Media Arts Suspensions and Deviations -Paz dos Reis between Cinema and Photography

Isabel Maria Lemos de Pina Universidade Lusófona, Lisboa, Portugal

Abstract

Media have non-linear evolutions. This means that new media failures or retractions can highlight overlooked features of old media. The very early history of Portuguese Cinema is one of those moments: the new and promising cinema technologies were first experimented and then discarded by Aurélio da Paz dos Reis, the pioneer of Portuguese cinema. Instead, he intensely explored in photography a solution for covering current affairs.

The creation of the 'Portuguese Stereoscope', a commercial stereoscopic card series that depicted political events such as the agitated republic rallies, the social life of the bourgeoisie and the daily life in the streets of Porto, was an international innovation: it consisted of the very first photojournalism in 3D.

This research project will investigate this historical fact by checking in the press the events covered by Paz dos Reis and by creating an online media art installation that will allow the matching of these materials with his stereos to understand how these 3D news materials relate to current VR 360° new videos.

This digital curation will be developed as an artistic research method which will also allow to experiment with film materials: photograph the original Aurelio's camera kept by the Portuguese Cinematheque (ANIM) to create a 3d object, and a documentary film focused on some of his most symbolic photographs.

It is expected that this research project will lead to a new approach towards the work of Paz dos Reis.

Keywords: Stereoscopy, Aurélio da Paz dos Reis, Documentary film, Digital Curation, Early media.

Introduction and reasons for this research

What led Paz dos Reis, the pioneer of Portuguese cinema, to abandon filmmaking in favor of photography? This question is the central focus of this research project.

Aurélio da Paz dos Reis (1862-1931) made the first Portuguese film in 1896 - *Saída do Pessoal Operário da Fábrica Confiança*, using his own filming and projecting machine acquired in France, introducing the "latest marvel" of the 19th century - cinema to Portugal.

He went on to make other films, but little remains of his film work, partly due to the lack of belief in the survival of cinema and partly due to inadequate film preservation.



Fig. 1 – Still of the first portuguese film in 1896 - Saída do Pessoal Operário da Fábrica Confiança, dir. Aurélio Paz dos Reis.

However, a significant and numerous legacies of photographs, especially stereoscopic ones, has been left to us - one of the largest in Portuguese public archives: 7294 glass plates, 7×18 cm in size (Flores, 2016). Most of these photographs have already been digitized and made publicly available. A CD-ROM was also produced that reproduced the effects created by stereoscopy, conferences and exhibitions were held, and books on Paz dos Reis were published relating to his productive stereoscopic activity.

Until the discovery of his photographs, the relevance of Paz dos Reis's work was mainly related to the fact that he introduced cinema to Portugal. The titles of his films were known through publications and books, and the Portuguese Cinematheque preserved his first film, along with some excerpts from other films, as well as a machine discovered by the cineclubist Henrique Alves Costa (1910 - 1988) in 1978. Biographical aspects related to Paz dos Reis's political activity as a convinced Republican were also known, and his diverse commercial activities, including the trade of photographic materials and his activity as a photographer, were also known. However, Paz dos Reis's stereoscopic practices now allow us to consider the originality and innovation he brought to the time, and enable hypotheses to be made, such as whether he was the pioneer worldwide of the creation of the first stereoscopic newspaper (Flores, 2016).



Fig. 2 – Aurélio da Paz dos Reis Paz dos Reis. Centro Português de Fotografia collection.

Therefore, proving the originality of the stereoscopic activity and the opportunity for experimentation with Paz dos Reis's devices may establish a relationship and dialogue at the level of stereoscopic media archaeology and new technologies, and seek to understand the factors associated with the failure to fully incorporate stereoscopy into Western cinema and the peaks that stereoscopy has experienced throughout the history of cinema, an evolution of advances, setbacks, and hesitations, with stereoscopy returning in the 21st century for a new phase of success (Zone, 2007).

Photography, as a historical element, conveys sensations that transcend the represented image itself. Thus, taking the photograph of his daughter Hilda Ophelia, taken by Aurélio da Paz dos Reis in 1908 and currently exhibited at the Portuguese Photography Center, as a starting point, the idea for a documentary was born, opening a portal to the universe of Paz dos Reis. From this vehicle - the photo of his daughter Hilda - information, testimonies, and images are being gathered that may contribute to the depiction of Aurélio da Paz dos Reis's universe.

Questions such as the cinematic representation of the mise-en-scène of this photo and the technical resources for the treatment of stereoscopic photographs raise hypotheses for the treatment of stereoscopic views incorporated into cinematic language through the use of special effects.

The opportunity for experimentation with devices may allow for the establishment of a relationship and dialogue at the level of the archaeology of stereoscopic media and new technologies, seeking to understand the factors associated with the incomplete incorporation of stereoscopy in Western cinema and the peaks that stereoscopy has experienced throughout the history of cinema.

To understand the reasons for his contributions to visual culture in Portugal, leading to a reflection about the development of resources that allow a contact with the legacy of Paz dos Reis, through digital curation, as an artistic research methodology, combined with the exploring of different typologies of images and articulated with the optical illusion of 3D heuristics, allowing the interpretation of a two-dimensional object by a three-dimensional one.

This project also offers the possibility of investigating concepts such as:

- The archaeology of media in Portugal, especially the first cinema machines and stereoscopic devices in the first decade of the 20th century;
- The antecedents in Portuguese journalism of photojournalism, particularly the publications of stereoscopic collections by Paz dos Reis (early 20th century);
- The genealogy of special effects (historical and present) provided by stereoscopy, in particular: the realism effect; the use of color; the anaglyph; the gif (as a hybrid format between still and moving images); the stereoscopic effect - 3D;
- The relationship between stereoscopic practices and cinematographic practices;
- · The relationship between photography and cinema;
- The concept of Mise-en-scène (photography and cinema);
- The treatment of time (still and moving image);
- The treatment of space and light (painting and photography);
- The concepts of "Constellation" and "Aura" (Walter Benjamin);
- The documentary film genre;
- · Some assumptions related to Digital Curation;
- · Issues related to archives.

The Pioneering Vision of Aurélio da Paz dos Reis: From Cinema to Stereoscopic Photography

Aurélio da Paz dos Reis had been to Paris several times, frequented the restless society of his time, had a curious spirit, and it was natural that he had already had contact with Edison's inventions and the work of the Lumière brothers. His attention to new inventions made him believe that animated photographs would be a novelty that could be successful (Alves Costa, 1978).



Fig. 3 – Aurélio da Paz dos Reis Paz dos Reis's photos of Paris international exhibition – 1900.

Other films followed, although little remains of his cinematographic work, either due to the lack of belief that cinema would survive, or due to the lack of caution with preservation practices. There are reports that his children amused themselves playing with the films, either cutting or burning them to appreciate the beautiful colored flames produced (Aurélio da Paz dos Reis - *Um Olhar Atual*, Dir. Manuel Faria de Almeida, 1996).

With the discovery of Paz dos Reis' important stereoscopic collection, new possibilities for discoveries or hypotheses about his work are expanded and allow for a deeper understanding of the reasons that motivated this reversal of direction from cinema to photography.



Fig. 4 – Aurélio da Paz dos Reis Paz dos Reis`s stereoscopic photo. Portuguese Cinematheque.

However, there are some clues to understanding this reversal of direction. Aurélio Paz dos Reis dedicated himself to photography, an art that was more profitable than cinema. The coincidence between the resumption of interest in stereoscopy in 20th-century Europe, as a more mature practice, and the advent of cinema, resulted in intense production of stereoscopy by amateur photographers in Portugal. This dynamic market for stereoscopic materials was particularly relevant to Aurélio da Paz dos Reis, who sold them in his florist shop in downtown Porto, and used them in his photographic work until his death in 1931 (Victor Flores, 2016)

Probably, like many people of his time and like Edison and the Lumière brothers, Paz dos Reis did not believe in the profitability of projecting animated images (Alves Costa, 1978).

Another clue is related to the fact that cinema made in Portugal was more connected to a moral obligation than aesthetics. Thus, Paz dos Reis filmed Portugal to show the country abroad, especially in Brazil, to capitalize on the investment made with the purchase of filming equipment. However, the business with Brazil failed, and the money that Paz dos Reis invested in the "Portuguese kinetoscope" and the films made was not recovered.

Paz dos Reis's interest in stereoscopy is notable, and Alves Costa notes that "in his vast library, the book *A Fotografia em Movimento* is one of the most browsed."

Another interesting way to study his stereoscopic activity is to understand the documentary side, always present in the various events he photographed:

[...]'current events' such as the procession of the celebrations of the centenary of India, in Lisbon, in 1898; Doctors Ricardo Jorge, Câmara Pestana and Bento Silva, in Porto during the outbreak of bubonic plague; a crowd during the siege of Porto; the fire that destroyed the Real Teatro de São João located in Praça da Batalha, in 1908; a collective of scientists from all over the world who came to Portugal on the occasion of the total eclipse of the sun in April 1912; photographs of the January of the "Veronice" steamship stranded north of Leixões in 1913, and flower and art exhibitions that took place at Palácio de Cristal, and even recorded an advertisement of two Spaniards climbing the Clérigos Tower. (Aurélio Paz dos Reis, dir. Ângelo Peres. RTP 1984).

As a liberal republican, Paz dos Reis intervened in several political struggles that took place before the proclamation of the Republic in Portugal in 1910, and always with his camera, usually stereoscopic, he recorded Portuguese social, cultural, and political daily life in a specific and intense way" (Flores, 2016).

Although he was an amateur photographer, he had a journalist's credential and could publish collections and records in the press of the time. For example, his participation in the periodicals "Folha Nova" and "Pontos e vírgulas" (Jorge Paixão da Costa/ Pandora da Cunha Teles, RTP 2015), and the publications in the weekly magazine *Illustração Portugueza*, published since 1903 by the newspaper *O Século*, with some of these stereoscopic photographs commercialized in a series of stereoscopic cards under the name Estereoscopio Portuguez (Flores, 2016).

Therefore, bringing into this project the investigation of materials in archives and newspaper archives about this activity in the press by Paz dos Reis may allow an important contribution to the understanding of another area where Paz dos Reis may have been innovative, anticipating the arrival of photojournalism. If we cross-reference the relationship of photography with cinema, we can still attribute to him an innovative and pioneering look when related to the Russian manifestos postulated years later the documentary function of cinema, namely those of Dziga Vertov, "kino-eye," regarding the relationship of the eye with the camera and with reality itself.

The development of a Documentary: Exploring the Universe of Aurélio da Paz dos Reis

From the photograph exhibited at Portuguese Center of Photography (Porto) dated 1908, the idea for a documentary about the universe of Paz dos Reis was born.

This large photograph shows a young girl of around 10 years old, sitting alone at a desk with a glass of port wine in hand, in a setting with various props such as a camellia, a symbol of the republic, a globe, some Masonic literature, a pair of bottles of port wine, a clock, a calendar with the date of January 1st, and some photos. This extraordinarily careful mise-en-scène causes both strangeness and enchantment.



Fig. 5 – Hilda Ophelia Paz dos Reis, 1908. Photo by Aurélio Paz dos Reis with the scheme of the mise-en-scène.

Each object in this carefully composed photograph functions as a portal that transports us to another time and space, to the cultural and social life of Porto in the early 20th century, the hustle and bustle of a revolution with the committed republican Aurélio Paz dos Reis and the future presidents of the Portuguese Republic.

The idea of presenting a narrative of historical events based on the relationships that objects have with each other appeals to Walter Benjamin's idea of constellation, as well as maintaining the aura in the representation of reality, and when we are faced with the appropriation of an object (Benjamin, 1935). This idea of constellation, through the connections or imaginary lines between the elements present in Hilda's photograph and the various aspects of portuguese political, social, and cultural life in the early 20th century.

Reflections on the artistic questions of the gaze on photography and how to portray mise-en-scène shows how the calculated use of stereoscopic practices confers a realism effect to Paz dos Reis' work.



Fig. 6 – Hilda Ophelia Paz dos Reis, 1908. Inside the triangle very important people; her mother, father [Paz dos Reis] and brother.

The time of the cinematic narrative can be "the time that fixes the proper movement of photographic technology, while appealing to a subjective time of viewing an image that is not there" (Flores, 2014). The consciousness of the unfolding of time is central to Chris Marker's 1962 film La Jetée, both thematically and formally, especially due to the relationship established between photography and cinema, which is comparable to the experiences Aurélio da Paz dos Reis had with stereoscopic photography, argues Teresa Flores in her 2014 article, where she imagines an unlikely encounter between these two filmmakers. Chris Marker's photo-films can serve as inspiration for using photography as proof of truth, especially using some of the photographic sequences produced by Paz dos Reis that allow for narrating some of the episodes he portrayed.

Technically, there are two possible hypotheses for the treatment of stereoscopic images for this project: on the one hand, recreating special effects, dissolves, the use of color, and the sensation of short-lived moving images, whose transposition is currently observed in the hybrid format of gifs, which were already present in Paz dos Reis's work; on the other hand, seeking to emulate through the possibility of filming with his camera.

Emulation may allow for establishing a relationship and a dialogue at the level of the archaeology of stereoscopic media and new technologies and understanding the factors associated with the non-full incorporation of stereoscopy in Western cinema and the peaks that stereoscopy has undergone throughout the history of cinema, seemingly returning in the 21st century for a new phase of success (Boehs, 2012). Ray Zone (2007) also divides the periods of the appearance of stereoscopy into four major eras: [...] the 'Novelty' era that came with the emergence of the technology; the 'Convergence' era, with the discovery of new technologies and the great public success in the 1950s; the 'Immersive' era, with the appearance of large cinema formats; and the 'Digital' era, where the change in technologies raised the quality of the final product and reduced the costs of the process.

The knowledge of Paz dos Reis' contributions to visual culture in Portugal allows for the development of resources that facilitate contact with his legacy, whether through the production of written information, audiovisual reproduction, or even the creation of a documentary.

Digital information repositories, together with an understanding of digital curation processes and 3D heuristics, such as those advocated by Nicholas Routhier, an entrepreneur and stereoscopy enthusiast, and Media Archaeologist Erkki Huhtamo, in collaboration with Professor and News Media theorist Jussi Parikka, offer a contemporary approach to museum practices in the digital age, and are part of the activities associated with this research project.

Research Methods

The research focuses on several key areas, starting with the history of stereoscopic photography and cinema, particularly in the late 19th century across the USA, France, and Portugal. It delves into stereoscopic techniques and practices, exploring their relationship with cinema and the documentary film genre, as well as their specificities.

Archival management and digital curation are also critical aspects of this research, especially in relation to the life and work of Aurélio da Paz dos Reis. This includes examining newspaper archives and libraries from the first decade of the 20th century, reviewing publications of Paz dos Reis's photos and collections, and identifying assets related to his work in private collections.



Fig. 7 – Opening of the Lello bookstore in 1906, Porto. Photo by Aurélio da Paz dos Reis.

The research extends to photography centers in Portugal and France, seeking objects and photos by Paz dos Reis, with a particular emphasis on his stereoscopic practices. Additionally, it involves testing the operation of devices used by Paz dos Reis, such as the machine located in the Portuguese Cinematheque, National Archive of Moving Images (ANIM).

To gain deeper insights, the research includes conducting interviews with specialists on stereoscopic practices in Portugal and collecting testimonies from researchers who are familiar with or work on Paz dos Reis's contributions to the field.

Expected Results

This research aims to demonstrate the originality that Aurélio da Paz dos Reis's stereoscopic practices brought to the field of stereoscopy in the early 20th century. It seeks to understand the extent to which a dialogue and relationship between old and new technological devices are established. The research explores whether this process is evolutionary, promoting the construction of a visual culture of immersion through continuity, or if it involves moments of rupture or discontinuity, thereby reflecting on the autonomy of stereoscopic practices themselves, with a particular focus on the Portuguese context.

Additionally, the project involves developing digital media repositories for public sharing, documenting Paz dos Reis's stereoscopic practices and their dissemination through the publication of photos and collections in early 20th-century newspapers.

Furthermore, the research aims to produce a historical documentary based on Aurélio da Paz dos Reis's photographic collection. The documentary's objective is to present the universe of Paz dos Reis by examining a single photograph that provides insights into the historical, social, political, cultural, and artistic context of early 20th-century Portugal.

Conclusion

The journey of Aurélio da Paz dos Reis, from pioneering cinema to mastering stereoscopic photography, reveals a multifaceted artist deeply embedded in the cultural and technological currents of his time. This research project has meticulously traced his path, seeking to answer why Paz dos Reis abandoned filmmaking for photography and to uncover the depth of his contributions to visual culture in Portugal.

Paz dos Reis's transition from film to stereoscopic photography was influenced by multiple factors, including economic considerations and the evolving landscape of visual media. His extensive collection of stereoscopic photographs, now digitized and preserved, offers a rich tapestry of early 20th-century Portuguese life, politics, and culture. This project leverages these historical artifacts to construct a narrative that not only highlights Paz dos Reis's technical and artistic innovations but also situates him within the broader context of media archaeology and technological evolution.

The photograph of his daughter Hilda Ophelia, with its intricate mise-en-scène, serves as a focal point for this exploration, embodying the connections between personal history, political symbolism, and artistic expression. By examining this photograph and other works, the project aligns with Walter Benjamin's concept of constellation, revealing how disparate elements of Paz dos Reis's life and work interlink to form a coherent historical narrative.

The research also bridges past and present technological practices, exploring the potential of stereoscopy in contemporary media through both historical analysis and practical experimentation. This dual approach aims to revive Paz dos Reis's legacy, demonstrating the ongoing relevance of his work in today's digital age.

Ultimately, the project's anticipated outcomes include a comprehensive digital repository of Paz dos Reis's stereoscopic works, a deeper understanding of his impact on Portuguese visual culture, and a documentary that captures the essence of his artistic vision. By doing so, it not only honors the memory of a key figure in early cinema and photography but also enriches the historical narrative of technological and artistic innovation in Portugal.



Fig. 8 – Aurelio da Paz dos Reis's stereoscopic viewer. Collection of the Portuguese Center of Photography, Porto.

Bibliography

Bazin, André. 2004. What is cinema?. Vol. I. University of California Press.

Benjamin, Walter. (1992). "A obra de arte na era da sua reprodutibilidade técnica", in Sobre arte, técnica, linguagem e política ['The Work of Art in The Age of its Technological Reproducibility', in On Art, Technique, Language and Polítics]. Lisboa: Relógio d'Água.

Costa, Henrique Alves. (1988). Longa Caminhada para a invenção do cinematógrafo. Cineclube do Porto. Deleuze, Gilles. (1990). The Time-Image. University of Minnesota Press.

Flores, Victor. (2019) 'Stereoscopic Photography in Portugal. Discourses and Practices of a Visual Culture'. In The Third Image. Stereo Photography in Portugal, 19-59. Lisbon, Portugal: Documenta, 2019.

Flores, Victor. (2016) The animation of the photographic: stereoscopy and cinema. The experiments of Aurélio da Paz dos Reis, Early Popular Visual Culture, 14:1, 87-106.

Mendiburu, Bernard. (2009). 3D Movie Making -Stereoscopic Digital Cinema from Script to Screen. Elsevier.

MUSSER, Charles. (1994). The Emergence of Cinema: The American Screen to 1907. "Before Cinema", "The Novelty of Cinema: 1896-1897". Pp. 70-89; 116; 130-132; 218-221.University of California Press.

Parikka, Jussi. (2013). Archival Media - Theory An Introduction to Wolfgang Ernst's Media Archaeology. In Electronic Mediations, Volume 39 Digital Memory and the Archive. University of Minnesota press.

Ribeiro, Félix. (1993). Filmes, figuras e factos da história do cinema português 1896-1949. Cinemateca Portuguesa.

Santos, A. Videira. (1964). Paz dos Reis: cineasta, comerciante, revolucionário. Monografia sobre o pioneiro do cinema português. Rio Maior: Gráfica, [s.d.]. Portugália Editora.

Santos, A. Videira. (1990). Para a história do cinema em Portugal. Cinemateca Portuguesa.

Zone, Ray. (2007). Stereoscopic Cinema and the Origins of 3-D Film, 1838–1952. Kentucky: The University Press of Kentucky.

Article

Mendes Flores, T. 2015. "Stereoscopy, Film and the Time Image. An Improbable Encounter: Paz dos Reis and Chris Marker's Photographic Films". In T. Mendes Flores, J. Cunha Leal, & M. Medeiros (Eds.), Photography and Cinema: Fifty Years After Chris Marker's La Jetée (pp. 44-76) 2015. Cambridge Scholars Publishing.

Webgraphy

Centro Português de Fotografia. CPF. Acervo Fotográfico da coleção de Aurélio da Paz dos Reis. https:// digitarq.cpf.arquivos.pt/results?t=Hilda+

Cunningham, A. 2008. Digital Curation/Digital Archiving: A View from the National Archives of Australia. The American Archivist, v. 71, n. 2, p. 530-543.

https://periodicos.ufrn.br/principios/article/ view/7549/5618

Routhier, Nicholas. 2021. CubicSpace, la 3D simplifiée. https://www.cubicspace3d.com/

Exhibitions

Oliveira, Anabela D. B. 2013. "Federico Fellini: Le Visage Devenu Récit Filmique". Comunicação apresentada na AVANCA | CINEMA 2013 – Conferência Internacional de Cinema- Arte, Tecnologia, Comunicação, 24-28 de julho

Nota Texto: (Oliveira 2013)

Bénard da Costa, João. 1996. "Paz dos Reis: O grão e a floresta." In Aurélio da Paz dos Reis: uma exposição. Lisboa: Cinemateca Portuguesa - Museu do Cinema. Siza, Teresa. (1996). Aurélio Da Paz Dos Reis. 28 de Julho de 1862 – 19 de Setembro de 1931, Comissão Portuguesa para as Comemorações do Centenário do Cinema. Catálogo da Exposição sobre Aurélio da Paz dos Reis. Lisboa: Cinemateca Portuguesa.

Filmography

La Jetée. 1962. By Chris Marker. France: Argos Films. Saída do Pessoal Operário da Fábrica Confiança. 1896. By Aurélio da Paz dos Reis. Portugal: Cinemateca Portuguesa.

Pontos e vírgulas. 2015. By Jorge Paixão da Costa/ Pandora da Cunha Teles. Portugal: RTP.

Aurélio da Paz dos Reis - Um Olhar Atual. 1996. By Manuel Faria de Almeida. Portugal: RTP.