the design's application within the architectural heritage).

Blind pairs reviewed all articles as a guarantee of quality in order to obtain the recognition of the scientific community.

All the works are in English, although they may have originally been written in one of the languages of the Congress, either Spanish, Italian, or Portuguese, with the goal of emphasizing their respective international characters.

We believe this compilation of articles could be the trigger to start a new collection of books about the international relevance of architectural graphic expression. It is the result of the important contributions taken from the congresses dedicated to the subject that have been held regularly for over thirty years, with the participation of a large number of researchers from European and Latin-American countries.

Alcalá de Henares, Spain

Enrique Castaño Perea
Ernesto Echeverría Valiente

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Practical Actions in the City: Designs for an Environment

Ana Torres Barchino, Juan Serra Lluch, Aitziber Irisarri López
and Anna Delcampo Carda

Abstract The aim of the present text is to explain the contents and the teaching of the course entitled “Product and Environment Colour Design”. This course is included in the “Specialization” called “Products for Collective Use” of the curriculum of the Master’s Degree in Design Engineering. It develops several concepts, procedures and, finally, the design of a specific product to be exhibited in urban environments and local stores. The proposed designs by the students of the Master’s degree are based on the study of colour and the interpretation of several featured authors with renewed artistic works and contemporaneous stiles. The present text explains two different ways of developing the final product designs: on one hand, students work throughout the design project learning; on the other hand, students work throughout the study of colours and shapes attending to the most influential contemporary art movements.

Keywords Arte-Diseño · Lugar · Escenografía

1 Introduction

The School of Design Engineering at the Polytechnic University of Valencia offers the Master in Design Engineering within the European Higher Education Area.

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Since its inception in 2007–2008, the faculty of the Department of Architectural Graphic Expression has taken part in this Master, with a curriculum that covers a range of courses focused on the knowledge and habitual development of Industrial Product Design.

Contributing with new concepts, methods of study and development of a project, we aim to generate courses with more appropriate contents for the culture of design in order to foster the involvement with the society.

Given the multidisciplinary faculty involved, the Master focuses not only on the product, but on the techniques used to set it in a space, place or environment, providing new ways to understand design in its various perspectives: starting with the knowledge and analysis of an object, up to the study and creative development for its public use.

It is in the specialization module, entitled: *Products for Collective Use* consisting of various courses where arise more practical and closer to the user contents. The courses deal with different lines of action, which represent different objectives within the creative process of every project, such as: product design for urban environments and events; design for exhibition spaces and temporary facilities design.

We emphasize as well that, in each and every learning content and project developed since the implementation of this Master, the good connections exerted by the faculty with related firms would let join educational and professional work, bringing students closer to the reality of an increasingly versatile industrial design.

It should be noted that the most technological and color-related courses in this module stress on the process, development and finish of the product through proposals, combinations or chromatic organization such as digital displays, using techniques and instruments adapted for each case to find an optimal result for the posed design.

In this regard, solving the aesthetic problems required by the design of a product demands a coherent and consistent creative project, as defined by André Ricard: “The design task in the creation of industrial products lies in setting up a better relationship between the product and its future user, both at the level of the service that the product will provide, and at that of its integration into the cultural whole of which it will be part of. So it can only be an industrial product design to the extent that its use will require direct contact with the user” (Ricard 2000, 171).

Based on this and other reflections on design, the proposals and initiatives of the faculty have been those of managing and performing activities with companies, groups of users, debates with designers and meetings with commercial associations during the design process.

The design proposals for each of the disciplines aim: to pay attention to the requirements, that above all, the society demands; to unify concepts at the beginning of each course; to coordinate needs and types of products agreed with the business companies; to favor research when developing a product that, in our case, is the starting point to boost the students to perform the creative tasks involved in design.

At this point, the addition of different fields in design studies allows for the opening of new creative ways that revolve around movements of disturbing cultural and social versification. The latest trends spread by the media, exhibitions, activities and publications, materialize extensively and globally, announcing changes in the design that most deals with culture and towards an art closer to the recent times avant-garde (Julier 2010).

2 Contents: Design and Develop a Project in a Commercial Space

As indicated in the abstract of this paper, the courses of the Master in Design of our department are included in the specialization module entitled *Products for Collective Use*.

The initiatives and design proposals, developed by the students in their final-year projects, are based on the requests of business companies or public associations to make street furniture elements in order to generate new environments or daily-use products (technological and accessible), ideas ever conceived and designed for the city. These requests are managed by the faculty through competitions and exhibitions, showcasing the designs of useful products ready to be integrated into the public space.

Thus, the two ways indicated in our abstract are focused on promoting a project based on experience and interdisciplinary concepts which tries to bring a real problem into the classroom at the request of a company and use the most appropriate means, techniques and production processes. On the other hand, we transmit to the student the proper bases and concepts to carry out the project exploring the implementation of new issues and contexts, such as art and design culture as main supports for innovation.

This way, in the course called: *Color in Product and Environment Design*, we focus the research on the study and the learning of adapting designs to help liven up commercial spaces and highlight a product exposed for sale among the top issues. As a result, small and medium businesses, specifically dedicated to craftwork, needs solutions that provide their spaces with a creative vision, aiming to please and bring in the public to the purchase of a product delving into the most recurring innovation, proliferating the *branding* methods (Julier 2010).

It is implied that such activity is based on the learning of a specific project, which aim is to work from the generation of the idea up to its full-scale construction. The research of the proposals is based on an initial and illustrative outline given to the student, who must understand the process and generation of a design that should be created for a collective use.

This scheme, designed to raise the student's interest, basically consists of bringing him closer to: the real world; the enterprise; manufacturers of products and

services; professionals in the design area; commercialization; the phases of production; the latest trends and, obviously, the society.

Quoting André Ricard again: “The creation of industrial products is subject to creative problems of very different types, corresponding to the various facets and disciplines required by the industrial product. Basically we can differentiate three types of areas: operative = subject to the laws of physics; manipulating = to facilitate the comfort of use, and processing = to enable the production” (Ricard 2000, 165) (Fig. 1).

We emphasize that the intention of the faculty of this course is to get the students to show the most creative aspects of the process and resolution of the project, as well as delve into one of its principles: connect art and design as a unit. Concepts that sum up in the search for information on contemporary art focused on the study of form and color.

The phases of study and research, carried out on color, new trends, production, new technologies and industrial development generated lately, allow for a knowledge of this issue that is very useful in design studios involved in the creative process of the designer.

In short, having an overview of what design is today as a whole, where art greatly influences the creative process of the planner/designer. The theories of Bruno Munari, in the sixties, predisposed in this field towards the connection of design with plastic arts and artistic experimentation, pointing out that the designer signifies the object and its final form has a psychological value at the moment of purchase by the buyer; materials, color, function and aesthetics in a consumer and industrial world (Munari 2005) (Fig. 2).

For it, the study directly observed in a commercial environment, the search for authors and artists or avant-garde schools, and visual perception knowledge, light and color, exert a progressive increase in the creative capacity of the students (Press and Cooper 2009).

Fig. 1 Cenicero Stockholm.
1967 André Ricard

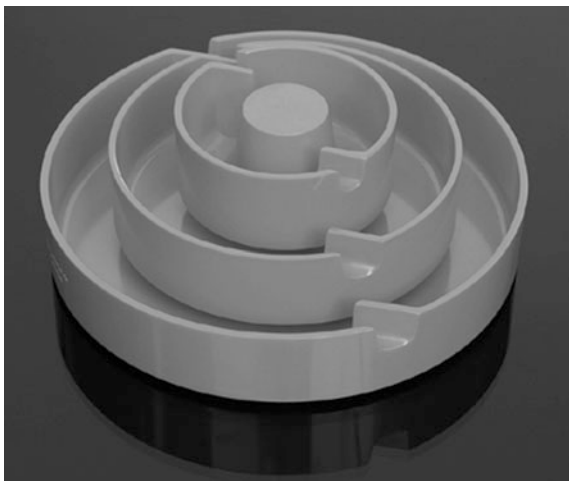




Fig. 2 Lámpara Falkland. 1964 Bruno Munari

The enthusiasm roused by such research generates a series of formal interpretations that appear through the work of construction and installation of the selected elements in a space.

Again, it is not only the experimentation and interpretation of artistic forms and compositions or visual games that is valued, but the creation of new proposals with new and old materials. Design analyzes the contexts, the experience and the role of designers as the third millennium moves forward; it interconnects two main and fundamental ideas. The first one is that design must be regarded, more and more, as the process that generates meaningful experiences for people [...]. The second idea is that being a designer is, radically and irrevocably, volatile; new tasks arise, methods and activities that give a greater importance to the innovative and transcendental research, associated with creative methods, effective communication and proactive entrepreneurship (Press and Cooper 2009).

3 An Approach to Contemporary Art as Base for Design

We consider appropriate to quote Gombrich in this encounter between art and design, for it should be addressed more frequently among the disciplines of Industrial Design, as support and cultural reference.

“Everybody who watches the contemporary scene with sympathy and understanding must acknowledge that even the eagerness of the public for novelty and its responsiveness to the whims of fashion add zest to our lives. It has stimulated inventiveness and an adventurous gaiety in art and design for which the older

generation may well envy the young [...]. The new tolerance, the readiness of critics and manufacturers to give new ideas and new colour combinations a chance, has certainly enriched our surroundings, and even the rapid turnover of fashions contribute to the fun. It is in this spirit, I believe, that many young people look at what they feel to be the art of their own time without worrying overmuch about the mystical obscurities contained in the preface to the exhibition catalogue. This is s it should be. Provided the enjoyment is genuine we can be glad if some ballast is being discarded” (Gombrich 2002, 616).

In the time we have been working in this specialty of products for the public use, and specifically in the course of Product and Environment Colour Design, to which we have referred in the abstract, it should be stressed that there have been several interventions of artistic nature, leading to the research and development of installations designed with shapes and compositions based on the Op-art movement as an example of the previously presented.

Given the sense of the proposals by companies and businesses, represented by the Association of traders from the historic center of Valencia, it was given a new look to the exterior and interior spaces of some of the most traditional artisan shops. The proposal to regenerate and innovate in the historic center and to create a more contemporary image to the craft-selling spaces allowed to carry on some experimental works taking as reference, among others, Victor Vasarely and the most representative works that influenced, notably, in the panorama of the avant-gardes as Groupe de Recherche d'Art Visuel (GRAV) formed by Julio Le Parc (Fig. 3), García Rossi, Sobrino, Morellet, Yvaral and Stein.

In turn, the students researched on figures as Yaacov Agam, Jesús Rafael Soto, or Nicolas Schöffer. Jean Tinguely, Yaacov Agam, Luis Tomaselo, Hugo Demarco or Apolonio Marina had some influence on the projects presented with very visual



Fig. 3 Color and light installation. Julio Le Parc, 1981 Red sphere. Tokyo Palais, Paris (France)

optical motifs, geometric compositions and well-organized perceptual interactions between colors.

We should clear that the decision to investigate and study the development of these two artistic movements, was made for their character and experimental, technical and expressive basis as well as for virtuous demonstrations of great visual impact that focus the attention of the observer. Also, we must add that, along with the pictorial or sculptural themes, we assume a conception of the spatial vision and movement, where light and color are transformed as plastic agents of great richness.

Obviously, the contribution of these two schools of avant-garde was one of the trends that influenced modern scenography, as seen in the spaces and facilities of the Fondation Vasarely in Aix-en-Provence (France) (Figs 4 and 5).

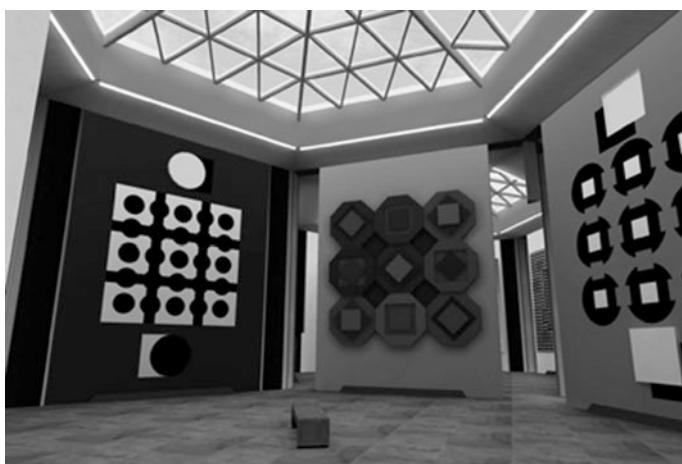


Fig. 4 Interior of the exhibition spaces of the Fondation Vasarely



Fig. 5 Interior of the exhibition spaces of the Fondation Vasarely

Concurrently to this experimental challenge of connection between art and design, we also introduce the new trends, which represented by designers as Marc Newson (Fig. 6), Sebastian Wrong, James Dyson, Fabio Novembre (Fig. 7), Ron Arad and Philippe Starck, make an impression of the most current and cutting edge.

Many of the proposals made by the students of the Master in Design have been worked and installed in the spaces selected by the shopkeepers offering a sign of sensitivity and cooperation on both sides. Thus, the social groups and partner companies help generate enthusiasm in the students of a Master, ever closer to achieve their entry into the job market. This is one of the reasons why we are



Fig. 6 Marc Newson. Bucky Chair Installation. 1995



Fig. 7 Fabio Novembre. Hitgallery. Hong Kong. 2012

committed to a learning system based on a real training project. In this sense, the training received by the students of this Master is increasingly diverse and multi-disciplinary. Backgrounds from fields such as the Fine Arts, Architecture, Engineering or History of Arts, or from different countries, can expand the training activities and experiment with new actions.

Finally, it should be noted that many of the works carried out have been disseminated in social networks and exhibitions, allowing the student to interact with entrepreneurs and craft industries, providing the opportunity to continue or develop new and different designs for commercial spaces looking for innovation. Therefore, we consider that it is necessary to offer a wider cultural and creative vision, exploring more communicative proposals, conceived from art emphasizing the object, space and image (Figs. 8, 9 and 10).



Fig. 8 Work process for the installation at the commercial spaces



Fig. 9 Dadá bookshop at MUVIM (Museo Valenciano de la Ilustración y de la Modernidad). Work carried out by students of the Master in Design: Isabel Crespo; Edwin Genao; Joaquín Ginés; Rosa Mascarell; Aida Ramón. Construction and installation. Year 2014–2015



Fig. 10 Soriano bookshop. Historic Center of Valencia. OpArt shop-window. Work carried out by students of the master in design: Cesar Morant and Fangzhou Chen. Construction and installation. Year 2014–2015

4 Conclusions

To promote a project based on experience and interdisciplinary concepts which tries to bring a real problem into the classroom at the request of a company and use the most appropriate means, techniques and production processes.

To broaden the basis and concepts of branding techniques and methods in a project for its study, installation and communication, exploring themes closer to design for set places, delving into new themes and contexts, as well as in art and culture design as main supports for innovation.

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