It's Not Just About Buildings: Looking Forward to a New Portuguese Modernist Architecture Photographic Archive

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Abstract. This presentation intends to analyze the potentials of photography as a source of historical and theoretical data and as a tool for the construction of knowledge to develop new interpretations of the history of architecture, in the European context and especially in Portugal from the 1930's onwards, when the dissemination of photography and modernist architecture coincide. It also aims to discuss the role of photographic archives in the conservation of cultural heritage and construction of contemporary culture.

Architectural photography — besides documenting a precise place and time — has the ability to tell a particular story and through an image transcend a realized design or evoke a feeling and sense of place. If this is valid to most architectural photographic archives, it's particularly true for the starting point of this research: the collection of the photographer Teófilo Rego (1914-1993) that profusely documented Oporto and the Northern region of Portugal during the last five decades of its live.

Belonging to the Fundação Manuel Leão, the "Foto Comercial" studio archive has approximately 600,000 photographs, whose systematic study remains to be done. This collection illustrates, amongst other things, one of the most comprehensive portrayal of Modern Architecture in Portugal, bringing together a series of photographs of the works of a generation of architects — such as José Marques da Silva, David Moreira da Silva, Januário Godinho, João Andresen, Arnaldo Araújo, Luis Pádua Ramos, José Carlos Loureiro, Viana de Lima, Agostinho Ricca Gonçalves, Rogério de Azevedo or Francisco de Oliveira Ferreira, amongst others — that would be later known as "Escola do Porto" (School of Oporto).

In addition to its enormous historical interest, this archive — mainly composed of unpublished photographs of both built and unbuilt architectural projects of these architects, central figures of this internationally recognized architecture school, born under the pedagogical influences of José Marques da Silva and Carlos Ramos — as a collection, gathers together the material that enables the carrying out of a number of other readings of comparable interest. Besides permitting us to further study this particular period of the history of Portuguese architecture, by accompanying it by a monographic and highly specialized view, also enables us to establish a critical reading on the role of photography in architectural production. All this within the specific context of the "Escola do Porto," but also recognizable in a Portuguese architecture, somehow affiliated with it.

With the purpose of studying this photographic collection, the "Centro de Estudos Arnaldo Araújo / Escola Superior Artística do Porto", a university research & development unit, and the "Casa da Imagem / Fundação Manuel Leão", a nonprofit and public interest institution, formed a joint team between the two entities — that combine professionals from different knowledge areas, such as history and theory of architecture, history of photography, archival management and techniques of preservation and restoration of photographic records — in order to study this particular photographic archive.

The project is held at the newly opened "Casa da Imagem", in Vila Nova de Gaia (Portugal) that apart from promoting this photographic archive is dedicated to developing projects in artistic education — through workshops in photography and other art practices — as well to the management of a contemporary art gallery and a museum about the history of the moving and still image, currently under construction. In parallel, at the "Centro de Estudos Arnaldo Araújo", based at the Escola Superior Artística do Porto, in Oporto — whose principle aim is to carry out research in the fields of scientific and artistic areas of the degrees offered by "Escola Superior Artística do Porto": Architecture, Visual Arts, Performing Arts, Cinema and Audiovisual Studies — its investigators produce research work about the architectural photography of Teófilo Rego archive.

It is hoped with this project — in addition to the analysis how architectural design and its image influence each other or how editing and producing photographic images become tools of communication and design — to understand what kind of relationships were established between photographers and architects, and how were the photographs were used: if the purpose was strictly professional, if they were used to build a personal archive, or whether they were produced for exhibitions and publications. Being important, for each of these cases, to

determine to what extent the photographer remained anonymous, while the image highlighted the author of the photographed object: the architect. Demonstrating precisely how, from the beginning of modern architecture, photography came to provide an essential tool in the conception, dissemination and promotion of architectural design, as well as an indispensable tool in the communication of its ideas and theories.



Figure 1. Téofilo Rego (1914-1993).



Figure 2. "Foto Comercial" photographic studio logo.

Thus, this research project — in order to analyze, with further depth, the specific relationships that were established between photography and architecture in the context of the emergence of Modern Architecture in Portugal — outlined three main objectives:

- 1. To restore, organize and study the Teófilo Rego archive, in order to establish a collection of Portuguese Modern Architectural Photography, with a particular focus in the Oporto and Northern regions of Portugal.
- 2. To produce a critical reading on the relationship between photography and architecture, from the beginning of Modern Portuguese Architecture to the present day, with the purpose of clarifying the role of photography as a communication and design tool in the field of architectural production.
- 3. To make this collection, and its critical reading, available to both a specialized and non-specialized public, through the organization of a public online database, several publications on Modern Architecture in Oporto and the North of Portugal, an itinerant exhibition and an educational service capable of interpreting both the exhibition and the collection.

With this triple approach, the project seeks to go beyond simply preserving and contextualizing the collection, allowing also the public access to the photographs themselves as well to all the knowledge produced. On the other hand, through an exhibition and its educational service, this project will provide an experimental thinking and learning space, with the purpose of looking to a photographic archive from a contemporary perspective.

However, the first step — prior to the beginning of this project — was, in fact, to contextualize both the thematics and the problematics raised by the archive itself. And, therefore, in order to fully recognize the importance of this archive to the construction of a critical reading on the relation between photography and architectural production, it was first necessary to understand how did it occurred the emergence of Modern Architecture in Oporto, within the Portuguese panorama (Almeida and Maia, 1986; Portas, 1977), specially between the 1930s and 1970s, a period in which two generations of architects were educated in the Escola Superior de Belas Artes do Porto. The first generation (born between 1910 and 1920) educated under the influence of Oporto architect José Marques da Silva (Cardoso, 1997; Trevisan, 1996) and a second generation (born between 1930 and 1940) educated under the influence of the new educational programme of Lisbon architect Carlos Ramos, who became Head of the school in 1951.

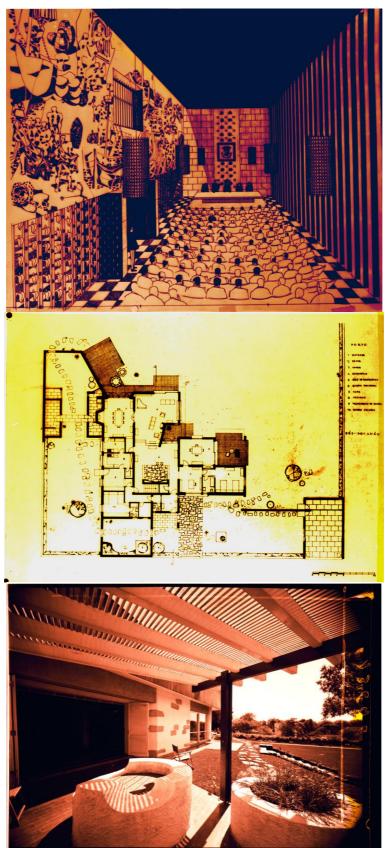
The defense of Modernism in relation to the other prevailing architectural styles, with the supremacy of the rationalism of Le Corbusier (Cubero, 1996; Papillault, 2000; Trevisan, 2009), nevertheless permitting the students awareness of lesser-known trends, closer to the organicism of Frank Lloyd Wright; and the teaching methods of Carlos Ramos, with some similarities to the Bauhaus, contributed to the creation of an idea of "Escola do Porto" (School of Oporto).

This idea is not, however, consensual; giving place to differing points of view, that must be looked at, in order to contribute to a thoughtful and critical approach of the period in question (Almeida, 2005; Figueira, 2002; Filgueiras, 1986; Portas, 1986). It must also be stated that the idea of "Escola do Porto" has gained an international reputation, or at least the acknowledgment that there is a recognizable formal affiliation to certain approaches that relate to architects such as Fernando Távora and Álvaro Siza Vieira. However, seeming that Portuguese architecture begins, from the point of view of international recognition, only with these two architects, and particularly with Siza Vieira (Curtis, 2008; Frampton, 1987).

Specifically, the "Foto Comercial" (Teófilo Rego, 1914-1993) photographic collection — despite covering themes similar to other Portuguese photographic studios during those same decades, like Estúdio Novaes (Mário Novais, 1899-1967), Fotografia Beleza (António Beleza, 1872-1946), Foto Guedes (Henrique António Guedes de Oliveira, 1885-1932) or Fotografia Alvão (Domigues Alvão, 1872-1946) — will allow the development of further detailed monographic studies of this two generations of architects (Azevedo, Graça et al, 2012; Moreira, 2011; Pimentel, 2011; Pinto, 2011), thereby contributing to a comprehensive study of the modern architecture of Oporto.

Also, in the time period in question, the diffusion of both national and international architecture coincided with the expansion of photography in terms of its democratization and instrumentalization (Colomina, 2000; Fiz, 2010), as images are progressively used as a way to achieve a particular result in the communication process (Bandeira, 2007), especially in architectural competitions, specialized publications and exhibitions.

Therefore, the proposed critical and multidisciplinary reading will address the analysis and reviewing of the existing knowledge about modern architecture and architects of Oporto, simultaneously revealing the artistic and professional relationships that were established between the photographer and these architects.



Figures 3 to 6. Architectural photography samples from the Teófilo Rego archive.

Publications on the history of photography in Portugal, still very scarce, address this relationship between architecture and photography mainly showing how it served as a form of dissemination of artistic and architectural heritage, particularly in the nineteenth century (Sena, 1991). On the other hand, when analyzing photography from the 1940s onwards, included in the field of the visual arts, this one is essentially understood as a medium, and is used in some cases by the architects (Serén, 2009).

We believe that the relationship between architecture and photography, and particularly between these architects and photographer, has its embryo in an exhibition catalogue entitled "Marques da Silva, Exposição conjunta das principais obras do Mestre e de alguns dos seus discípulos" (Porto: ESBAP, 1953); whose photographs were taken by Teófilo Rego, and, as we will try to prove, mark the beginning of an extensive and fruitful collaboration with this Oporto architects.

The restoration and study of this photographic collection, besides providing an inventory of the work of this architects and contribute to the safeguarding and study of this unique cultural heritage, will gives us an opportunity to expand the knowledge of the history of Portuguese photography and contribute significantly to new interpretations of the history of modern architecture in Portugal.

This is an approach that no other study about a photographic archive has managed to establish in Portugal, due to the fact that generally those act as simple repositories of images made available to the public, without prioritizing research as a primary objective.

No less important will be the purpose of making this collection accessible to general public and understand how the photographs and its critical reading can be materialized into operational systems (like online databases, publications, exhibitions or workshops) that promote the interaction of different discourses relating to spatial / photographic / distributors of visual knowledge, from local community to global networks (Agra, 2001; Freedman, 2006; Pestana, 2012).

And, in order to address its public accessibility, it will be necessary not only to look at photography as a social document (Freun, 2008) but place it within the discussion that includes photography in the exhibition space (Krauss, 1982). And so, bringing the debate to the present time, considering the photographic image as a documentary object and discussing it as a representation of a subjectively constructed reality (Mateus, Faria et al, 2012). Therefore an additional ambition of this project will also be to discuss the construction of individual knowledge as an open process; the promotion of experimental practices, with the goal of encouraging autonomous thought and action (Azevedo, 2012; Mateus, Faria et al, 2012); as well to address the intercultural and relational issues of the communicative process (Mateus, 2011), in the attempt of constructing new interpretations of this photographic archive.

Therefore, in order to try to achieve such a diverse set of objectives — namely, both the creation of an architectural photographic archive and its historical contextualization, the production of a theoretical and critical body on this theme and its expression in contemporary society, or the publicizing of this project to the widest range of audiences possible — the methodology used to approach this research project is, by definition, rather particular and specific.

It will be supported not only by a multidisciplinary approach based on the team existing knowledge, as well by a time phased programming by objectives, and aided by the conjugation of practical and theoretical components of support to the project.

On one hand, as the main theme of the research project is the intersection between the fields of architecture and photography, we have tried to bring together a multidisciplinary team in order to achieve an innovative approach and a greater scientific rigor. For this reason a group of ten researchers in the fields of architecture, urban planning, art history, fine arts and arts education were brought together. In order to achieve this multidisciplinary approach it is required the knowledge-sharing amongst this mixed team, composed not only of elements of the "Centro de Estudos Arnaldo Araújo" (CEAA), based at the "Escola Superior Artística do Porto (ESAP) — that teach and research in the areas of Architecture, Photography, Art History, Art Education and Urban Planning — but also by members of the "Casa da Imagem", a project of the "Fundação Manuel Leão" (FML), responsible by the management of the Teófilo Rego Archive, the supervision of an educational service and the promotion of artistic and educational practices amongst the local community.

Management of the team is given to a Principal Investigator (IR – Investigador Responsável), who is responsible for the supervision of the project in all its various aspects, historical, theoretical and critical;

although the preparation and partial management of some tasks will be carried out by other researchers. In addition to the Principal Investigator, with a PhD in the area of architecture and urban planning, the team will include three PhD researchers in the areas of modern architecture, art history and arts education, belonging to the Research Groups on Theory, Criticism and History of Architecture (TCH Arquitectura) and on Theory, Criticism, History and Practices of Contemporary Art research group (TCHP Arte Contemporânea). The team will also include two researchers; a sculptor specialized in the areas of education in the visual arts and practice of contemporary art, and another researcher holding a degree in communication sciences with specialization in the teaching of visual arts and multimedia art. Apart from the diversity of knowledge that they can bring to the project, their participation is relevant because they belong to "Casa da Imagem / Fundação Manuel Leão", which is responsible for the Teófilo Rego Archive.

There will also be four researchers belonging to the Research Group on TCH Arquitectura — more specifically two architects, an artist and an art historian — who are developing their PhDs on topics directly related to the architects and architectures represented in the Teófilo Rego Archive, including the architects Januário Godinho, Rogério de Azevedo and João Andresen, and the theme of Modern Architecture in Oporto in the period between 1935 and 1960. Their participation is essential both for providing their specialized view, as well for the knowledge that will arise based on the work that they are carrying out as part of their own studies.

Technical work relating to photography restoration and treatment; organizing and archiving physical and online documents; and graphic design, editing and printing of project publications is to be contracted to outside specialized services.

The research project also brings together an international panel of relevant consultants, specialized in most of the themes addressed by the project and with numerous studies and publications in the field of aesthetics and architecture.

Due to the fact that this photographic collection is of a considerable size, and not all of it is devoted to the topic under review — part of the archive being the photographer's personal archive and another part, the most significant, devoted to product photography — a representative sample of photographs related to the theme of this project, will be chosen and studied in small groups, in a gradual and systematic way. In order to maximize the productivity of the team, it will be used a time phased programming by objectives, in which the various investigators will be divided in smaller teams, responsible for the completion of separate tasks, handed out in accordance with the expertise of the different team members.

The methodology used to approach the problem will therefore be structured along three fundamental lines, running in parallel, supported by the conjugation of practical and theoretical components of support to the project:

- Line 1 dedicated to the systematization of the architectural photographic archive, through the selection, treatment and digitization of the photographs to be included in the project.
- Line 2 dedicated to the production of a theoretical body, from the interpretation of the photographic records and devoted to the relationship between photography and architecture, with the goal of enhancing an appropriate level of scientific production associated with the project.
- Line 3 dedicated to making the research results, resulting from the development of the investigation lines set above, available to general public.

In order to determine the progress of the investigation project, a set of assessment indicators will be defined in order to serve as a form of evaluation, allowing the measurement of the level of implementation of the above-mentioned fundamental lines. Being, the most important of them, the cleaning, digitization and archiving, both physically and online, of a significant set of photographs devoted to the topic of this investigation; but also:

- The achievement of specific levels of scientific production assigned to the project, such as a minimum number of articles, presentations, books, reports or completion of the doctoral or master theses, associated with the subject under review;
- And the organization of a series of scientific activity spreading actions for the discussion, promotion and public diffusion of results, such as an international conference, an exhibition and a workshop, in order to publicize the intermediate and final conclusions of the project.

In fact, one of the main goals of this research project will be undoubtedly to provide visibility and to make public part of a photographic archive, through the publicizing of the knowledge produced by the scientific study of that portion of the archive, and through the organization of an exhibition featuring this photographic records and its critical reading.





Figures 7 and 8. "Monumento ao Infante D. Henrique" (architect: João Andresen / photographer: Teófilo Rego). Photographic shooting and photomontage from the architecture model (1956).

Consequently, several moments of externalization of the scientific knowledge produced by this research project were defined, in order to achieve this goal:

- Presentations in national and international meetings;
- Publication of articles and essays in scientific journals;
- Organization of an international meeting aiming the discussion, promotion and public diffusion of the results of the project.

In addition to these events of scientific activity spreading, this project will also make use of a broad range of media to promote its results, namely through printed, digital, audiovisual and didactical media, specifically:

- Three publications;
- The establishment of an online public-access database of the photographic archive, in which the photographs are identified, organized and catalogued;
- An exhibition that brings together the audiovisual and scientific content of the project;
- A practical workshop about the contents of the exhibition, promoted by the educational services of Casa da Imagem Fundação Manuel Leão.

However, no matter how detailed the plan and methods of this investigation might be, there's always certain a level of uncertainty that must be considered. Despite an exploratory initial analysis has been carried out, over a sample taken from a photographic archive, the state of conservation of the photographs or even the themes, architectural works and architects portrayed may vary depending on the analyzed sample.

But regardless of the evaluation profiles of the above-mentioned assessment indicators, there will be naturally also a set of expected results that we could briefly point out. And these are:

- the restoration and systematization of the photographic negatives of the Teófilo Rego collection, most of them unpublished, on the theme of Modern Architecture of Oporto and the North of Portugal; as well as the creation of a physical archive to be held at the "Casa da Imagem -Fundação Manuel Leão";
- 2. the creation of a public database of the photographs and knowledge produced, available for online consultation by researchers, specialists and general public;
- 3. the production of new interpretations of theory, criticism and history of Portuguese Architecture, embodied in the scientific outputs associated with this project;
- 4. the public diffusion of Portuguese photography and architecture and its history, through the programmed national and international scientific spreading actions.

To end, we would like to emphasize three final aspects that, in our view, strengthen the relevance and originality of the project.

The first aspect is that, although the project has as starting point a document that is clearly historical, this is undoubtedly a contemporary issue. Indeed, we cannot think today about architecture without seeing it as an image, probably due to the fact that photography is, as much now as it was then, still one of the most powerful instruments of communication and design.

The second aspect is that the added value of this project lies in the fact that it is a comprehensive and interdisciplinary interpretation of a theme, focused on the production of results. I.e., not only is this project dedicated to the preservation of a piece of unique national cultural heritage, as it also attempts to contextualize it in order to be interpreted; going beyond a simply historical focus and approaching the field of theory and criticism of architecture, simultaneously focusing on the scientific dissemination of the knowledge produced, and its availability to new audiences.

The third and final aspect, and perhaps also the most important one, is the fact that, by definition, this is a work-in-progress investigation. That is to say that in addition to the contribution on promoting and enriching the theoretical framework of the selected theme; this is essentially the beginning of a project that will, in the future, lead to further developments. For these reasons we do not see it as a specialized, closed and single-focused project. And we prefer to say instead that architectural photography, definitely, "it's not just about buildings".

References

Agra, María Jesus (2001). Itinerarios de arte para la educación. Revista Aula, n. 106 (Nov), pp. 22-28.

Almeida, Pedro Vieira de (2005). A Escola do Porto, a Escola de Lisboa. In Da Teoria: Oito Lições. Porto: ESAP, 83 pp.

Almeida, Pedro Vieira de; MAIA, Maria Helena (1986). Arquitectura Moderna em Portugal. In ALMEIDA, Pedro Vieira de; Fernandes, José Manuel (eds). História da Arte em Portugal, Vol. 14. Lisboa: Publicações Alfa, pp. 1-153.

Azevedo, Inês (2012). Arte + Educação ≠ Educação Artística / Resposta a Arte + Educação ≠ Educação Artística. In Martins, Catarina S.; Martins, Vítor; Terraseca, Manuela (org). À procura de renovações de estratégias e de narrativas sobre educação artística: Escritas posteriores ao Encontro Internacional em Cabo Verde. Porto: Gesto Cooperativa Cultural, CRL, pp. 15-18 / 25-26.

Azevedo, Inês; Graca, Miguel Silva; Mateus, Joana; Pimentel, Jorge; Pinto, Miguel Moreira; Ribeiro, Duarte; Trevisan, Alexandra (2012). Fotografia e Arquitectura Moderna: a visão de Teófilo Rego e Nova Monumentalidade de João Andresen. In 2nd Edition of the International Seminar: On the Surface: Public Space and Architectural Images in Debate. Porto: FAUP/EAUM, 9 pp. (accepted for publication in April 2012).

Bandeira, Pedro Jorge Monteiro (2007). Arquitectura como Imagem, Obra como Representação: subjectividade das imagens arquitectónicas. Guimarães: Departamento Autónomo de Arquitectura da Universidade do Minho, 2007. PhD Thesis (vol 1: 190 pp.; vol 2: 145 pp.).

Cardoso, António (1997). O Arquitecto José Marques da Silva e a arquitectura no Norte do País na primeira metade do séc. XX". Porto: Edições da FAUP, 1997, 793 pp.

Colomina, Beatriz (2000). Privacy and Publicity: modern architecture and mass e media. Cambridge-Massachusetts: MIT Press, 408 pp.

Cubero, Maria Josefa Gonzàlez (1996). Le Corbusier: El proyecto de la ciudad moderna. Valladolid: Escuela Técnica Superior de Arquitectura - Universidad de Valladolid. PhD Thesis, 481 pp.

Curtis, William J.R. (2008). Arquitectura Moderna desde 1900. Porto Alegre: Bookman, 736 pp.

Figueira, Jorge (2002). Escola do Porto: Um Mapa Crítico. Coimbra: Edições do Departamento de Arquitectura da FCTUC, 147 pp.

Filgueiras, Octávio Lixa (1986). A Escola do Porto (1940/1969). In Carlos Ramos, Exposição Retrospectiva da sua Obra. Lisboa: Fundação Calouste Gulbenkian, s/n de pp.

Fiz, Simón Marchán (2010). La Percepción Estética de las Arquitecturas a Través de la Fotografía. EXIT: Imagen y Cultura, n. 37 (Feb/Mar/Apr), pp.16-35.

Frampton, Kenneth (1987). História crítica de la arquitectura moderna. Barcelona: Gustavo Gili, 375 pp.

Freedman, Kerry (2006). Ensenar la Cultura Visual, curriculum, estética y la vida social da arte. Barcelona: Ediciones Octaedro, 223 pp.

Freun, Gisèle (2008). La fotografia como documento social. Barcelona: Editorial Gustavo Gili, 207 pp.

Krauss, Rosalind (1982). Photography's discursive spaces. Art Journal, Vol. XLII, n. 4 (Winter), pp. 311-319.

Mateus, Joana (2011). Interrupção: um movimento intercultural. In MARTINS, Catarina S.; PAIVA, José Carlos de (org). Investigar a partir da acção intercultural: ID_CAI(Colectivo de Acção e Investigação). Porto: Gesto Cooperativa Cultural, CRL, pp. pp. 65-74.

Mateus, Joana; Faria, Mónica; Nascimento, Márcia (2012). Expressões Artísticas nas Escolas da Comunidade do Quilombo de Conceição das Crioulas. In Martins, Catarina S.; Martins, Vítor; Terraseca, Manuela (org). À procura de renovações de estratégias e de narrativas sobre educação artística: Escritas posteriores ao Encontro Internacional em Cabo Verde" Porto: Gesto Cooperativa Cultural, CRL, pp. pp. 117-120.

Moreira, César (2011). Hidroeléctrica do Cávado 1945-1964: a paisagem como património. In Actas do Simpósio: Património em construção - Contextos para a sua preservação. Lisboa: LNEC, 8 pp.

Papillault, Rémi (2000). Le Corbusier, Le bon sauvage en son cabanon. Architecture d'Aujourd'hui, n. 328, p. 44-47.

Pestana, Assunção (2012). Educação Artística, da prática artística à prática docente, as Pastas e os Blogues como dispositivos pedagógico-didácticos. In Formação de Professores, Trajectos e projectos em didática: das teorias à praxis eductiva - Expressões artística. Separata nº 4. Vila Nova de Gaia: Quimigal, pp 11- 22.

Pimentel, Jorge Cunha (2011). Uma Escola Chamada Salazar?. In CARDOSO, Alexandra; SALES, Fátima; PIMENTEL, Jorge Cunha (eds). Januário Godinho – Leituras do Movimento Moderno. Porto: Centro de Estudos Arnaldo Araújo/ESAP, 2011, 13 pp.

Pinto, Miguel Moreira (2011). João Andresen (1920/1967): O Projecto da Casa Ruben A. Porto: Universidade Lusíada, 106 pp. Master Thesis.

Portas, Nuno (1977). A Evolução da Arquitectura Moderna em Portugal: uma interpretação. In ZEVI, Bruno. História da Arquitectura Moderna, Vol. 2. Lisboa: Editora Arcádia, pp. 687-746.

Portas, Nuno (1986). Sobre a Escola e a escola do Porto. In Páginas Brancas. Porto: FAUP/ESBAP, pp. 6-9.

Sena, António (1991). Uma História da Fotografia. Lisboa: Imprensa Nacional Casa da Moeda / Comissariado para a Europália 91, 181 pp.

Seren, Maria do Carmo (2009). A Fotografia em Portugal. In RODRIGUES, Dalila (coord). Arte Portuguesa da Pré-História ao Século XX. Vila Nova de Gaia: Fubu Editores, 142 pp.

Trevisan, Alexandra (1996). A Arquitectura Artes Déco no Porto - 1925/1935. Porto: Faculdade de Letras da Universidade do Porto. Master Thesis (vol 1: 113 pp; vol 2: 90 pp).

Trevisan, Alexandra (2009). Le Corbusier: influência da obra escrita nos arquitectos do Porto. In Ler Le Corbusier. Porto: Centro de Estudos Arnaldo Araújo/ESAP, 21 pp.