# Photography, landscape and modern architecture:

Januário Godinho, Teófilo Rego and Álvaro Cardoso de Azevedo - the HICA connection

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## INTRODUCTION

In the first half of the 20th century in Portugal, as the result of a policy based on agriculture and on a way of life in which access to more than a bare minimum of goods was denied, the Portuguese Estado Novo, presided over by António de Oliveira Salazar (1889-1970), maintained, until the 1940s, an indefinite stance in relation to industrialization which was reflected in weak management of the nation's hydrological resources and in the late creation of large hydroelectric power stations.

It was only in 1945, with the end of World War II, that favourable conditions were created for economic development founded on a basis of industrialization. At that time, due to their importance in bringing electrical power to the country and its consequent industrialization, hydroelectric plants for the production and distribution of electrical power began to be strongly encouraged by the Estado Novo.

A meeting between technology and architecture, these large projects introduced significant alterations to the territory of Portugal, bringing substantial modifications to the existing landscape. At locations that were far from the main centres of population, large building projects would be constructed, utilizing an architecture in which integration into the landscape and technology constituted environmental, historical and cultural values of immense interest.

In 1933, the Office of National Propaganda - the SPN - was created by the Portuguese state for the purposes of strengthening the role of propaganda in the Estado Novo. During this period of dictatorship, the SPN directed and supervised all Portuguese propaganda, making use of radio, cinema, photography and theatre, and of architecture too, as fundamental methods of disseminating the political ideology and projects carried out by the state.

The understanding of the importance of propaganda and of the crucial role of image in publicizing the large building projects that were undertaken can be clearly seen in the activities promoted by the Estado Novo. In publications and at major events, photographers and their work came to be a constant presence in public life, recording scenes that appeared to the Portuguese public to be illustrating moments of great national importance.

It is these photographs, much more so than the texts of the time, that can reach out to us today and allow us to go back to the past. Photography transports us from real, chronological time to a time of memory that is fixed in the image, replacing the real people and events that have long disappeared, the understanding of which helps us to reconstruct history.

The aim of this essay is precisely that of analysing the potential of photography as a tool for the development of new interpretations of the theory, criticism and history of modern architecture, with particular focus on a specific moment at the beginning of the second half of the 20th century during which several hydroelectric plants were built in the north of Portugal, interventions which led to the construction of a variety of new landscapes on national territory.



Img 01 Casa Alvão 1951 Location Caniçada Dam

The company studied in this work, the Cávado Hydroelectric Company (Hidroeléctrica do Cávado - HICA) was to build, throughout the 1950s and 60s, several developments in the north of Portugal along both the river Cávado and its tributary the

Rabagão, and to capture the development of the work taking place on the different dams, photographers Álvaro Cardoso de Azevedo (1894-1967) and Teófilo Rego (1914-1993) were called to the scene. It was through their lenses that over a period of 19 years the process of change taking place in the basins of the Cávado and the Rabagão rivers was recorded on film.

We will take a look at the way in which two of the foremost photographic studios of the 1950s in the north of Portugal contributed to identifying the development and transformation of this area, a transformation in which the figure of Januário Godinho (1910-1990) played an essential part. The work of Godinho, a modernist Portuguese architect whose work was closely linked to the development of these dams, is notable for the manner in which he takes characteristics of traditional Portuguese architecture and relates them to a landscape that is transformed.

#### THE PHOTOGRAPHERS

One of the starting points of this reflection is the work of two photographers from the city of Porto, Álvaro Cardoso de Azevedo (1894-1967) and Teófilo Rego (1914-1993), whose involvement allows us to make a full exploration of the relationship between their photographic work and the objects that they captured on film.

Álvaro Cardoso de Azevedo was born in Porto in 1894. Losing his mother at the age of 4 and his father at the age of 11, he started work in 1906 at Fotografia Alvão — a photographic studio set up in 1902 in Rua de Santa Catarina, Porto — as an apprentice to Domingos Alvão, owner and master photographer of the studio. Cardoso de Azevedo stayed at the Fotografia Alvão until 1920, when he left for Brazil with his wife and daughter. He returned to Portugal at the request of Domingos Alvão, who offered him a partnership in the business. After becoming a partner in 1924, the studio changed its name to Casa Alvão, a name which it still holds today. In 1937, Cardoso de Azevedo became the sole proprietor of the Casa Alvão studio, and remained so until his death in 1967. Casa Alvão continues as a studio in the same location, now under the ownership of Arnaldo Soares.

The archives of the Casa Alvão were acquired by the Portuguese Institute of Cultural Heritage (Instituto Português do Património Cultural - IPPC) from Arnaldo Soares in1981, and were held temporarily at the Soares dos Reis museum in Porto. In 1988 the archive was transferred to the National Photographic Archive (Arquivo Nacional de Fotografia) in Porto, and with the closure of that institute, was transferred to the Portuguese Photography Centre (Centro Português de Fotografia - CPF), which has been conserving and documenting the work since that time.

The documentation contained in this archive includes images relating to the surveying of the wine-growing region of the Douro; buildings and infrastructure such as monuments, factories, hydroelectric plants, dams, hospitals and social housing projects; landscapes, habits and customs from Portuguese regions and places, and studio and group portraits.

Teófilo Rego was born in Brazil in 1913. In 1924, he came to Portugal with his mother and two brothers as a returnee on a cargo boat. Orphaned in 1925, that same year he entered the Oficinas Marques Abreu workshop which specialized in commercial printing, working initially as a typographic printer. In 1944 he left Marques Abreu and moved to the Lito Maia workshop as a slide photographer, where he stayed until 1945. After this, he set up his own photographic studio — Foto Comercial — initially in Rua da Alegria and from 1956 in Rua de Santa Catarina in Porto.

The archive of this photographer, which belongs to the Manuel Leão Foundation, consists of around 600,000 photographs taken over the period of more than 45 years in which "Foto Comercial" was active, and the conservation, documenting and study of which remains to be carried out.

This essay is in fact part of a wider study on the photography of modern architecture which is taking place at the Arnaldo Araújo Study Centre (Escola Superior Artística do Porto) in partnership with the Casa da Imagem (Manuel Leão Foundation), which is currently running a research project financed by the Foundation for Science and Technology (PTDC/ATP-AQI/4805/2012). The project will analyse the relationship between photography and architecture, particularly within the context of the appearance of modern architecture in Portugal, using the archive of this Portuguese photographer as the basis of the study.

The archive contains one of the most significant portraits of the architecture produced in the north of Portugal between the 1940s and 1960s, bringing together photographs of the works of a large group of architects such as João Andresen, Januário Godinho, Arnaldo Araújo, Luís Pádua Ramos, José Carlos Loureiro, Alfredo Viana de Lima, Agostinho Ricca Gonçalves, Rogério de Azevedo and Francisco de Oliveira Ferreira amongst others, who as teachers and professionals contributed to the construction and prestige of the internationally recognized Porto School, which arose from the pedagogical influence of Porto architect José Marques da Silva (referring to a first generation of architects active between 1910 and 1920) and the influence of the new pedagogical project of Lisbon architect Carlos Ramos, who directed the School in 1951 (resulting in a second generation of architects that came to prominence between the 1930s and 1940s).

The archive in question however, which as we have seen is of a considerable size, is not entirely dedicated to the subject being studied, i.e. architectural photography. Part of the photographer's personal archive is dedicated to a variety of ethnographic themes (such as life in Ribeira, the riverside area of Porto, or studies of the wine-growing region of the Douro) with the remainder, the commercial and more significant part, dedicated to product photography for use in sales, industry or factory production, and studio portrait photography, which also represents a significant part of the total archive.

Despite this, the focus of this research project is obviously architectural photography — independent of the evident cultural and historical wealth of the remainder of the Teófilo Rego archive — and that of this article is the work of architect Januário Godinho, a reference in Portuguese modernism, who, from amongst a wide range of projects, from 1947 also participated in the planning, design and construction of a system of dams and associated operational structures in the north of Portugal.



Img\_02\_Teófilo Rego\_1961, Alto Rabagão Dam

## THE HYDROELECTRIC PLANTS

With the approval of the legal framework for electrification in 1945, the Portuguese state created that same year the Cávado Hydroelectric Company (HICA) which was to be in charge of the concession of the harnessing of hydroelectric power from the waters of the Cávado and the Rabagão rivers. The dams, constructed by HICA, were to be distributed amongst the valleys and tributaries of the Cávado in the north-east of Portugal, in the geographical region of the North Atlantic (RIBEIRO, 1991,P.145), in the province of 'Entre-Douro-e-Minho'. This is a region characterized by the sheer inclines and flat peaks of the mountain ranges of Peneda, Soajo, Amarela and Gerês, from whose rift valleys and young slopes the rivers Minho, Lima, Cávado, Homem and Ave arise. (BRITO, 1994,P.49)

The Cávado is one of the four rivers whose trajectory falls entirely within Portugal, (OLIVEIRA, 2003) with its source in the Larouco mountains, running north-east/south-west until it meets the Atlantic Ocean at Esposende. In its upper course, its elevation frequently surpasses 700 metres. On its left bank, between the mountains of Barroso and Larouco, lies the source of one its main tributaries, the Rabagão.

HICA, for each one of the 5 facilities constructed - at Venda Nova, Paradela, Salamonde, Caniçada and Alto Rabagão -, created not only dams and power stations, but also small villages for the workers, managers and technicians.

Given the high degree of technical knowledge demanded by the design of the technical buildings and the villages, teams were created which consisted mainly of engineers, who were responsible for basic decisions such as the choice of location for the dams and the other infrastructure that would be built to support the developments.

The design and construction of all the facilities associated with the operation were first looked at by the engineering team, with some of the structures later worked on by outside architects who collaborated in the planning and spatial organization of the urban centres and who gave shape to the architecture of those spaces. From amongst the architects who worked on the project, the contribution of Januário Godinho stands, out as previously mentioned, being in charge of the planning of a number of housing projects and some of the infrastructure needed for the dams to operate to capacity. As well as the housing projects, Godinho also planned and constructed the Pousada buildings and the power stations of Venda Nova, Salamonde and Caniçada.

Despite the fact that HICA was not a state company, the government's strategy of propaganda was decided on either by accident or design, and the state, which held a share in all the hydroelectric companies, used the dams to raise its prestige while carrying out the much needed modernization of the country.

During the 20th century, man's intervention on the landscape was dominated by an economics-based and materialistic view of society and the technology at its service, which was considered to be an essential pre-requisite for its progression. Cities, roads, bridges and dams were built, rivers were diverted from their natural courses, and territories were settled by the building of infrastructure which would lead to their transformation, much as it transformed the perception that was held about that same territory as new landscapes were created.

The transformations that were taking place on the land were recorded mainly by means of photography. The images, called on to provide a service as the documentation of reality, often for purposes of propaganda, glorifying the importance of economic development to the progress of the country, in fact act

as witnesses, in both space and time, of the changes that these large public works created within national territory.

During the 19 years over which HICA constructed the 5 hydroelectric plants, the company contracted both *Casa Alvão* and *Foto Comercial* to document the work they were engaged on. Independently, and at different places and times, the two photographers, each respectively representing the photographic studios of Álvaro Cardoso de Azevedo and Teófilo Rego, documented various moments from the choice of location for the dams to their construction and the carrying out of all the infrastructure needed to enable those large hydroelectric plants to function as they should. Using their cameras, they were able to record images that would allow the preservation of a past that has now vanished.

Cameras began to duplicate the world at a time in which the human landscape began to be submitted to a vertiginous rhythm of transformation: while an immensity of forms of social and biological life are destroyed in a very brief space of time, an invention appears that permits the recording of the things that are disappearing.(SONTAG, 2012,P.24)

In those images, it was not only the dams, the power stations and the workers' housing that was recorded, but also the changes to an entire natural landscape, to cultures and to ways of life. There were villages in that territory where tiny populations were living, people whose lives were radically changed by the dams at the same time as thousands of people were being brought in to work on the building sites and to run the power plants.



Img\_03\_Casa Alvão\_1947, Construction access to the Power plant of Venda Nova

Despite the fact that photography had, at that time, placed the visual image at the service of the power of the state, today, more than 60 years later, the photographs that were taken allow us to understand some of the changes, changes which cannot be understood by looking at minutes of HICA board meetings, (in which progress on the construction sites is described in great detail) nor by reading the main texts published by the government which simply glorify the size and modernity of the finished work.

As stated by Eduardo Brito, ...no image understands its own story: it exists rather like a time marker that is available to be reviewed (BRITO, 2012,P.9) and analysed. The changes that took place on Portuguese territory in the second half of the 20th century have transformed many of these photographs into important witnesses, with the recording of landscapes, customs and habits that have today completely disappeared, allowing us a deeper understanding of those moments in history.

On the other hand, the images, with the passing of time, increase in aesthetic value and the scars of time turn those images into objects of great fascination.(SONTAG, 2012,P.169)

### TRANSFORMATION OF A PLACE

A landscape is a product of time, it is a common and inherited scene, which we contemplate and live by means of culture and within a determined historical, economic and social context. We cannot formulate the idea of a landscape except in terms of its relationships in time as well as space (ANDRESEN,

1992,P.5), it is the dynamics of the contents that express the transformations and the tensions in the cultural valuations of the landscape itself.

It is only possible to understand changes to a determined territory by means of images taken of that place. In the majority of cases, the processes that lead up to those transformations are slow, and dependent on innumerable factors, both natural and mechanical, with photography being the principal tool used to record them.

The enormous transformations that took place in the landscape of the Cávado were a result of the building of the dams, and the lakes that these produced. Huge concrete walls were built in landscapes that were almost wild, and rivers were interrupted, leading to the large lakes that submerged villages, fields and plots of land. In order to pave the way for the construction and later operation of the dams, a series of facilities were built, of much smaller dimensions than the dams, but which, in those isolated spots, far from the city, gave rise to an architecture that had unique characteristics. One personality stood out in relation to those buildings, the architect Januário Godinho.

Using the photographs taken by Teófilo Rego and Cardoso de Azevedo, we are seeking to understand the meaning of the transformation that took place on the landscape of the Cávado, recognizing in the images and the story an essential factor to explain some of the options taken in relation to the architecture. A formal analysis of the works is not looked for as this would tend to be subjective, but rather the reconstitution of some of the moments that took place during the process of construction.

We understand that photography fixes, formalizes, informs and expresses a historical process, converting itself into a document that indicates and reveals the concepts and opinions of those who produced it, their time and their place.

In 1944, Álvaro Cardoso de Azevedo became the first to photograph the Cávado while working for HICA. Teófilo Rego only appeared on the scene later, in 1955, when the stages of the project at Venda Nova, Salamonde and Caniçada were already operational.

The archives of both photographers contain images from the different stages of the construction process, and later of the already working power stations. From the photographs in existence in the archives of the Portuguese electricity company, Electricidade de Portugal (EDP), which are mostly signed by their respective authors, we can see that Cardoso de Azevedo photographed construction work during the first 4 stages, Venda Nova, Salamonde, Caniçada and Paradela, and that Teófilo Rego arrived at the Cávado towards the end of construction work of the Caniçada stage, photographing the first 3 stages when they were already operational, and the construction of the remaining stages, those of Paradela and Alto Rabagão. Of the Alto Rabagão stage, there are no photographs in existence taken by Casa Alvão, for example.

The images produced by both studios can be divided into four groups<sup>1</sup>: Photographs produced before worked commenced, taken while the project was still at the planning stage, photographs produced during construction work, those taken when the work was completed, and lastly news photographs taken during the inauguration and official visits by members of the state.

In the first images captured by Álvaro Cardoso de Azevedo, before construction work had begun on the developments, there seems to be a desire to avoid any appearance of human presence. The villages that existed and their resident populations never appeared in the photographs, with only the 'natural' landscape appearing, leading the observer to assume that human intervention in that area had not yet occurred. We know, however, that the region had already been inhabited for several centuries, despite development being manifestly slow, with the resident population living mainly by the grazing of animals and agriculture.

With both photographers, it is the photographs of the construction work that have the greatest impact on the observer: starting from the initial images of the natural landscape, moving on to the environment in which the work under construction is depicted. Here we see hundreds of workers, helped by animals

<sup>&</sup>lt;sup>1</sup> As each development had been planned and built without the previous one having been finished, it is not possible to establish chronological order between the different projects, but only within each individually.

and rudimentary mechanical aids, making roads, digging out the land and constructing large areas in concrete for the channels and walls of the dams. It is interesting see, in these images, the dichotomy that exists between the act of construction and the built object. These were times of great change and development, but the means available for the creation of the much-needed infrastructure were still extremely precarious. Men are constantly shown at their labour, and in several photographs the workers face the camera, in a clear (im)position of contemplation of the work being carried out.

In these photographs we can see the sparse vegetation and the natural way in which that vegetation grew, in a landscape dominated by huge outcrops of rocks and where the absence of any construction is deliberately noted. This type of vegetation is distinct from that observable in the photographs taken at the end of construction, when the buildings are surrounded by recently planted small trees and flower beds, illustrating a new reality that is very different from the one the existed previously.



Img\_04\_Casa Alvão\_1952\_ Caniçada Village

With construction work finished, it was the individual buildings and their architecture that captured the imagination of the photographers and became the focus of their attention. There are in existence hundreds of images of both exteriors and interiors of the different buildings from this stage of the project, including power stations, houses, and the supporting facilities built for workers' housing. In exterior shots, the only nature that can be observed is that which is close-by and purposefully placed there,

mixed in with tarmac roads and new buildings, which glorify a different type of modernity.

The photographs of this stage show new locations created between two worlds that seem to be opposing and far apart: the villages and the power stations. Places, designed by Januário Godinho working with the engineers of HICA, which have an economic, social and cultural dimension, where there is a coexistence of housing, schools, churches and social areas with work spaces, dams, power stations and command centres, a mix that is radically different from the cities existing in Portugal. Places in which, without losing cultural roots in the Portugal of the artisan, in the inspirational landscape, in the existing city, Januário Godinho practised a modern architecture that denounced the real possibility of a historic continuity revealed in the approximation to real necessity, to an economy of means and to functionality, which is, after all, centuries old knowledge.<sup>2</sup>



Img 05 Teófilo Rego 1963, Power Plant Alto Rabagão

The landscapes of the Cávado, created by the will of the state and imposed by the techniques of engineers, became the working arena of an architect ... sensitive to the rural nature of the landscape<sup>3</sup>. Januário Godinho, showing ...an important and conscious historicalization of the modern phenomena that have to

Bertrand, 1991 p. 455

<sup>&</sup>lt;sup>2</sup> TOSTÔES, Ana, "Arquitectura Moderna Portuguesa: Os três modos" in A.A.V.V Arquitectura Moderna Portuguesa 1920.1970, Lisboa, IPPAR, 2004, p. 139 <sup>3</sup> FRANÇA, José Augusto, A Arte em Portugal no século XX, 1991-1961, Lisboa, Editora

exist in a constant relationship with those of the past,<sup>4</sup> conceived a series of settlements and power stations that developed a dialectic relationship with the landscape, which the art of photography was able to register and reveal.



Img\_06\_Casa Alvão\_1956\_Restaurant Caniçada

In the houses and pousadas, the photographers highlighted those more regional aspects of the architecture, the tiled roofs, the eaves or the roughness of the walls faced in granite. In the power stations and the dams themselves, it was the construction capabilities of concrete and its plasticity that needed to be shown.

It is important, in these photographs, to highlight the human presence, as it is through this that we can see the main differences between the ways in which each photographer captured the images.

The photographs taken by Cardoso Azevedo, once again appear to illustrate "deserted settlements", human presence is rarely seen in his photographs, and when it does appear it is in the form of silhouettes in the background, used to provide scale to the objects that the photographer wants to portray. From the inside of the power stations we have photographs of the large halls containing the generators, and command rooms equipped with the latest technology, but with nobody at the controls.

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<sup>&</sup>lt;sup>4</sup> SALES, Fátima, *Januário Godinho na arquitectura Portuguesa, ou a outra face da modernidade,* 2 Volumes. Valladolid: [ed. do autor], 2000. Doctoral Dissertation presented at the Escuela Técnica Superior de Valladolid.



Img 07 Teófilo Rego 1963, Alto Rabagão Dam

Teófilo Rego on the other hand focusses his images on people and their relationships with the buildings. With the exception of some of the images of the inside of the pousadas and houses, decorated throughout by HICA and with everything ideally placed so as to be ready for use, in the photography of Teófilo Rego the new inhabitants are a common presence.

Children are portrayed in their classrooms and in the streets of the housing settlements, workers are in their houses with their families and, in the power stations, they operate the machines in the modern control rooms.

These images, taken at the final stage of the project, with the power stations operational and the settlements occupied by workers and their families, have the ability to transport us back to specific periods of time, human presence, clothing and cars, elements which together define a determined moment in history. Their exclusion, which occurred in the early field-study photographs and in the photographs of as yet unoccupied architectural works, leaves us with a more fleeting sense of the time period of those places.



Img\_08\_Teófilo Rego\_1965, Inauguration Alto Rabagão\_Pousada de Pisões

Another aspect of the documentary work carried out by the two photographers is the recording of the inaugurations of the different developments and the official visits made by members of the state, events which were widely publicized by the SPN and which led to several publications at that time. At the end of each stage, HICA would published a book in which the work carried out was described, as was the capacity of the dam and the construction techniques utilized in its building. As Teófilo Rego was in charge of producing the plates for printing the book, this work was usually carried out by Foto Comercial, which during that period was asked to carry out several jobs producing final artwork for the printing of cards, books and propaganda leaflets, due to Rego's experience in this area.

HICA, from the very start of the work of creating draft plans for the dams on the Cávado and Rabagão rivers, made the decision to record the progress of the project by use of the photographic image. This record has reached us today by two different routes: through the photographic archive belonging to EDP and via the archives of two photographers: the first from the *Casa Alvão*, which is held by the Portuguese Photography Centre, and the second from *Foto Comercial* which is held by the Casa da Imagem at the Manuel Leão Foundation, which is, as previously mentioned, the object of a research study financed by the Foundation for Science and Technology, of which this essay is a part.

By cross-referencing the three archives, it is possible to understand that the documentary work carried out by the two photographers took place independently and 'crossing' in Paradela, the only stage which was photographed by both photographers simultaneously. This was the last job carried out by Cardoso de Azevedo for HICA, with the work in Alto Rabagão, the final stage carried out by the company, being documented solely by the camera of Teófilo Rego.

It is by the comparison of these three photographic archives that we can come to a special understanding not only in relation to the work carried out by HICA, but also of the changes to the landscape and occupation of the territory that involved thousands of people who were transferred to those places and who brought them to life.

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#### Bibliography:

ANDRESEN, Maria Teresa, "Para a critica da paisagem", [ed. Autor policopiado], Dissertação de doutoramento apresentada na Universidade de Aveiro, 1992 BRITO, Raquel Soeiro de, Dir. "Portugal perfil geográfico", Editorial Estampa, Lisboa, 1994

BRITO, Eduardo "Rever a cidade – Refotografias de Inês d'Orey e Carlos Lobo de imagens da Colecção de Fotografias da Muralha", Livro catálogo da exposição, Norprint, Guimarães, 2012

FRANÇA, José Augusto, A Arte em Portugal no século XX, 1991-1961, Lisboa, Editora Bertrand, 1991

OLIVEIRA, Ernesto Veiga de, e GALHANO, Fernando, "Arquitectura tradicional portuguesa", Publicações D. Quixote, Lisboa, 2003, 5ºedição (1ºedição 1992) RIBEIRO, Orlando, "Portugal, o Mediterrâneo e o Atlântico", Lisboa, Livraria Sá da Costa, 6ºedição, Lisboa, 1991 (1ºedição 1947)

SALES, Fátima, Januário Godinho na arquitectura Portuguesa, ou a outra face da modernidade, 2 Volumes. Valladolid: [ed. do autor], 2000. Doctoral Dissertation presented at the Escuela Técnica Superior de Valladolid.

SONTAG, Susan, "Ensaios sobre fotografia", Lisboa, Quetzal Editores, 2012 TOSTÔES, Ana, "Arquitectura Moderna Portuguesa: Os três modos" in A.A.V.V Arquitectura Moderna Portuguesa 1920.1970, Lisboa, IPPAR, 2004