

Victor Flores and Susana S. Martins (eds.)



*The Forgotten Medium*

# COSMO RAMA

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COSMORAMA

## TITLE

Cosmorama. The Forgotten Medium

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## Cosmorama. The Forgotten Medium

This book is dedicated to a long-forgotten and discontinued visual pleasure: that of viewing images through lenses. In Europe, this cultural tradition dates back to peep-boxes at travelling fairs and culminated in the elegant exhibitions of the Cosmoramas in the early 19th century. In these spaces of curiosity, a cultured, bourgeois, art-loving elite paid to peer at images of a distant world through an unusual optical device.

Unlike art salons, in the Cosmorama, paintings were not immediately visible. They were hidden behind walls and viewed through lenses that enlarged them and enhanced their depth effects. From lens to lens, the viewer would embark on their “picturesque journey around the world,” while socialising and shaping their own public sphere. Even though Cosmoramas travelled across countries and continents, the “world” in this cosmos was anything but universal – it was deeply Eurocentric. For this reason, the images they presented played a central role in constructing European identities and associating Europe with the ideals of civilisation and modernity, which in turn fueled the imperialist ventures of the second half of the 19th century.

Emerging in the 19th century after the Panorama and before the Diorama, the Cosmoramas – or “Views of the World” – were



Fig. 1 – View of the Cosmoramic Room at P.T. Barnum’s American Museum, New York. Illustration published in the museum’s official guidebook, 1849.

among the longest-running “orama” spectacles and the only ones to feature lenses through which the public would peer. Initially also described as a “show of curiosities,” the Cosmorama was a sophisticated painting gallery created in Paris in 1808 by the Italian clergyman Jean-Antoine-Henri-Eugène Gazzera. Located for nearly twenty years in the wooden galleries of the Palais Royal, the Cosmorama was presented as containing more than 200 paintings of “the most remarkable monuments and sites of the modern and ancient world.” These large paintings — which by 1823, after Daguerre’s Diorama, measured up to 203cm by 121cm — produced a striking illusion of depth and immersion thanks to the device in which they were mounted: behind the lenses on the wall, a dark prism focused the gaze on the image, preventing it from reaching the image’s edges. Lit by natural light, candles, or oil lamps, the image appeared at the end of this darkened tunnel in a vibrant and lively manner. The biconvex lenses, in turn, expanded the field of vision, immersing the viewer into the three spatial dimensions.

This device created a unique visual experience. Rather than offering a single, full view of the image at once, the image was revealed in parts, requiring the viewer to perform certain bodily actions. First, one had to approach the lens. Then, lean toward it. Lastly, to view the entire image, the viewer had to reposition their head several times to explore the image from different angles. Some *Cosmorama Rooms*, like those in London, made this fragmented and sequential experience even more evident by featuring three lenses per image arranged in a semicircle, thereby offering different perspectives. Unlike the Panorama experience, which Robert Barker

patented in 1787 as “Nature at a glance” (“La Nature à coup d’oeil”), in a Cosmorama, the image was seen in fragments. Its wholeness was constructed mentally. This contingency required peering again and again so the brain could complete the operation and piece together the different parts. Rather than being overpowered by the image, it was the viewer who held control, choosing their angle of vision from a central point of view.

Among its many particularities, one stands out: Cosmoramas did not present themselves as spectacles, but rather as “exhibitions.” Each Cosmorama exhibition lasted between one and four weeks, thus ensuring a constant renewal of images over several months — a distinguishing factor from competing spectacles. Furthermore, in contrast with contemporary painting exhibitions, where works were hung to fill walls from top to bottom, Cosmoramas adopted a different model. By aligning paintings and lenses at eye level and spacing them apart, Cosmoramas in some ways anticipated the modern exhibition format, adopting an innovative display language that also deserves historical recognition and recovery.

By 1832, when Gazzera’s Cosmorama in Paris closed, other Cosmoramas had already proliferated across Europe, establishing circuits for displaying images throughout the continent and from Europe to the Americas, notably in Brazil, Cuba, and the United States. Despite their strong presence in modern visual culture, Cosmoramas remain an invisible and overlooked part of the evolution of optical media, having received far less academic attention than Panoramas or Dioramas. Their invisibility and neglect are also evident

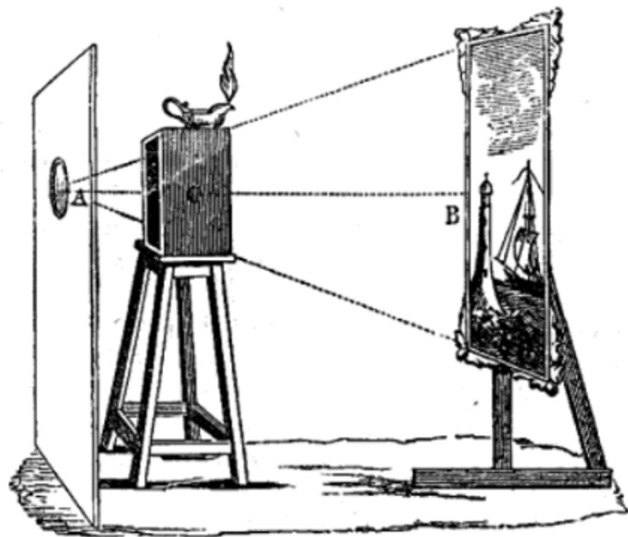


Fig. 2 – Illustration of the Cosmorama assembly, published in the book by William Clarke *The Boy's Own Book: A Complete Encyclopedia of All the Diversions of Boyhood and Youth* (Londres: W. Kent & Company, 1859)

in the histories of art, exhibitions, and museums – domains that evolved alongside Cosmoramas in the 19th century. Cosmoramas exhibit the same hybridity between art and science that marked the birth of the museum and that was also a defining feature of Renaissance cabinets of curiosities. These facts highlight the significance of this forgotten heritage.

In the exhibition *Cosmorama in Lisbon. Virtual Travelling in the 19th Century*, held at the Portuguese Cinematheque–Museum of Cinema from June to September 2025, and to which this book is an accompaniment, several of the routes mapped by the research project *Curiositas. Peeping before Virtual Reality* are presented. Through research in historical newspapers, this project catalogued over 700 Cosmoramas in Portugal, Spain, the United Kingdom, Brazil and The United States of America, utilising daily newspaper advertisements. This data was shared in a geographical visualisation available in open access on the *Curiositas* project website. With the same goal of sharing research and acquired knowledge, the exhibition also recreated a physical Cosmorama using paintings by the Austrian Hubert Sattler, preserved in the Museum of Salzburg, as well as a virtual Cosmorama, as described in the final chapter. Lastly, these aims are brought together in this free and online-accessible book, which seeks to revive the memory and sensory experience of the Cosmorama – its devices, histories, gestures, and ways of seeing – by recovering its meaning and historical significance.

*Victor Flores and Susana S. Martins*

*I. Cosmoramas in the Iberian Peninsula*

COSMORAMA

# The First Cosmoramas in Lisbon

The first two Cosmoramas operating in Lisbon stand out for the curious fact that they engaged in a press duel to claim their origins from Gazzera's Cosmorama in Paris<sup>1</sup>. The *Cosmo-Neorama* of the Frenchman Domingo Lusardi opened its doors to the Lisbon public on October 6, 1834<sup>2</sup>, and ten days later, the Frenchman Menatory inaugurated the first exhibition of his *Cosmorama of Paris*<sup>3</sup>. These two showmen had travelled together through France and Spain during the previous decade, until they fell out. As the first and only Cosmoramas in Lisbon in 1834, their rivalry and mutual accusations gained notable prominence in the Portuguese press, particularly in the newspaper *O Periódico dos Pobres*.

While Menatory claimed to have the "true and great Cosmorama of Paris," Lusardi countered by stating he possessed the bill of sale for the "Cosmo-Neorama" (sic) from Gazzera, which transferred to him the "privileges and prerogatives" granted by the French government<sup>4</sup>. This privileged commercial relationship enabled Lusardi to announce, at the beginning of 1835, the exhibition of several large-format, famous views bought in Paris from Gazzera. Four of these views were part of the program of Gazzera's first exhibition in January 1808: *St. Peter's Square*; *The magnificent and grandiose Basilica of St. Peter in Rome, and the first city of the world*; *The Flavian Amphitheatre [Colosseum], in Rome*; and *The Ruins of Palmyra*<sup>5</sup>. Lusardi exhibited them in Lisbon in February and March 1835.

1. The Cosmorama of the Piedmontese abbot Gazzera, the first Cosmorama establishment founded in 1808 in Paris, had been closed in 1832.

2. Lusardi was also an ophthalmologist, practising this profession at the same address as his *Cosmo-Neorama* in Lisbon: Rua da Figueira, No. 8, 1st floor. In February 1835, the establishment moved to Cais do Sodré, No. 19, 1st floor.

3. Initially established at Rua Nova do Almada, No. 35, 1st floor, the *Cosmorama of Paris* moved in December 1834 to Calçada do Duque, No. 1, 1st floor.

4. Newspaper *O Periódico dos Pobres*, 5 January 1835. It is unclear why Lusardi refers to Gazzera's Cosmorama as "Cosmo-Neorama," since Gazzera's establishment was consistently known as "Cosmorama" in its official prospectus, exhibition program, and press advertisements.

5. *Précis Historique sur le Cosmorama, ou La Promenade Pittoresque Autour du Monde*, January 1808.

6. *O Periódico do Pobres*, 15 November 1834.

7. The emergence of large-scale images in the Diorama had an impact on Gazzera's Cosmorama in Paris. The paintings nearly doubled in size (2.03 x 1.21 meters), also requiring larger lenses.

In response, Menatory presented a view of Lisbon, as he had promised several times, made by a local artist with the intent to "show that everything he presents in his Cosmorama is accurate and natural."<sup>6</sup> Accuracy was the quality most asserted by Menatory regarding his images. Including a local view was a common strategy in Cosmoramas to please visitors and validate the truthfulness of the other, more distant scenes. Local views acted as a kind of "fact check" to lend credibility to depictions of faraway and unfamiliar places. Menatory did not compare the topographical precision of his images to that of maps. His point of reference was Daguerre's new Diorama, the latest attraction in Paris, featuring life-size views<sup>7</sup>. Interest in this new medium and its aesthetic helps explain the exhibition of images such as the painting *Colonnade under the Library of Trinity [College]* by the British landscape artist William Westall (possibly a reproduction) in his exhibitions in Lisbon and Dublin (Figure 5). With an atmosphere reminiscent of dioramas, this view was built on a geometric perspective design intended to be seen through large magnifying lenses. The dramatic effect of its dim tones could be further enhanced by oil lighting, which some Cosmoramas were equipped with.

Moreover, the figures in academic dress seen in the image signify that, like all other European Cosmoramas, the shows by Menatory and Lusardi were promoted to and intended for a "cultured, distinguished public and lovers of the Fine Arts." The *Cosmo-Neorama*, for instance, was described in the press as a space "decent, elegantly furnished, and provided with some public leaflets [newspapers] and various permitted games." This atmosphere associated the space of the Cosmoramas with the prestige and social distinction sought



**Fig. 3** – *Colonnade under Trinity Library*, engraving by Joseph Constantine Stadler (1755 - 1828) after a painting by William Westall (1781 - 1850), published in R. Ackermann's *A History of the University of Cambridge, Its Colleges, Halls and Public Buildings*, 1815. Engraving on paper, 25x30cm

by the emerging bourgeois class. However, the main attraction to this audience was the description of this new “proto-virtual” medium, which offered immersive journeys through images. Lusardi presented this new experience as follows:

**8.** *O Periódico dos Pobres*, 4 November 1834. “Viagem no aposento” [room journey] is a translation of the Italian expression *viaggio di camera*. In German, it is known as *Zimmerreisen*.

“The curious enthusiast can, in a minute, transfer from one metropolis to another, travel through fields, cross rivers and seas, pass from one place on the globe to another, return in our days to the most remote centuries, draw near to the greatest distances, learn the topography of countries and the customs of peoples, the most famous events in History, and the rarest phenomena of Nature, educating oneself delightfully, without any effort, and at little expense, and all through sight. All this is offered by the exhibition presented to the public under the Greek title of *Cosmo-Neorama*, which can be called in Portuguese —Viagem no aposento [room journey].”<sup>8</sup>

Cosmorama showmen were the first travelling curators. Identifying their itineraries requires a detailed survey of historical press from various countries. Among the press ads gathered by the research project *Curiositas*, it was possible to reconstruct Lusardi’s tour between Madrid (1833), Lisbon (1834), and Porto (1835). Although he applied for a license in Madrid for his *Cosmo-Neorama* (Figure 3), Lusardi used that name only in Portugal, maintaining the simpler name *Cosmorama* for his exhibitions in Spain. Changing the names of exhibitions in different countries was relatively common for commercial positioning reasons. Menatory first established himself in Barcelona in 1832 with a *Neorama of Paris*, which he also called *Temple of Illusion*. In Lisbon, between 1834 and 1835, he adopted the name *Cosmorama of Paris*; however, upon moving to Porto in 1836, he reverted to the name *Temple of Illusion*. That same year, he travelled to Dublin, where he established a *Grand Cosmorama*. In 1837, already in Liverpool, he combined all these previous names. He even added

*Promenade Nocturne* and *Universorama* in an advertisement that had one of the most eccentric titles of his European tour, reflecting the growing branding importance of these titles (Figure 4).

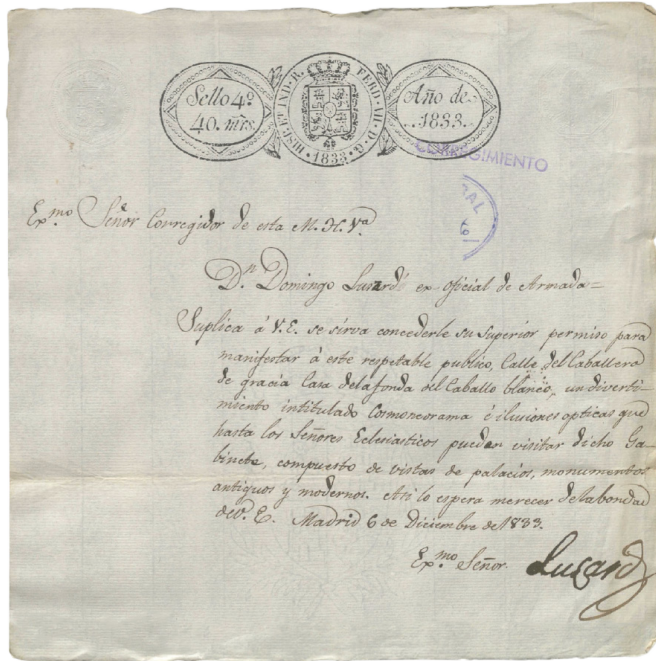


Fig. 4 – Request for permission by Domingo Lusardi to present his Cosmoneorama show, December 12, 1833. Municipal Archive, Corregidor's Archive, Madrid. Source: Cuenca Córcoles, 2023. This document was originally published in 2023 by Célia Cuenca Córcoles, in the doctoral thesis 'La mirada óptica. Vistas ópticas y espectáculos visuales en España durante los siglos XVIII y XIX' at the University of Barcelona.

Most Excellent Lord Corregidor of this Most Honoured Town, Domingo Lusardi, former Navy officer, Respectfully petitions Your Excellency to kindly grant him your superior permission to present to the esteemed public, at Calle del Caballero de Gracia, House of the Fonda del Caballo Blanco, an entertainment titled *Cosmoneorama and Optical Illusions*, which even members of the clergy may visit. The said cabinet consists of views of palaces, and both ancient and modern monuments. He thus hopes to deserve the kindness of Your Excellency.  
 Madrid, December 6, 1833.  
 Most Excellent Lord, Lusardi

Menatory has not been successful in Liverpool. According to local press reports, a complaint was filed against him with the police for making excessive noise by hiring musicians to attract visitors to his Cosmorama. Although he presented practically the same views from Portugal there, he did not achieve the same success. No images from the Cosmoramas of Menatory and Lusardi have been identified in Portuguese museums. Their subsequent itineraries also remain unknown.

Victor Flores

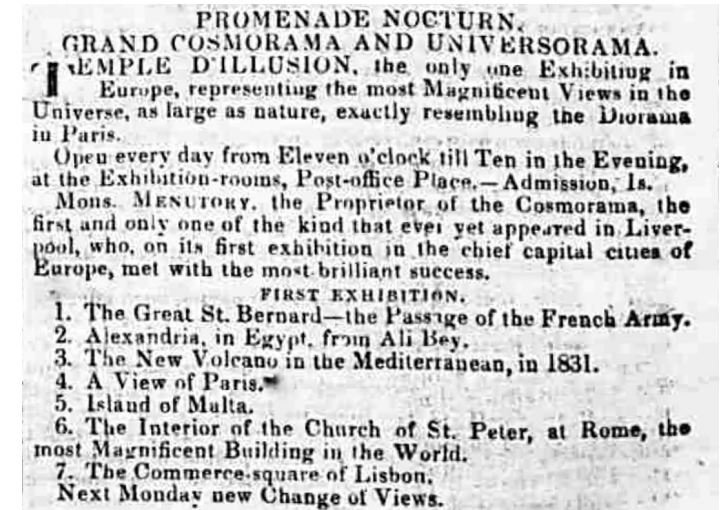


Fig. 5 – Menatory advertisement in Liverpool, *Liverpool Standard and General Commercial Advertiser*, 3 February 1837

# Cosmoramas in Porto

Cosmorama exhibitions in Portugal were not limited to Lisbon; they also extended to other coastal towns. Due to its significance, we focus here on those held in the city of Porto.

Domingos Lusardi's *Cosmoneorama* is documented in Porto from January 20, 1835. At the end of that month, he announced a temporary closure of his «world exhibition,» located on Rua de Santo António, to travel to Lisbon to acquire new views. Among them was *The Church and Monastery of Jerónimos in Belém, at the entrance to Lisbon*. In Porto, he presented at least nine exhibitions, each featuring around ten views that covered a variety of themes and places from around the world. Initially charging 120 réis, the price was halved by May. His announcements in Porto continued until June 1835.<sup>1</sup>

Under the name *Temple of Illusion*, the Frenchman Menatory — who had presented the *Grand Cosmorama of Paris* in Lisbon between 1834 and 1835 — exhibited a *Cosmorama* in Porto at Rua de Santo António, No. 81, from February 8 to March 26, 1836, featuring 6 to 10 views per show. The entry fee started at 120 réis and was reduced to 60 réis on March 19. He also offered subscriptions to attend all exhibitions of the 60 views of world locations and notable events that he displayed.<sup>2</sup>

1. *Diário do Porto* (1835, January 20), issues 2 and 12, and (1835, January 30), issues 11 and 46; *Folha de Annuncios*, (1835, April 20) issue 8, page 1 (1835, June 5), issue 28, page 1, cited by Miranda, C. (2006), *A Retratística em Portugal e a introdução da Daguerreotipia (1830-1845)*, Dissertação de Mestrado em História da Arte em Portugal, Faculdade de Letras da Universidade do Porto.

2. *O Artilheiro* (1836, February 8), and March 26); *A Vedeta da Liberdade* (1836, February 18), (1836, March 5).

3. *O Artilheiro*, (1836, October 25), issue 235, page 4, to (1837, June 5), issue 122, page 4; *A Vedeta da Liberdade*, (1836, October 26), issue 253, page 4, op.cit.

4. The Capuchin friars wore beards, hence the term “barbadinhos” (literally, “little bearded ones”).

5. In 1842, at its new location at Largo do Pelourinho, No. 24, 1st floor, in Lisbon, Andorfer added a vertical *Camera Obscura* [a solar microscope] to his exhibition. *A Revolução de Setembro* (1842, May 4), issue 433, page 4, to (1842, May 30), issue 452, page 4.

6. This time featuring a cabinet of relief and cork models of Roman monuments from Italy.

In October 1836, a new *Cosmorama* had just arrived in Porto. It was installed on Rua da Porta de Carros, No. 68, 1st floor, featuring a «machine» that had reportedly been shown in Paris and other European capitals. It was said to be larger than any previously exhibited in the city, allowing eight views to be observed from the front, right, and left. Two views were permanent, due to their popularity, while the others were rotated regularly. At the end of November, due to complaints about the venue's unsavoury clientele, the show moved to nearby Rua de Santo António, Nos. 42–43. Admission was 80 réis, and the space also offered sweets and drinks at various prices, as well as performances by a trained canary and dog at the end of the show.<sup>3</sup>

With the title Grand Optical Gallery, a show was presented in Lisbon in 1840 and again in 1842 by Thomas Karl Andorfer, from Baden. In Porto, this gallery was installed at Rua das Taipas, No. 71, occupying four rooms on the first floor, from August 25 to 31, 1840. As in Lisbon, it included images in both the Neorama and Cosmorama genres. During the 5th exhibition (held between August 25 and 31), he presented three Neorama-style images, one of which was the choir of the church of the Barbadinhos Fathers in Rome<sup>4</sup>—a copy of the famous painting by Granet (Figure 6). It was open daily, with admission costing 160 réis per person.<sup>5</sup> Andorfer toured the world with this optical show and returned to Porto ten years later.<sup>6</sup> Upon his return in 1850, he set up the show at Rua do Calvário, No. 17, with the first two exhibitions held across five rooms, and subsequent ones in four rooms on the 1st and



**Fig. 6 –** *The Choir of the Capuchin Church in Rome*  
 Francois Marius Granet, 1815.  
 ©2025 Image copyright.  
 The Metropolitan Museum of Art/Art Resource/Scala,  
 Florence. Oil on canvas,  
 148x196cm. MET NY 80.5.2

7. *O Periodico dos Pobres no Porto*  
 (1850, July 31), 179, 742.

8. *O Moderado* (1855, July 13),  
 183, 3.

9. «The «City of Porto, Portugal,»  
 between approximately May  
 15 and May 19, and the «City  
 of Lisbon, Portugal,» between  
 approximately May 24 and  
 June 1. *O Ecco Popular*,  
 (1856, May 15), issue 110,  
 page 4, to (1856, June 6),  
 issue 127, page 4.

2nd floors. The views in the Neorama and Cosmorama genres were updated for each weekly exhibition, which was open daily. He presented ten different exhibitions between June 5 and around August 6, 1850. He announced that on August 7, the venue would close briefly to install a *Salon Diorama* featuring seven Neorama and Cosmorama views, some entirely new, in four exhibitions over three weeks from August 8 to September 1.<sup>7</sup>

In early July 1855, a new Cosmorama and Panorama arrived in Porto from London, offering a diverse range of views, including scenes from the Crimean War.<sup>8</sup>

The following year, another *Cosmorama and Neorama* was announced in the city, installed on Rua de Santa Catarina, No. 449, from at least mid-May to early June 1856. The views on display were regularly changed. Among the foreign scenes, two views of Portugal were included.<sup>9</sup>

From March to June 1857, a *Grand Cosmorama and Neorama*, or *Grand Dioramic Cosmorama*, was exhibited in a house located at the corner of Praça de D. Pedro and Rua de Sá da Bandeira. Entry initially cost 200 réis, with children paying half, but the price was soon reduced to 120 réis and finally to 60 réis. Its owner, Brecciano, presented around eight series of twelve images each between March 16 and mid-June 1857. The themes ranged from familiar cityscapes and monuments to images illustrating recent news events, such as the Crimean War or the adventures of Captain Samuel Gurney and his ship *Investigator* in the Arctic. Based



**Fig. 7** – *Critical position of H.M.S. Investigator on the North Coast of Baring Island, August 20th 1851*. Colour lithograph by William Simpson, published by Ackermann und Co., 1854.

on title comparisons, these latter images appear to be chromolithographs published in 1854, based on Gurney's drawings and watercolours (Figure 7).

*Nuno Borges de Araújo*

## Thomas Karl Andorfer's *Grand Optical Gallery*

The *Grand Optical Gallery*, created by Austrian showman Thomas Karl Andorfer, was one of the most ambitious and widely travelled optical entertainment ventures of the 19th century. Between 1828 and 1854, Andorfer toured more than 25 cities across Europe, Brazil, the United States, and the West Indies. His exhibitions featured Cosmoramas, Neoramas, Dioramas, and a solar microscope—blending science, art, and illusion. Andorfer was a leading figure in 19th-century optical entertainment, standing alongside contemporaries such as Johann Michael and Hubert Sattler, Nicolino Calyo, and Johann Carl Enslen.

Andorfer's career began in Italy, where between 1828 and 1837, he toured cities including Verona, Milan, Naples, and Venice. His use of oil paintings, rather than coloured prints, combined with lens-based optical effects, created striking illusions of depth and realism. Rooted in the *vedutismo* of Canaletto and Pannini, his Cosmoramas were hailed as both educational and entertaining, offering viewers immersive glimpses of contemporary events and historical settings. One of his most successful subjects was the 1827 Naval Battle of Navarino, a key moment in the Greek War of Independence (Figure 8).

By 1839, Andorfer expanded westward into the Iberian Peninsula, arriving in Cádiz and later Lisbon, where he found considerable



**Fig. 8** – *The Battle of Navarino, 20 October 1827*. George Philip Reinagle, 1828. © National Maritime Museum, Greenwich, London. Oil on canvas, 121.9x243.8cm. [This Image illustrates a frequent theme in cosmoramas]

success. In Lisbon, he mounted eight exhibitions between January and April 1840, presenting four Cosmoramas and three Neoramas per show, updated every two weeks. His dynamic advertising strategy used local newspapers to generate anticipation, and his exhibitions appealed to the city's educated elite.

1. *Revolução de Setembro, 24 Maio 1842.*

2. Arquivo Nacional da Torre do Tombo, Document: 'Ministério do Reino, Decretos, 26 September 1843, António Carlos Andorfer'.

In May 1842, Queen Maria II of Portugal visited Andorfer's *Optical Gallery* with her children<sup>1</sup>— an endorsement that Andorfer leveraged to petition for and eventually receive a knighthood in the Portuguese Order of Christ (Figure 9). His application cited not only his artistic achievements but also scientific and charitable contributions, such as donating proceeds to orphanages and presenting mineral samples to academic institutions<sup>2</sup>.

From 1843 to 1845, Andorfer toured Brazil, setting up in Rio de Janeiro, Recife, São Luís, and Belém. Though he received another royal visit—this time from Emperor Dom Pedro II—his shows were less successful than in Europe. In Brazil, Cosmorama ads often appeared alongside slave sale and escape notices, revealing the troubling social context in which these spectacles circulated. In one case, a Cosmorama was offered in exchange for an enslaved person “without defect,” underscoring the contradictions of Enlightenment-era entertainment flourishing amid brutal colonial systems.

Admission prices were high, comparable to theatre tickets, and the programs were geared toward literate elites. In response to criticism and declining attendance, Andorfer made concessions. In Rio de Janeiro, he added three views of the city to the exhibition. In São Luís, he included a view of Lisbon's Praça do Comércio at the request of the Portuguese community. These gestures, however, were reactive, and the Gallery's core programming continued to reflect a Eurocentric perspective.

Like the original *Cosmorama* in Paris (1808), which presented a “picturesque promenade around the world” focused on Egypt,

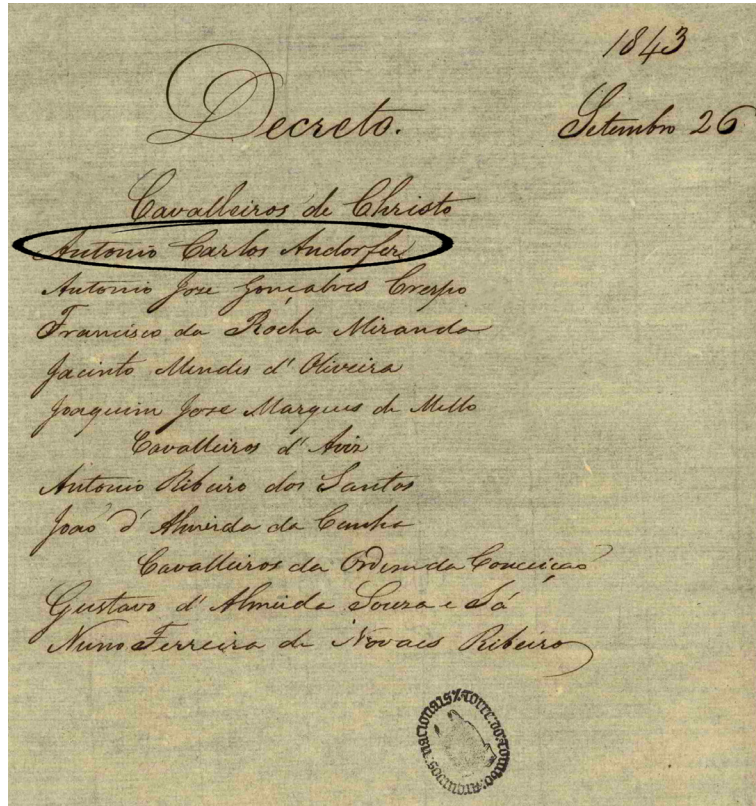


Fig. 9 – Decree of appointment of the Knights of Christ, Ministry of the Kingdom, 26 September 1843, National Archive of the Torre do Tombo

Syria, Greece, and Italy, Andorfer's gallery privileged European sites, events, and aesthetics. This worldview carried an implicit message of cultural superiority and was poorly adapted to audiences in the Americas. Despite touring globally, Andorfer never incorporated American imagery into his European exhibitions, exposing the limits of the "universalism" that Cosmoramas claimed to represent.

In 1845, Andorfer took his gallery to the United States, exhibiting in Salem and later at 271 Broadway in New York. Here, too, he promoted his European credentials but did not add American scenes. Ads in New York praised the gallery's royal visitors and academic appeal, contrasting sharply with Brazilian ads printed alongside notices about enslaved people. The U.S. ads also shared space with promotions for daguerreotype photography studios—signalling the rapid emergence of a new visual technology that would soon eclipse optical entertainments.

After brief stops in Cuba and further tours in Europe—including Porto, Genoa, and Ljubljana—Andorfer rebranded his exhibitions as an "Art Cabinet," incorporating cork models of ancient monuments. Despite extensive travels, none of the hundreds of images he exhibited have been identified. By the 1850s, Cosmoramas were in decline, replaced by photography studios that offered a new visual realism. Andorfer's *Grand Optical Gallery*, though international in reach, ultimately remained tethered to a Eurocentric worldview, failing to evolve beyond its 19th-century imperial imagination.

# The Cosmorama in Madrid (1828–1870): traces of a modern visual spectacle

During the 19th century, urban audiences underwent a profound transformation in the ways they observed and understood the world. One of the experiences that shaped this new visual culture was a series of spectacles based on optical devices such as the Cosmorama, polyorama, mundonuevo, and other variants including peepshows, the kaiserpanorama, the kinoscope and the mutoscope. These devices, displayed in cabinets, fairs, or dedicated venues, employed lenses, directed light, and painted scenographies to project enlarged views of distant cities, famous monuments, historical battles, or natural landscapes.

Madrid played a central role in the reception and dissemination of these visual spectacles. An analysis of the digitised historical press -preserved in the Digital Newspaper Library of the National Library of Spain, the Virtual Library of Historical Press, and the Regional Library of the Community of Madrid<sup>1</sup> – reveals a vibrant and sustained activity related to the Cosmorama between 1820 and 1870. The study of advertisements and press reports enables a detailed reconstruction of the contexts in which these shows were presented: locations, duration, visual content, and the individuals or entrepreneurs involved. Indicators such as the

1. <https://prensahistorica.mcu.es/es/inicio/inicio.do>; <https://hemerotecadigital.bne.es/hd/es/advanced?o=&w=Cosmorama&f=text&t=%2Bcreation&l=600&l=700&s=0&lang=es>  
[https://biblioteca.virtualmadrid.comunidad.madrid/bvmadrid\\_publicacion/es/inicio/inicio.do](https://biblioteca.virtualmadrid.comunidad.madrid/bvmadrid_publicacion/es/inicio/inicio.do)

2. *Diario de Avisos de Madrid*, 08/10/1835

3. Cuenca, Cèlia (2022). *La mirada óptica. Vistas ópticas y espectáculos visuales en España durante los siglos XVIII y XIX*. Universitat de Barcelona. Tesis Doctoral, 280

frequency of performances, the titles, and the identity of the impresarios or showmen have made it possible to develop a fairly comprehensive profile of this cultural phenomenon.

The Cosmorama had significant social reach in Madrid. Its presence in political, illustrated, cultural, and general newspapers highlights its broad appeal and ability to engage a diverse public. Among the most frequently cited publications were: *Diario de Madrid* (1828–1830), *Diario de Avisos de Madrid* (1828–1845), *La Revista Española* (1833), *El Español* (1836–1855), *El Corresponsal* (1839–1842), *El Espectador* (1845–1847), *La Correspondencia de España* (1846–1870), *El Museo Universal* (1857–1868), *El Diario Español* (1852), and *La Ilustración de Madrid* (1870).

Press accounts confirm that the Cosmorama was exhibited with considerable regularity. A striking example of its continuity is the Galería Topográfica Pintoresca<sup>2</sup>, directed by D. León Gil de Palacio and D. Eusebio Lucini, which operated for over two decades between 1835 and 1856<sup>3</sup>. Its presence in Madrid also followed seasonal cycles, often associated with touring exhibitions or the arrival of foreign visual repertoires. The earliest known reference dates back to 1828, with intermittent displays continuing into the 1830s. From 1860 onward, references in the press increased markedly, especially between 1860 and 1865, marking what could be considered the peak of its popularity.

The duration of these exhibitions varied: some lasted several years, while others were on view for only a few weeks. Shows could be

**NUEVO ESPECTACULO**  
DENOMINADO  
**PASEO PINTORESCO**  
POR GRANADA.

El local donde se vé está situado en la calle de la Estrella, esquina á la de Silva, entrando por la de la Luna, casa núm. 2 nuevo, cuarto principal.—Las horas de entrada son todos los días desde las 10 á las 2 por la mañana, y por las tardes desde las 3 á las 7 de la noche.—Entrada general 3 rs. y 1 los niños.

Fig. 10 – Advertisement for the Picturesque Cosmorama of Granada by Luis Muriel. *Diario de Madrid*, May 5, 1836.

scheduled daily or within specific time slots, often in the afternoons or evenings. It was common to offer reduced admission prices for children or soldiers. Among the documented titles were Cosmoneorama<sup>4</sup>, Gran Cosmorama<sup>5</sup>, Galería Pintoresca<sup>6</sup>, Cosmorama Exposición de París<sup>7</sup>, and the Cosmorama Pintoresco de Granada (Figure 10), the latter presented by the painter D. Luis Muriel<sup>8</sup>. Other shows were unnamed but featured detailed descriptions of the views on display.

Two thematic tendencies stand out: on one hand, depictions of urban and monumental landmarks such as the Paseo del Prado,

4. *Diario de Avisos de Madrid*, 30/1/1834

5. *Diario de Madrid*, 24/10/1839; *La correspondencia de España*, 20/08/1865

6. *Diario de Madrid*, 9/08/1840

7. *Madrid en sus diarios*, 02/01/1936

8. *El Español*, 19/04/1936; 20/06/1836



Fig. 11 – Optical view of El Escorial (Spain), published by Basset, c. 1820. Hand-colored engraving.

the Royal Palace of Aranjuez, the Alhambra of Granada, the Royal Palace in Madrid, or El Escorial (Figure 11); on the other, scenes of religious or historical significance, alongside panoramic vistas of international cities like London, Paris, Constantinople, and Rome.

In Madrid, the Cosmorama was perceived as a modern, visual, and educational experience. Newspaper sources reveal that audiences appreciated these exhibitions both for their ability to recreate distant and exotic places and for their instructive value—allowing them to “see the world” without ever leaving the city.

*Carmen López-San Segundo*

## The Girona Cosmorama

The Cosmorama held at the Museu del Cinema in Girona can be considered the sole surviving material example of a Cosmorama device. Its uniqueness lies not only in its remarkable state of preservation but also in the fact that it has survived with a complete set of over fifty views specifically designed for use with the device.

The Cosmorama consists of a large wooden structure measuring 3.70 meters in length and 2.24 meters in height, functioning as a double wall with five lenses arranged horizontally at eye level, each spaced approximately 35–40 centimetres apart. This viewing apparatus represents a new form of bourgeois entertainment that sought to distinguish itself from earlier street spectacles, such as the *mondi nuovi*, by promoting a more disciplined and socially acceptable mode of spectatorship.

The accompanying collection includes 55 views, mainly depicting Italian cities, along with scenes of Paris, Istanbul, Brazil, and local sites in Vic and Barcelona. The inclusion of local views was a common practice in nineteenth-century Cosmoramas. In the pursuit of a more realistic experience of immersive shows, the local views provided a point of comparison that reinforced the credibility of the other European and foreign views.

Each view is numbered on the reverse, from 1 to 5, corresponding to the five internal stands inside the Cosmorama apparatus, which are also numbered. For example, the view of Gibraltar is number 3, while Napoleon's burial is number 1. This system enables the

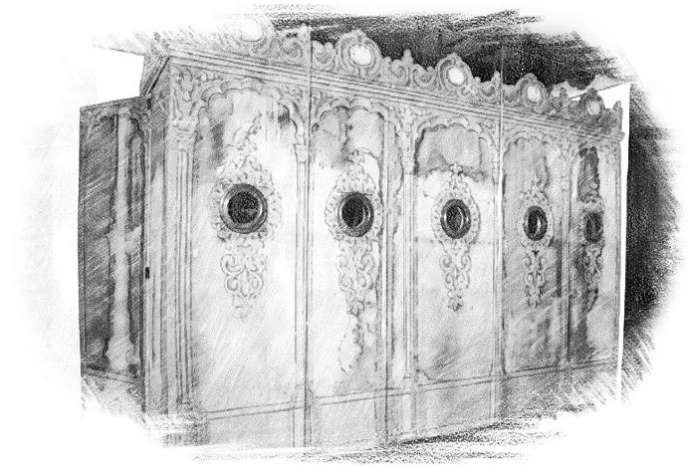


Fig. 12 –Cosmorama from the Museum of Cinema – Tomàs Mallol Collection, Girona.

combination of views to create multiple displays. Each show was typically accompanied by a printed program that described the key elements of the views presented, providing textual support that further emphasised the elevated status of the spectacle.

The Girona Cosmorama offers valuable insight into the social, technological, and aesthetic dimensions of nineteenth-century visual culture. It stands as a material trace of the cultural practices surrounding immersive vision in nineteenth-century optical shows.

*Cèlia Cuenca*

# Nicolino Calyó: The Cosmorama Artist and Showman

The foundations of modern visual perception were consolidated in the early 19th century through a diverse visual culture in which emerging technologies of image consumption and circulation played a pivotal role. From the 1820s onward, Cosmorama exhibitions gained popularity, updating the tradition of peepshows and fairground attractions by blending entertainment, spectacle, and education.<sup>1</sup> These exhibitions played a significant role in expanding the reach of visual experiences, and central to this phenomenon was the figure of the showman, whose presence shaped public engagement with the *medium*.

Although Nicolino Calyó is only briefly mentioned in artist dictionaries—typically identified as a “portrait and miniature painter”—historical newspaper advertisements reveal a far more active and complex professional identity.<sup>2</sup> Calyó functioned as both artist and showman, collaborating with Cosmorama entrepreneurs and taking his works on extensive tours. His exhibitions traveled not only through various European cities—particularly in Spain through Madrid, Granada, Cádiz and Jerez (Figure 13)—but also reached audiences in the United States, Mexico, and Cuba.

1. See Balzer, R. *Peepshows: A Visual History*. New York: Harry N. Abrahams, 1988, and Plunkett, J. “Peepshows for All: Performing Words and the Travelling Showman”. *Zeitschrift für Anglistik und Amerikanistik*. vol. 63, no. 1, 2015, pp. 7-30.

2. Patterson, M.S. “Nicolino Calyó and His Paintings of the Great Fire of New York, December 16<sup>th</sup> and 17<sup>th</sup>, 1835”. *The American Art Journal*. vol. 14, no. 2, 1982, pp. 4-22.

*The Italian artists Nicolino Calyó and his son have arrived in Madrid, so well known already in several capitals of Spain and especially in Seville, where they remained for quite some time, showcasing their rich collections of tempera paintings through optical exhibitions. For three days, the Calyós were at the palace showing the precious views they bring to the Most Excellent and Most High and the royal family, having pleased the queen so much that she deigned to grant them the location where the raffles at the Trinity are held, so that they may present to the public some exhibitions of such precious paintings.’*

3. *American and Commercial daily advertiser*, 20 April 1835.

4. *El clamor público*, 11 June 1854.

5. *Diario del Gobierno de la República Mexicana*, 30 April 1840.

**—Han llegado a Madrid los artistas Italianos D. Nicolino Calyó y su hijo, tan ventajosamente conocidos ya en algunas capitales de España y principalmente en Sevilla, donde han permanecido bastante tiempo, haciendo admirar sus ricas colecciones de pinturas al temple, por medio de exposiciones ópticas. Durante tres días han estado los Sres. Calyó en palacio enseñando á SS. MM. y familia real las preciosas vistas que traen, habiendo gustado tanto á la reina, que se ha servido concederles el local donde se verifican las rifas en la Trinidad á fin de que puedan dar al público algunas exposiciones de tan preciosas pinturas.**

Fig. 13 – Advertisement of Nicolino Calyó's arrival in Madrid and his visit to the royal family. *La Época*, 1 May 1854

While many Cosmorama artists focused primarily on landscapes and monuments, Calyó's work reveals an interest in contemporary events and a desire to bring current affairs to a wider public. In addition to conventional battle scenes, he produced compelling depictions of natural disasters and unusual phenomena, such as the eruption of Mount Vesuvius in 1832 (a subject he revisited repeatedly)<sup>3</sup>, the shipwreck of the *Maria Joana* in the Gulf of Mexico<sup>4</sup>, and the sudden appearance of a new volcano in the Mediterranean—reportedly witnessed during one of his travels<sup>5</sup>. His responsiveness to topical events is further demonstrated by his arrival in New York and swift documentation of the Great Fire of December 1835. In addition to numerous images of the conflagration, he also recorded the aftermath in detailed renderings of the ruins.



Fig. 14 – *A View of the Port of Baltimore*, Nicolino Calyó, 1836 Baltimore Museum of Art. Watercolor on paper, 94.1x128.3cm

Calyó's preference for natural over urban subjects is evident in the selection of works he displayed in Cosmorama shows. Cities are often represented not through detailed architectural renderings but from vantage points that emphasize surrounding landscapes—bays, hills, and natural features (Figure 14). A critical review from 1854 reinforces this impression, noting that his brush was more effective in depicting fields, skies, and rivers, while his portrayals of buildings and figures suffered from “carelessness and rigidity.” This suggests a clear prioritization of nature in his artistic practice.

The study of Cosmoramas—particularly the role of the artist-showman—offers a rich opportunity to reassess the place of visual media and artistic culture in the 19th century. This perspective allows for a re-evaluation of known figures like Calyó, shedding light on lesser-explored facets of their careers and contributing to a broader revision of art historical narratives.

*Sara Beirão*

## The Titles of Iberian Cosmoramas and Their First Geographic Visualisation

In the Iberian Peninsula, Cosmoramas were presented under various names, which has not always contributed to their easy study and understanding. In Portugal, the most common designation is *Cosmorama*, although these exhibitions could also be referred to as *Cosmorama Político* (Political Cosmorama), *Cosmorama Universal* (Universal Cosmorama), *Galeria Óptica* (Optical Gallery), *Espectáculo Óptico* (Optical Show), or *Templo da Ilusão* (Temple of Illusion). Later spectacles such as the *Neorama* and *Diorama* gave rise to agglutinated neologisms like *Cosmoneorama* and *Dio-Neorama*.

In Spain, the most common designations are *Cosmorama* and *Neorama* (not always as synonyms). Still, one also finds *Cosmorama Universal*, *Gran Cosmorama*, *Cosmoneorama*, *Diorama*, *Templo de Ilusión*, *Viaje Pintoresco* (Picturesque Journey), *Galeria Óptica*, or *Galeria Pintoresca*. Other mentions include *Gran Neorama de Paris*, *Gran Panorama Monstruo* (Great Monster Panorama), and more specific variations such as *Neorama con Figuras de Movimiento* (Neorama with Moving Figures), *Cosmorama Histórico*, *Cosmorama con Luz Natural* (Cosmorama with Natural Light), or *Cosmorama de la Guerra Franco-Prusiana* (Cosmorama of the Franco-Prussian War).

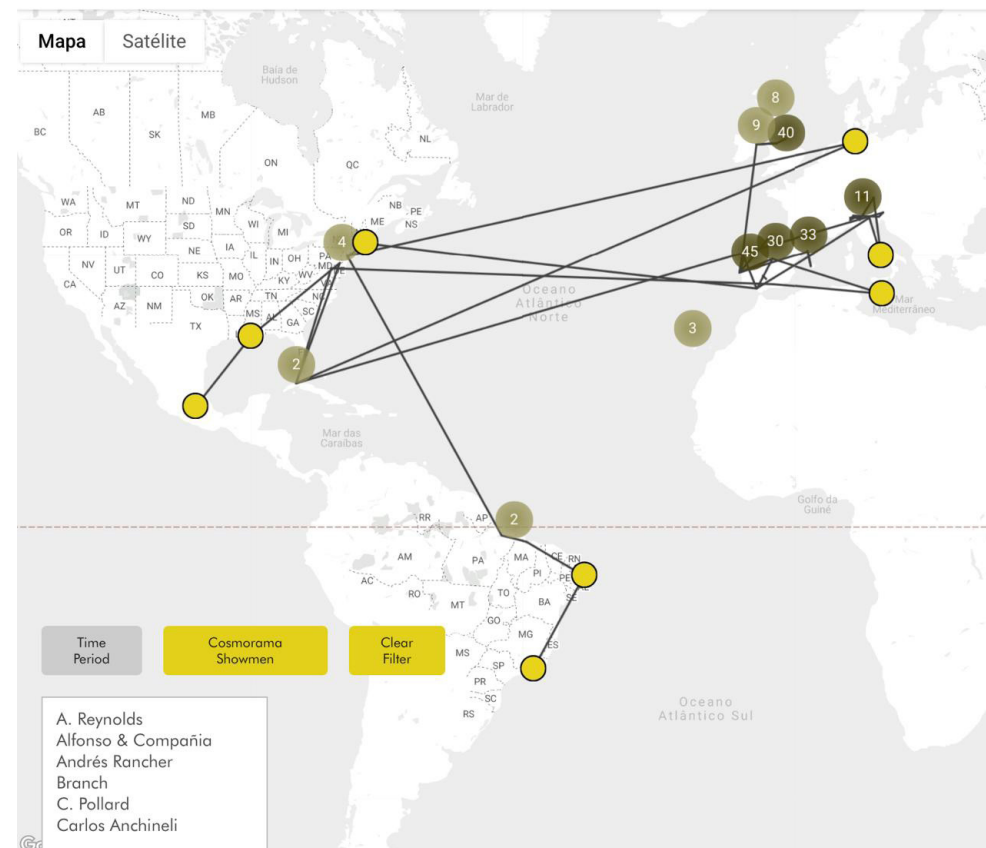


Fig. 15 – Geographical visualisation of the international circuits of Cosmoramas developed by research project *Curiositas*: <https://curiositas.ulusofona.pt/Cosmoramas-map/>

Cosmoramas began to be regularly advertised in the press from the 1820s onward. The research project *Curiositas* has catalogued, for the first time, over 700 of these advertisements published in Portuguese, Spanish, British, Brazilian, and North American newspapers. In total, more than 200 distinct Cosmoramas that circulated in the West between 1818 and 1889 have been identified. A chronological and geographical visualization of this data is available at the following address: <https://curiositas.ulusofona.pt/Cosmoramas-map/>

Navigating this map is simple, allowing users to filter shows by date or by the names of the main Cosmorama showmen who toured the Iberian Peninsula. In the latter option, their itineraries are displayed as lines on the map. Clicking on each entry provides more detailed information about each exhibition, including the title, duration, location, showman's name, and the newspaper in which the advertisement was published. The innovative nature of this tool lies in its mapping of the global circulation of Cosmoramas and in the access it provides to detailed information on each exhibition and its travels through different countries.

*Victor Flores, Sara Beirão and Susana S. Martins*

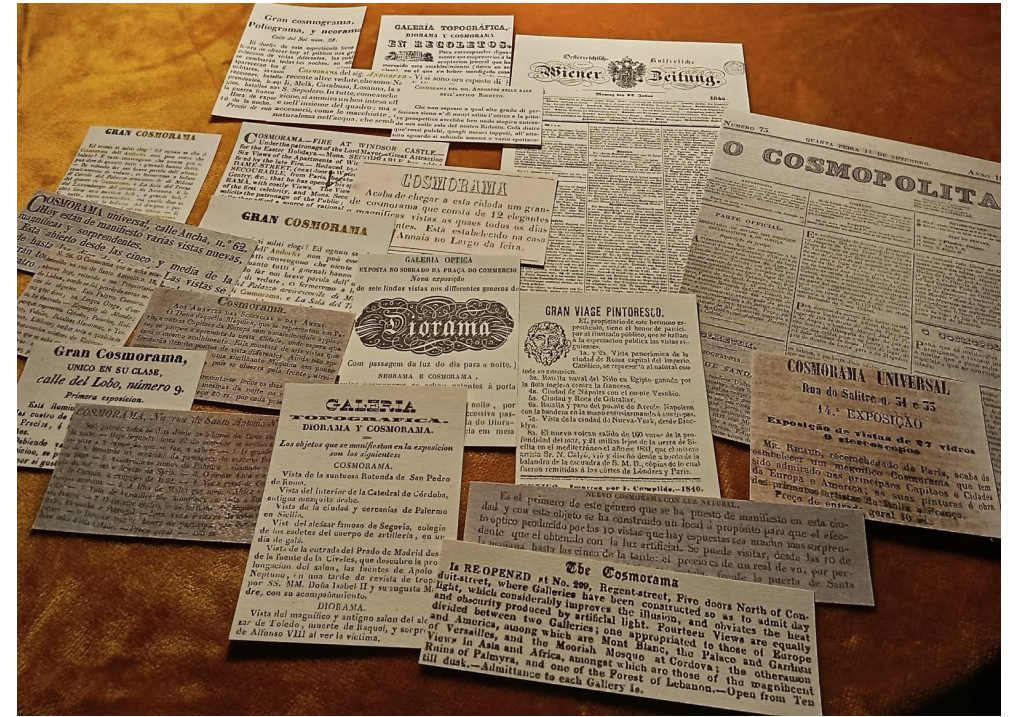


Fig. 15a – Cosmorama advertisements investigated by the Curiositas research Project.

*II. London and the United States*  
*The Longevity of Two Cosmoramas*

COSMORAMA

## Fashionable Peeping at the Cosmorama Rooms, London

In London, the *Cosmorama Rooms* became one of the most fashionable exhibition venues of the 1820s. Opening in St James's Street in May 1821, it subsequently relocated to 207-209 Regent Street in 1823, where it displayed Cosmoramas for the next three decades. At the *Cosmorama Rooms*, attendees could see a series of eight views (later expanded to fourteen) through a series of convex lenses, which would have magnified and enhanced the immersive realism of the scenes. The two smaller illustrations on the right of the illustration also demonstrate that viewers saw the image through a darkened aperture, which would prevent the edges of the frame from being seen and also aid the illusion. Reviewers praised the scenes for being larger-than-life. Rather than the cheap prints of the peepshow, the Cosmorama displayed small oil paintings. The scenes on display included views of European cities and renowned natural and heritage sites. The initial views featured the interior and exterior of St. Peter's Church, Rome, as well as Gibraltar, Paris, Switzerland, and the London Docks. Scenes were updated regularly to attract audiences.

Entry to the *Cosmorama Rooms* was one shilling, akin to that charged by the panorama and diorama, and the venue marketed itself as a genteel space; in the accompanying illustration, the dress of the attendees and the elegance of the décor emphasise its respectability. Moreover, this illustration was published in *La*

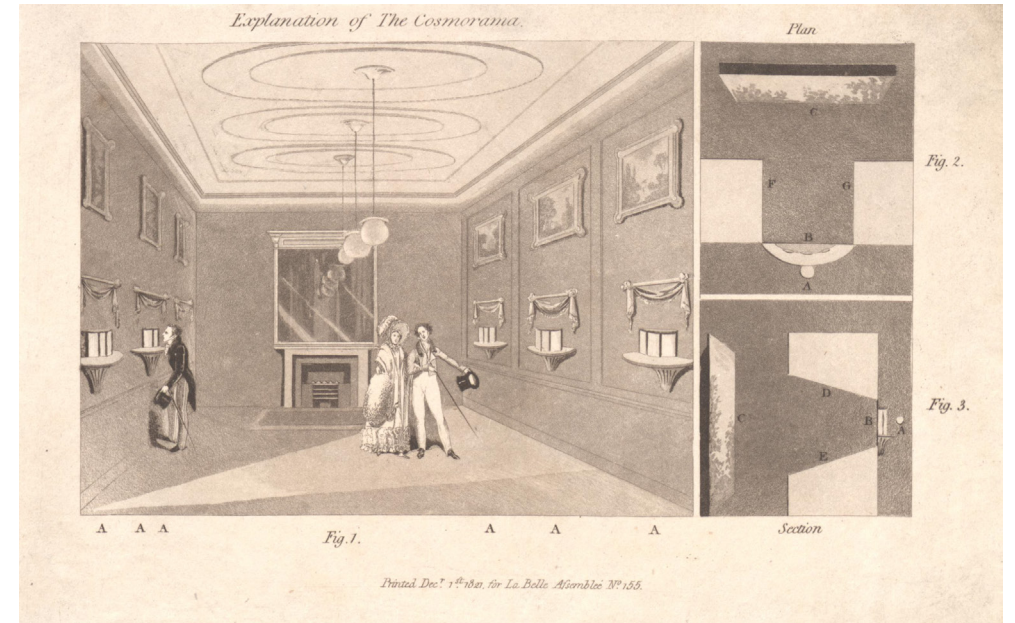


Fig. 16 – The Cosmorama in 29 St James Street, London. Illustration published in Blunt, C. 'Popular description of the Cosmorama', *La Belle Assemblée*, n°155, vol. 24 November 1821, p.233

*Belle Assemblée* (full title of which was *La Belle Assemblée or, Bell's Court and Fashionable Magazine Addressed Particularly to the Ladies*), a magazine aimed at women that tried to capture the latest social highlights. Publication in this magazine, including the educative guide to how the Cosmorama worked, is a sign of the fashionable and elite interest in this new optical format.

John Plunkett

# Cosmoramas and museums in the United States

Despite their European origins, Cosmoramas rapidly spread across the United States, prompting vibrant international and transatlantic circulation. Numerous cities hosted these optical displays, revealing cultural routes and figures such as Hubert Sattler and Nicolino Calyo. One of the most noteworthy developments, however, was the integration of Cosmoramas into permanent museum venues, bestowing upon them cultural and educational significance that far exceeded the transient nature of itinerant shows.

In Philadelphia, Charles Willson Peale (1741–1827) installed a convex lens in front of a watercolour in his museum after visiting John Scudder's Grand Cosmorama at the *American Museum* in New York in 1817<sup>1</sup>. In 1825, his son Rubens Peale opened the *Rubens Peale's Museum and Gallery of Fine Arts*, also in New York, where he featured a "Cosmorama of superior quality<sup>2</sup>." Yet the most emblematic example of the Cosmorama/Museum alliance was probably that of showman P. T. Barnum (1810–1891).

After acquiring Scudder's museum in 1841, Barnum incorporated its Cosmorama into his own Barnum's *American Museum* on Broadway, establishing a permanent home for this emerging urban culture. This five-storey museum, eclectic in concept, combined natural curiosities and scientific wonders with a striking Cosmorama

1. Bellion, Wendy. 2011. *Citizen Spectator. Art, Illusion, and Visual Perception in Early National America*. Williamsburg: University of North Carolina Press Books, pp. 3-6.

2. Barber, John W., Henry Howe. 1841. *Historical Collections of the State of New York*. New York: S. Tuttle, p.333.

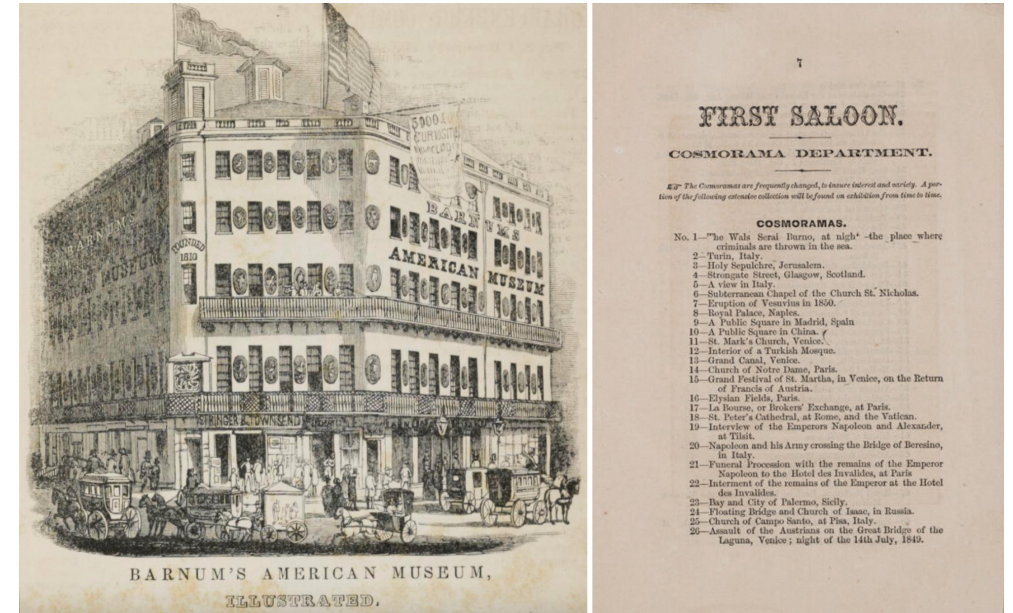


Fig. 17 – Depiction of the Barnum's American Museum building and Cosmorama programme

Salon. Within this space—one of the most detailed, rare, and significant period representations still exists—dozens of views were displayed in a setting designed for modern enjoyment, becoming highly popular among audiences and social gatherings. Although situated in an environment prone to wonder and encounters with the unfamiliar, Barnum’s Cosmorama paintings were also praised for their aesthetic quality. Painted by accomplished “Italian artists,” these images offered cosmopolitan virtual journeys through art and a state-of-the-art system of world viewing.

Such examples highlight the prominence and recognition that Cosmoramas achieved within wider cultural and entertainment networks and demonstrate how museum contexts elevated them with new cultural values.

*Susana S. Martins*

*III. The Iconography of Cosmoramas*

COSMORAMA

## Current Events

In addition to views of distant landscapes and monuments, Cosmorama exhibitions also featured pictures of recent current affairs, — like battles, ceremonies or representations of royal figures and distinguished personalities.

Through this kind of almost newsreel images, visitors could witness the explosions of the Battle of Navarino, follow Napoleon's grand funeral procession through Paris in 1840, or observe the front lines of the Crimean War. In this way, the Cosmorama offered a visual chronicle of contemporary events and politics, transforming the observer into an active participant in history.

*SM*



**Fig. 18** – Italian Brigands Surprised by Papal Troops, Horace Vernet, 1831. The Walters Art Museum, Baltimore. Oil on canvas, 86.7x131.5cm. [The Cosmoramas exhibited copies (sic) of this image]

# Cities

The word Cosmo-rama, meaning “view of the world,” instantly evokes the notion of travel. Cosmoramas were advertised as picturesque journeys around the world, in which cities — both in their urban character and everyday life — were prominently featured. Cosmorama images, inspired by the Grand Tour and ideals of cultural prestige, depicted major capitals and the exoticism of distant lands. However, they reflected a distinctly Eurocentric vision — celebrating, above all, the classical cities and those of the Mediterranean basin, regarded as the cradle of the civilisations that shaped European culture.

*ADM*



Fig. 19 – Mecca (Saudi Arabia), Hubert Sattler, 1897. Salzburg Museum. Oil on canvas, 100x130.5cm. Inv-nr 9083-49

## Monuments

Much like today, travelling in the 19th century involved the ritual of becoming acquainted with the main monuments of destination countries or cities. At the Cosmorama, images of Western monuments allowed visitors to marvel at architectural wonders and also experience these monuments from the inside. This educational observation combined pleasure and instruction, rendering the world accessible even to those who could not actually travel. The Cosmorama thus participated in the broader cult of monuments, regarded in the 19th century as central to national identities.

SM



**Fig. 20** – *La Girandola. Fireworks from Castle S. Angelo in Rome*, Ippolito Caffi, 1830-1840. Thorvaldsens Museum, B65. Oil on canvas, 36.6x46.5cm. [This image illustrates a frequent theme in the Cosmoramas]

# Nature

In Cosmoramas, the overwhelming power of nature comes alive. Images of violent storms, seas of ice, and erupting volcanoes immerse us in the extremes of the natural world. These sublime landscapes stir a mix of awe and fear—yet from a place of safety, we watch from afar. Unlike traditional scenic views, Cosmoramas don't aim for beauty or charm. Instead, they embrace tension and ambiguity, inviting us into a deeply Romantic experience that stirs emotion and defies logic.

VF

**Fig. 21** – *The Vesuvius Erupting, the Artist and His Father*, Carle Vernet, in the Foreground, Horace Vernet, c. 1822. Museum of Fine Arts, Houston. Oil on canvas, 74x92.5cm [This image illustrates a frequent theme in the Cosmoramas.]



## Crystal Palaces

From the 1850s, industrial exhibitions were held in Crystal Palaces. These elegant structures, built with iron frameworks and glass walls, symbolised the Industrial Revolution. Following London's Great Exhibition of 1851, such palaces proliferated across Europe and the United States. In Lisbon, three of these Crystal Palaces were showcased in the 1855 exhibition at the Grand Cosmorama on Rua Direita do Loreto—highlighting the widespread fascination with these modern spaces, which were strongly associated with progress and innovation.

VF



Fig. 22 – *Crystal Palace, London*, [The Foreign Department viewed towards the transept], 1851. Victoria and Albert Museum. Engraving on paper, 29.4x46.6cm. [This image illustrates a frequent theme in the Cosmoramas]

# Religion

Catholicism was among the most frequent themes in Cosmoramas. In addition to illustrating biblical scenes and showcasing famous temples, Cosmoramas also served as spaces for religious devotion and contemplation. As viewers looked through the lens, they often experienced a sense of isolation, as though the outside world had momentarily been suspended.

Religious imagery became especially prominent during major feast days. Still, it was also used to depict contemporary events, such as fires that destroyed important basilicas or the dissolution of the Capuchin Order following the Napoleonic invasions of Italy.

VF



**Fig. 23** – *Basilica of Saint Paul Outside the Walls The Day After The Fire of 1823*, Louis Léopold Robert, 1825. Thorvaldsens Museum. Oil on canvas, 82.4x102cm. Inv-nr b92. [This image illustrates a frequent theme in the Cosmoramas]

## Audiences of the Cosmorama

Cosmoramas were primarily aimed at an urban bourgeoisie increasingly drawn to visual forms of entertainment that combined pleasure, novelty, and instruction. These spaces, dedicated to displaying global views, presented themselves as respectable venues, well-suited to the modern spirit and to the new visual regimes that emerged in the nineteenth century.

Rather than merely responding to a pre-existing audience, these spectacles actively helped to shape new publics and social behaviours around the act of viewing. Cosmorama exhibitions occupied a relatively novel space, positioned between popular entertainment and more erudite pursuits. Their promoters sought, on the one hand, to distance themselves from the world of travelling street peepshows—often associated with deception, vulgarity or improvisation. On the other hand, Cosmoramas aimed to democratise a mode of detailed image observation that had previously been the preserve of aristocratic and courtly elites, opening it up to a broader and more socially diverse audience.

Interestingly, historical documentation reveals a strong concern with the moral respectability of these venues. A recurring theme in promotional materials and press advertisements was the need to ensure that Cosmoramas were understood as decent, educational, and appropriate for all—ladies, children and families. The

—Tendo chegado ao conhecimento do Director da Galeria Optica exposta na rua do Giz em seis salas do 1.º andar, que algumas pessoas achirão nas primeiras noites da abertura da dita Galeria que ella estivesse demasiado escura, e que esta circumstancia poderia pôr obstaculo ao bello sexo desta capital de assistir a este genero de divertimento; e apezar de que durante o longo curso de suas viagens, nas suas exposições em todas as capitães tanto na Europa como n'este Imperio elle não uzava iluminação exterior alguma, enfraquecendo ella em parte o effeito das vistas expostas; não obstante considerar elle de sua obrigação, o conformar-se com o uso do paiz em em que vive, e por conseguinte tem a honra de participar que tem tomado as disposições necessarias para remediar tal inconveniente com uma iluminação forte até tal ponto que satisfaça a decencia sem destruir o effeito das representações.

O Director depois de ter obtido nas outras partes do Imperio as informações de que a cidade do Maranhão se vangloreia como o centro da civilização moderna do norte do Brasil, deseja tanto mais que o bello sexo não deixe de honrar frequentemente a sua Galeria, tendo a mesma em todos os tempos e em todas as capitães por elle frequentada, sido visitada por tantas familias Reaes e Damas de Distinção; e promete que não poupará nada para saptisfazer a justa expectativa dos concorrentes e por meio da escolha das mais interessantes e mais notaveis representações.

Fig. 24 – Advertisement of Optical Gallery in S. Luis, Maranhão. Publicador Maranhense, 9 September 1844

The Director of the Optical Gallery located on Rua do Giz, in six rooms on the first floor, having become aware that some may find the gallery too dimly lit during its opening nights—this deficiency potentially discouraging the fairer sex of the capital from attending such a form of entertainment—and noting that throughout his long journeys and exhibitions in every capital across Europe and within this Empire he had never used any external lighting, thereby slightly diminishing the effect of the displayed views, he nonetheless considers it his duty to conform to the customs of the country in which he resides. Accordingly, he has the honour to inform that he has taken the necessary measures to overcome this inconvenience with enhanced lighting—sufficiently strong to satisfy decorum without impairing the effect of the pictures.

The Director—having received information from other parts of the Empire that the city of Maranhão prides itself as the centre of modern civilisation in northern Brazil—now wishes all the more that the 'fair sex' should frequently grace his gallery. Indeed, in every capital where he has exhibited, his gallery has been visited by numerous royal families and distinguished ladies. He promises that nothing shall be spared to fulfil the just expectations of his audience, through the careful selection of the most interesting and most notable representations.

darkened environment of the viewing rooms, though essential to the visibility of the images, was itself the object of some suspicion: darkness could suggest impropriety or indecorum, potentially casting doubt on the propriety of female attendance. For this reason, it was common to find public praise for the presence of “elegant ladies”, whose visits served to reinforce the legitimacy of the exhibition and dispel any sense of scandal. The showmen themselves were often aligned with this ideal of respectability. Many were referred to as “Professors”, highlighting both the pedagogical ambitions of the Cosmorama and the cultural authority of its promoters.

Another notable aspect was the presence of highly distinguished visitors, and the ways in which their attendance was used for advertising purposes. The visit of the Portuguese royal family—specifically Queen Maria II and the Infants—to Thomas Karl Andorfer’s Cosmorama in Lisbon in 1842, for example, was widely reported and celebrated, as were similar visits by the Spanish royal family to other Calyó’s Cosmoramas. The presence of such illustrious figures did more than lend cultural value to these exhibitions; it also served, quite effectively, to attract a wider audience and consolidate the public image of Cosmorama as a legitimate and prestigious venue.

Alongside their visual appeal and the curiosity they sparked, Cosmoramas also adopted modern marketing strategies and techniques to engage their audience. Discounted tickets for those who visited more than one exhibition, reduced prices for children,

subscription models, and the sale of printed programmes and collectable items (such as engravings or souvenir views) all demonstrate a surprisingly early understanding of the logic of modern cultural consumption. These mechanisms supported not only the financial sustainability of the exhibitions, but also encouraged emotional investment on the part of the viewer—allowing the experience to be remembered, revisited, and shared.

*Susana S. Martins*

*IV. Hubert Sattler*

COSMORAMA

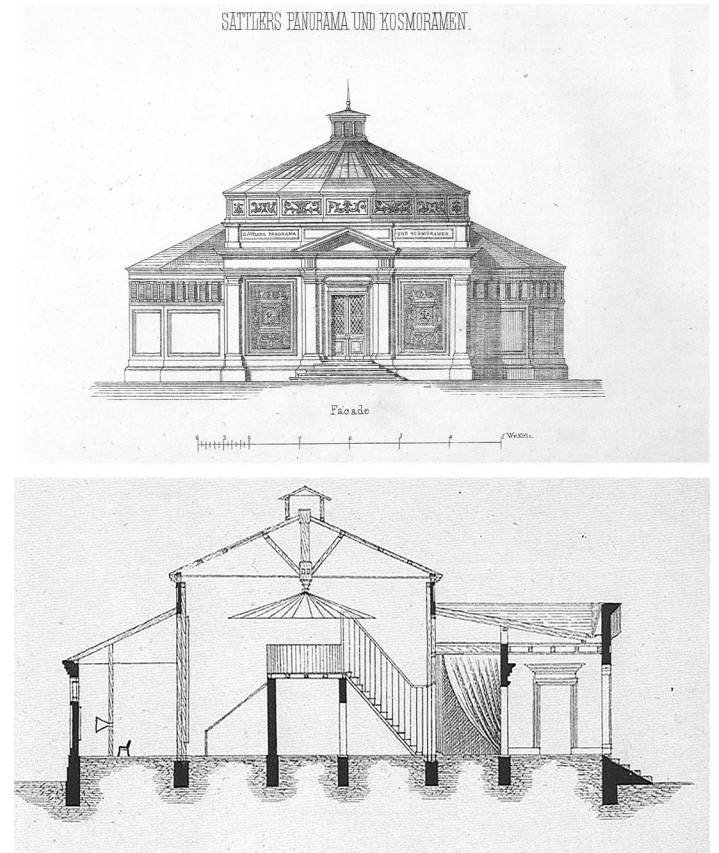
# Hubert Sattler's Cosmorama

Hubert Sattler (1817–1904) was one of the most renowned European painters of Cosmoramas. As a travelling artist, he crossed Europe, the Middle East, Cuba, and the United States between 1840 and 1870, producing one of the most extensive repertoires of Cosmorama paintings. The topographical accuracy and documentary precision of his images set him apart in an era when photography was beginning to emerge both as an auxiliary medium to the visual arts and as their competitor.

Among his works are two views of Lisbon, little known in Portugal, painted in 1868 following a visit to Spain. One of these images is displayed in this room, alongside views of St. Peter's Basilica in the Vatican and the ruins of the Temple of Karnak in Egypt. To recreate an experience similar to that of a 19th-century Cosmorama, the space has been darkened, and equipped with false walls and large convex lenses. Behind these lenses, cones conceal the edges of the paintings, heightening the sense of immersion.

Hubert Sattler's Cosmoramas form part of a heritage collection that includes the *Panorama of Salzburg* (1829), painted by his father, Johann Michael Sattler (1786–1847). Until 1937, this collection was presented in the same circular building in the historic centre of Salzburg. Today, the Salzburg Museum preserves 138 of these oil-painted Cosmorama views, each in a standard format (approx. 130 cm × 100 cm), constituting the most extensive known collection of its kind.

Victor Flores



'Reader, if you have not visited the Professor [Sattler]'s magical galleries, let not the first bright morning pass without doing so. Gloomy-looking places you will find them to be; quite bare and unfurnished (...). Look through one of the openings and you are straightway thousands of miles from home.'

'Go and take your children: they will learn more this way in an hour than in three month's poring over Atlases and Physical Geography Books.'

Reviews of Sattler's Cosmoramas in the U.S.  
Source: Ralph Hyde, *Panorama!mania!*, London: Barbican Art Gallery, 1989

Fig. 25 – Building of the Sattlers' Panorama and Cosmoramas in Salzburg. The Panorama was installed in the central rotunda, with the Cosmoramas displayed in the surrounding corridor.

## *The Mouth of the Tagus near Lisbon*

This cosmopolitan view by Hubert Sattler features the Tagus River and its vessels as the main protagonists. In the foreground, the clipper *D. Pedro* flies the Portuguese crown's flag, while a rowboat with passengers attempts to reach the ship. Among the passengers, bearded men wearing turbans reflect Lisbon's trade connections with India and the Middle East. On the left, the Belém Tower and a traditional *falua* of the Tagus stand out; on the right, various Spanish and French vessels enrich the composition, revealing maritime painting as one of Sattler's favourite themes.

VF



Fig. 26 – Hubert Sattler (1817-1904), *The mouth of the Tagus near Lisbon*, 1868. Museum of Salzburg. Oil on canvas, 105.6x133.4cm. Inv.-Nr. 9046/49

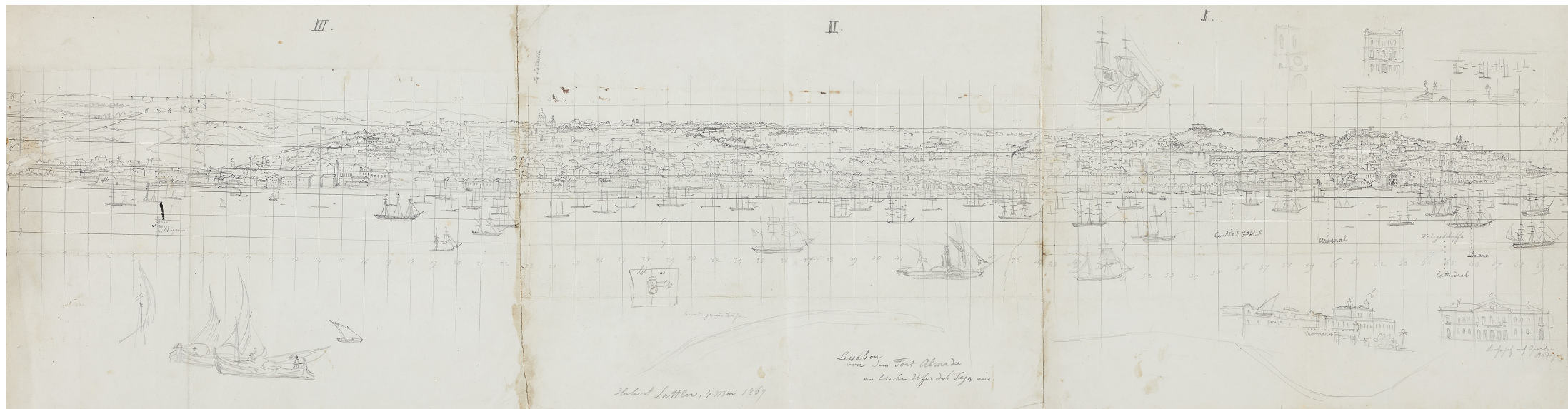
## *Lisbon, Seen from the Almada Fortress on the Left Bank of the Tagus*

As a method of study for his Cosmorama paintings, Hubert Sattler produced several panoramic drawings of cities he either visited or observed through photographs he had acquired. Of the two Cosmoramas of Lisbon he created, only this one has its preparatory drawing preserved. Lisbon is depicted here “from the Fort of Almada, on the left bank of the Tagus,” as noted in the caption. In a detailed drawing laid out on a numbered grid, the artist highlights a profusion of different types of vessels on the Tagus, as well as some of the capital’s monuments: the Sé Cathedral, Santa Apolónia Station, and the Monastery of São Vicente de Fora.

VF



**Fig. 27 e Fig. 28** — Hubert Sattler (1817–1904). Painting and preparatory drawing of *Lisbon, View from the Fort of Almada, on the Left Bank of the Tagus*, May 4 1867. Collection Museum of Salzburg: Oil on canvas, 99x123.5cm. Inv.-Nr. 9035/49



## *St. Peter's Basilica in Rome*

Representations of the Vatican proliferated in 19th-century Europe. This view transports the viewer inside St Peter's Basilica in Rome, allowing one to admire the grandeur and detail of the architecture along the central nave. From 1861 onwards, the Basilica was also at the centre of territorial disputes between the Church and the new Kingdom of Italy, which led to the loss of the Papal States (Roman Question). Images like this not only celebrated religiosity but also functioned as symbols of resistance and affirmation of the Pope's authority in the face of the political challenges of the time.

SM



Fig. 29 – Hubert Sattler (1817-1904), *St. Peter's Basilica*, in Rome, 1862. Museum of Salzburg. Oil on canvas, 102.5x120.5cm. Inv.-Nr. 9033-49

## *Rome Seen from the Ruins of the Imperial Palaces on the Palatine Hill*

City views are central themes in Cosmoramas, evoking a visual tradition that fostered an appreciation of the city developed since the Renaissance, particularly from the sixteenth century onwards. As Europe moved away from feudal organisation, centred on rural landholding, a new urban sociability began to emerge, linked to grand, monumental cities that served as hubs of economic and cultural life<sup>1</sup>. Paintings, engravings, and panoramic maps played a vital role in shaping the modern urban imagination.

High-angle views — such as this image of Rome from the Palatine Hill — were especially prized. Approaching the “bird’s-eye view”, they combine the expansive scope of maps with a human scale that allows individual buildings to be recognised. The elevated vantage point offers a scopic pleasure, enabling the gaze to traverse the city depicted with clarity and richness of detail, including human figures engaged in everyday scenes. The golden luminosity, typical of nineteenth-century painting, enhances this delight even further. The optical device of the Cosmorama enhances the experience, as the lenses and lighting highlight details and increase the sense of wonder. These views also held political and symbolic

1. Lefebvre, H. (2000).  
*La production de l'espace*. Paris.  
*Anthropos*.



Fig. 30 – Hubert Sattler (1817-1904). *View of Rome from the Palatine Hill (Italy)*. Salzburg Museum. Oil on canvas, 105.5x160cm. Inv-nr 9003-49

value, helping to assert the identity of cities that were becoming emblems of emerging regions or nation-states.

In 1861, when Sattler painted Rome, Italian unification was still underway. Rome would only become the capital in 1870. The emphasis on the imperial ruins celebrates the civilizational origins of Italy and Europe, in an era that valued history as the foundation of national identity. Cosmoramas amplified the visual culture associated with the Grand Tour, an educational journey undertaken by wealthy young men and women to places regarded as the cradle of European civilisation. The written accounts and visual records produced from such travels were integral to the experience and soon gave rise to a commercial market. These practices helped to transform historical sites into visual symbols – the foundations of the modern tourist experience, in which seeing, recognising, and representing a place become as crucial as physically being there.

*Teresa Mendes Flores*

## ***The Colossi of Memnon, Standing 18 Metres Tall, at the Time of the Flood in Upper Egypt***

“These statues, carved from a single block of granite from the quarries of Siena, are located about an hour’s walk from the west bank of the Nile, opposite Luxor, near Medinet Habu, and depict King Amenophis III.”

– Excerpt from the original text presented to viewers of Sattler’s Cosmoramas<sup>1</sup>.

1. *Archäologische Stätten, Salzburger Museumshäfte*, no. 18, p. 48

This painting encapsulates the nineteenth-century European taste for illusionistic and imaginative depictions of ancient, exotic, and distant civilisations. As a painter-traveller, Hubert Sattler skilfully tapped into this fascination in his popular Cosmoramas. The scene is striking for the “colossal” scale of the statues, accentuated by the low vantage point of someone approaching from the river, seeing them set against a luminous blue sky – a typical feature of cosmoramic landscapes. The doubling of the figures through their reflection in the water contrasts with the arid mountainous landscape in the background. Interestingly, in the preparatory sketches Sattler made on site, near Luxor, the colossi stood on dry ground. The flooding of the Nile was a visual artifice introduced by Sattler



Fig. 31 – *The Memnon Colossi in the Nile Valley (Egypt)*, Hubert Sattler, 1846. Salzburg Museum. Oil on canvas, 104.5x132.5cm. Inv-nr 9075-49

to create a “special effect” that enveloped the colossi in an aura of mystery and inaccessibility.

Orientalist themes constituted a highly competitive market. To meet demand, painters such as Sattler undertook journeys with the aim of visually documenting monuments and cultures of the past, in a nostalgic movement of memorialisation promoted by industrial societies. These images are a direct product of the European colonial project: by idealising the past of non-European peoples through the glorification of ruins and monuments – while disregarding their present – they contributed to the erasure of those peoples’ histories and to the appropriation of their archaeological heritage, which was widely looted and transferred to European museums during this period. In the name of advancing knowledge, Europeans dispossessed Egyptians of their own history, by narrating and imagining it on their behalf – as in this image.

At the time of Sattler’s journey in 1844, Egypt was under Ottoman rule following the Napoleonic campaigns (1798–1801). However, the French presence had opened the country to European exploration. The images produced and widely disseminated in this context helped legitimise and naturalise colonialism, transforming the world into a spectacle for the European gaze – a cosmos made to fit within a single room: the Cosmorama.

*Teresa Mendes Flores*

## *The Ruins of the Temple and Complex of Karnak, near Luxor*

The result of Sattler's own trips to Egypt, this Cosmorama painting depicts the monumental ruins of Karnak, near Luxor. The composition is anchored by the imposing central colonnade, which draws the viewer's eye into the scene. Meanwhile, the foreground invites contemplation of the small human figures and the mysterious hieroglyphs. Despite its almost documentary precision, the image reflects the 19th-century Orientalist fascination and Europe's growing curiosity about archaeology and the remnants of the ancient civilisations.

SM



**Fig. 32** – Hubert Sattler (1817-1904). *The ruins of the temple and complex of Karnak near Luxor (Egypt)*, 1868. Museum of Salzburg: Oil on canvas, 106x134cm. Inv.-Nr. 9071-49

## The Circle of Sattler

This small landscape painting may have been created by Hubert Sattler or, as was often the case, by someone from his close circle. Works of this kind and scale were frequently sold as souvenirs and also served to promote the themes presented in the Cosmorama. Regardless of authorship, such paintings reflect Sattler's influence and reputation, while also bearing witness to the emergence of a tourist and collector audience, alongside the development of a parallel market for views and images associated with the Cosmorama exhibitions.

SM



Fig. 33 – Unknown [Circle of Sattler], *View of Zürich towards Lake Zurich and the Alps*, c. 1864-1873  
Oil on cardboard, 24.4x33cm. Private collection

*V. Anticipating and Returning to the Virtual*

COSMORAMA

## Before the Cosmorama Looking Close, Looking Far

The first known Cosmorama opened in Paris in 1808. However, the practice of peering through lenses to appreciate images dates back a long time. In the 18th century, the fascination with optical illusion and the simulation of visual depth led to the development of various pictorial observation devices in diverse social and cultural contexts.

In the private circles of aristocratic education, zograscopes stood out as devices designed to enhance the depth effects of watercoloured prints through the use of a magnifying lens and an angled mirror. In more popular venues—such as streets or fairs—it was common to encounter travelling showmen who advertised their ‘curious views’ by setting up optical boxes with various observation points. These were also known as *tutilimundi*, *mondo nuovo*, *marmotas*, or *optical cameras*, and were often accompanied by music.

More than mere entertainment, these instruments celebrated technical ingenuity, scientific curiosity, and a totalising conception of the world. Locating the Cosmorama within the long continuity of these ‘peeping practices’ throughout the 19th century allows us to better comprehend the later popularity of polyorama viewers and their marvellous illuminations and transitions, as well as the enormous success of stereoscopic photography— also anticipating future immersive experiences.

*Ana David Mendes and Susana S. Martins*



**Fig. 34** – Illustration published in *Câmara Óptica Onde as Vistas às Aversas Mostram o Mundo às Direitas* (Optical Chamber Where Reversed Views Show the World Aright). Edited by José Daniel Rodrigues da Costa, Lisboa, 2 July 1807

“Come closer, gentlemen, come closer, and through the lenses of this Optical Chamber observe the extravagant things that present themselves to the eyes of those who wish to see them in frames of vivid paintings; and so that these may be understood, I will, with as much clarity as possible, explain in detail the meaning of each one, which is all that lies within my power.”

Fig. 35 – Excerpt and quote (left page) from the satirical publication *Câmara Óptica Onde as Vistas às Avessas Mostram o Mundo às Direitas* (Optical Chamber Where Reversed Views Show the World Aright). Lisbon, 2 July 1807



## The *Mondi Nuovi* Showman by Nicolas-Louis-Albert Delerive (c. 1755–1818)

This painting of a street vendor with an optical box is one of the earliest and rarest depictions of this subject in Portugal. It documents the long-standing tradition of these portable optical devices, which were commonly found in fairs and town squares across the country from the mid-18th century onward. The phrase “*mondi nuovi*”—meaning “new worlds”—was often shouted by these showmen to attract curious onlookers eager to glimpse distant cities and exotic landscapes.

In the scene, we see the vendor from behind, draped in a cloak and manipulating the images inside the box using a cord. An adult man and a young boy peer into the lenses, while a child stretches out a hand, eager for his turn.

This small painting is part of a series of fourteen depictions of traditional Portuguese trades and folk types, showcasing Nicolas Delerive’s remarkable talent for capturing everyday life.

Delerive’s paintings are also part of the collections of the National Coach Museum and the National Palace of Ajuda.

*Victor Flores*



**Fig. 36** – Nicolas-Louis-Albert Delerive (c. 1755-1818), *The *mondi nuovi* showman*, c. 1801. Oil on wood. Museum of Portuguese Decorative Arts/FRESS. Inv.-Nr. 788

## The Cosmorama of Roque Gameiro (1864–1935)

In this watercolour by Roque Gameiro, a showman manipulates views with light effects for a spectator who peers in an optical box while a group of adults and children wait their turn. Although it is identified as “The Cosmorama,” a common name at the time due to the resemblance in the act of peering through lenses, it is actually a travelling dioramic optical box (with transparent views). Various advertisements and illustrations show that it was common for optical shows to adopt different names for commercial reasons. The scene takes place in Terreiro do Paço. By his clothing and posture, this showman represents a common social type very similar to that in the painting by Nicolas Delerive (previous page).

*Ana David Mendes*



**Fig. 37** – Roque Gameiro (1864 –1935) *The Cosmorama*, 1905. Watercolour on paper, 14.5x22cm. Roque Gameiro Watercolour Museum

## After the Cosmorama. *The Great Virtual Show*

The promise of a virtual journey has always been implicit in the narratives of Cosmoramas. The use of Virtual Reality in the exhibition *The Cosmorama in Lisbon* refers to this long-standing desire, while also enabling the recreation of one of the most renowned Cosmoramas in Lisbon — the *Grand Optical Gallery* by Austrian Thomas Karl Andorfer. This is a “physically augmented Virtual Reality” experience, meaning the physical space of the exhibition room was modelled to enhance the realism of the virtual experience. In addition to seeing, one can also touch the walls, lenses, and objects.

In the first part of this virtual Cosmorama, visitors are invited to peer through six thematically organised lenses, as well as choose cosmoramic views from a menu. To illustrate these themes, images by renowned painters such as François Marius Granet, George Philip Reinagle, Hubert Sattler, Ippolito Caffi, Louis Léopold Robert, and Horace Vernet are presented, along with colourised engravings from the only surviving Cosmorama — the Tomàs Mallol Collection at the Museum of Cinema in Girona. In this virtual Cosmorama room in Lisbon, the paintings are displayed through two types of lenses known from historical Cosmoramas: 15 cm lenses arranged side by side in groups of three, allowing viewers to visually explore the image from different perspectives; and 23.5 cm lenses providing a more immersive effect. The simulation of the optical and



Fig. 38 – *The Cosmorama in Lisbon*. View of the room in Virtual Reality. Design by Hugo Rodrigues

depth effects of the images in these virtual lenses was prepared using depth maps generated by artificial intelligence algorithms.

In the second part of the experience, visitors can interact with a map showing the circuits travelled by prominent Cosmorama presenters who passed through the Iberian Peninsula. Before concluding, one can also observe and touch a miniature model of the Belém Tower — a typical curiosity found in Cosmoramas — and approach a window overlooking Lisbon’s Praça do Município to watch a 3D animated video depicting the arrival of the royal family visiting the Cosmorama.

*Victor Flores*

## A ‘Cosmorama Window’ — the Physical and Virtual Recreation of a Mode of Seeing

Based on an important engraving published in the periodical *La Belle Assemblée* (Figure 16), along with other historical and iconographic sources, the *Curiositas* project developed an analogue prototype of a Cosmorama — an optical device using biconvex lenses that created a relief effect when viewing images. In particular, this prototype aimed to study a now-lost lenticular system known as the “cosmorama window”: an original combination of three biconvex lenses arranged in a semicircle and set into a ledge through which viewers would peer at the images. The multiple visual parallaxes made possible by these lenses allowed the Cosmorama’s visitor to explore each image all the way to its edges. Additionally, the arrangement of images at varying focal distances, the curvature of the lenses, and the lighting — particularly the use of 19th-century oil lamps — became the focus of heuristic and experimental research into these discontinued sensory practices.

This analogue prototype also served as a model for the creation of a Virtual Reality Cosmorama (Figure 38). For each painting, a quadrangular pyramid was designed between the lens and the image, and a lighting system was programmed with adjustable settings and controlled color temperature. Furthermore, depth maps



Fig. 39 – Components of a Cosmorama prototype designed for optical tests

generated by artificial intelligence algorithms were used to approximate the relief effect of the biconvex lenses.

This transposition aimed not only to simulate but also to critically expand this optical experience, situating it within a framework of curatorial mediation and media archaeology. Reconstructing the Cosmorama was both an exercise in preservation and memory recovery, and a strategy for the critical reinvention of 'invisible' visual heritage. In this process, remediation becomes both a creative and reflective gesture — one capable of re-inscribing historical devices into the digital present, while enhancing their possibilities for interpretation, experience, and transmission.

*Ana David Mendes*

## Depth Maps — Between the real and the virtual

The digitisation of the optical experience of a Cosmorama employed algorithms and artificial intelligence to generate depth maps from photographic reproductions of 19th-century paintings. These maps extrapolate three-dimensional information, resulting in black-and-white images where the greyscale indicates spatial depth: lighter tones suggest elements closer to a fixed reference point, while darker tones represent those farther away. This reinterpretation of the painting's RGB pixels into a depth-based monochrome image was individually calibrated for each case to simulate the optical characteristics of a historical biconvex lens.

To study this immersive experience in greater detail, a prototype Cosmorama structure was constructed, incorporating a physical lens and carefully controlled lighting. This setup utilised a photographic print of Hubert Sattler's 1862 painting, "*Interior of St. Peter's Basilica, Rome.*" Insights gained from the physical reconstruction informed adjustments to the digital depth maps, particularly in refining the contrast between spatial planes. This iterative process mediated between physical perception and virtual interpretation.

The paintings selected for this immersive process were originally composed to emphasise clear spatial separation between elements. The adjustments and resulting digital recreations aimed to

respect and highlight these compositional intentions, reinforcing the painter's original vision through enhanced virtual depth.

*Oleksandr Lyashchenko*

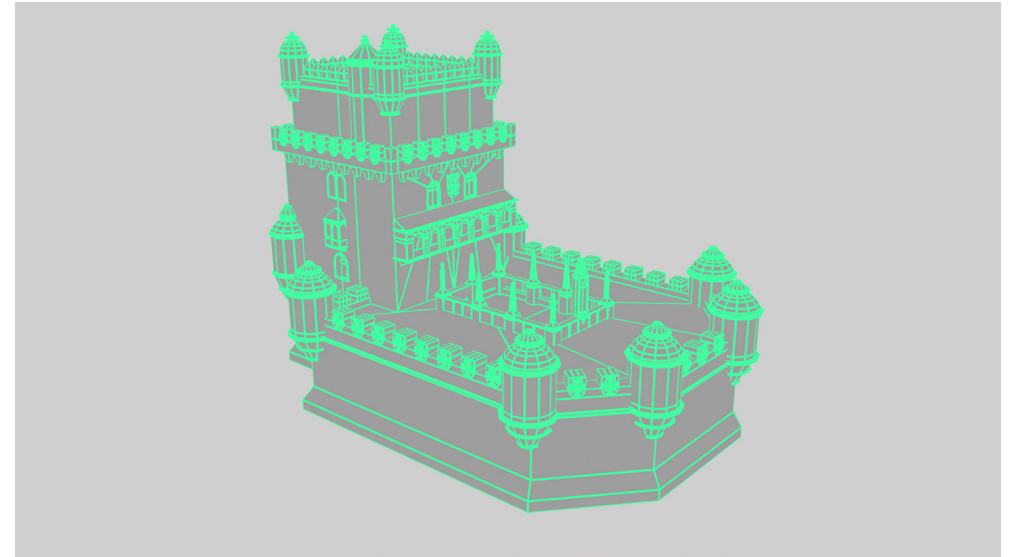


Fig. 40 — Depth map of the Cosmorama painting by Hubert Sattler, *Interior of St. Peter's Basilica, Vatican*. Salzburg Museum, Inv. no. 9033-49.

## The relief models in the Cosmoramas

Alongside the paintings placed behind lenses, many Cosmorama exhibitions also included spaces — often referred to as museums — where the public could admire meticulous models of monuments, such as this one of the Belém Tower. Frequently crafted from cork, these small-scale replicas reflected a 19th-century fascination with miniaturising the world, a practice common to many museums and collections of the time. Transposed into the Cosmorama, these miniature models evoked ideas of knowledge, ownership, and souvenir, allowing visitors to — quite literally — hold the world in the palm of their hands.

*Susana S. Martins*



**Fig. 41** – Belém Tower for 3D printing and for the Virtual Reality experience *Cosmorama. The Grand Virtual Show*. Design by Hugo Rodrigues.

## Biographical notes on the authors

### *Ana David Mendes*

Ana David Mendes is a PhD candidate in Contemporary Art at the University of Coimbra and a doctoral researcher at CICANT (Centre for Research in Applied Communication, Culture and New Technologies). She was also a researcher on the project *Curiositas: Peeping Before Virtual Reality*. Specialised in Museology, she is the artistic curator of BAG – the Municipal Gallery of Contemporary Art – and is currently the artistic director of the Villa Portela Arts Centre. She co-founded *mijimo* (Museum of the Moving Image) in Leiria in 1996 and served as its scientific and artistic coordinator until 2017. She has developed interactive exhibitions such as *The Eye Workshop* (2010) and curated museum collections incorporating new technologies. Since 2013, she has been part of several CICANT projects focused on stereoscopic photography. She has also worked in curatorship related to photography, media archaeology, panoramas, and media art installations. She is a member of ICOM (International Council of Museums).

### *Carmen López-San Segundo*

Professor at the University of Salamanca and PhD with International Mention, with the dissertation *Media Archaeology and Education: Magic Lantern Slides in Spain as a Case Study*. Her work focuses on media archaeology, visual culture, and scientific heritage through

an interdisciplinary approach that bridges history, communication, and education. She coordinates the Scientific Collections Network of the University of Salamanca ([coleccionescientificas.usal.es](http://coleccionescientificas.usal.es)) and is a member of the research group *Academic Culture, Heritage and Social Memory* ([causal.usal.es](http://causal.usal.es)). She developed the web application *Linternauta* ([linternauta.usal.es](http://linternauta.usal.es)) and coordinates the project *FotoC3: Citizenship, Creativity and Care* ([fotoc3.usal.es](http://fotoc3.usal.es)). She is involved in projects such as *Curiositas: Peeping Before Virtual Reality. A Media Archaeology of Immersion Through VR and the Iberian Cosmorama*s (Lusófona University and Nova University, Lisbon), *Magic Lantern: Study, Safeguard, Uses and Reuses in 19th-Century* (Nova University, Lisbon), and *A Million Pictures: Magic Lantern Slide Heritage as Artifacts in the Common European History of Learning*, a JPI-CH project involving the universities of Utrecht, Exeter, Antwerp, Girona and Salamanca.

### *Cèlia Cuenca*

Cèlia Cuenca holds a PhD in Art History from the University of Barcelona. Her doctoral research, conducted with the support of a *La Caixa* Foundation fellowship and framed within the field of Media Archaeology, examined the arrival, reception, and dissemination of optical views in Spain and the transformative impact optical devices had on visual culture in the eighteenth and nineteenth centuries. She completed a BA in Humanities at Pompeu Fabra University and a research Master's in Art History at Université Paris 1 Panthéon-Sorbonne. She currently serves as Curator of Photography at the Museo Nacional Centro de Arte Reina Sofía in Madrid.

### **John Plunkett**

John Plunkett is Associate Professor in the Department of English and Creative Writing at the University of Exeter, UK; his research focuses on nineteenth-century visual shows and optical media. His most recent publication is a co-authored book with Joe Kember, *Picturegoing: Popular Visual Shows 1800-1914: Picturegoing from Peep Shows to Film* (Oxford University Press, 2025), which tells the story of the growth of picturegoing as a popular habit. Drawing on a wealth of new evidence for the exhibitions of panoramas, diorama, peepshows, magic lantern, stereoscopes and early film, this book details the shows that were on offer, where and what they were, the networks and infrastructure they existed within, and, above all, how their audiences experienced them.

Previous books include *Queen Victoria – First Media Monarch* (2003), *Victorian Print Media – A Reader* (2005), co-edited with Andrew King, and *Popular Exhibitions, Science and Showmanship 1820-1914*, co-edited with Joe Kember and Jill Sullivan, as well as numerous articles.

### **Oleksandr Lyashchenko**

Oleksandr Lyashchenko holds a degree in Photography and a Master's in Film Studies from Universidade Lusófona. He has been collaborating with the Early Visual Media Lab at the CICANT research centre since 2020, where he is part of the Centre of Excellence in Immersive Media Heritage at the FilmEU European University. His work focuses on the photographic reproduction of cultural heritage, having contributed to the *Carlos Relvas Stereo Raisonné* and *FilmEU RIT Congo VR* projects. In parallel, he pursues an artistic practice, with group exhibition participations since 2021.

### **Nuno Borges de Araújo**

Born in Braga in 1959. He began learning and practicing photography in 1977. From 1976 to 1978, he worked full-time on archaeological excavations. He earned a degree in Architecture (FAUP, Porto) and worked in several architecture studios. He resumed photographic activity in 1994. From that year onward, he worked in architectural photography, having published images in various national and international architecture magazines, advertising photography, and exhibited and published his personal photographic work.

Between 1995 and 2013, he took part in various training courses in the fields of the history of photography, practice of historical photographic processes, conservation, restoration, and the treatment and dissemination of historical photographic images. In parallel, he has carried out research in the field of the History of Photography in Portugal, focusing on the period from 1839 to 1910, producing studies on national, regional, and monographic levels within this theme.

He is currently completing a PhD in Communication Sciences at the University of Minho, with the thesis "*Photography and Visual Culture in Braga, 1853–1910.*"

### **Sara Beirão**

Sara Beirão holds a degree in Art and Heritage Sciences and a Master's in Museology and Museography from the Faculty of Fine Arts of the University of Lisbon. A specialist in 19th-century art, she focused until the end of 2017 on the study of the Silva Porto Drawing Centre at the National Society of Fine Arts. From 2018 to

2022, she worked as a museologist and cultural producer at the PLMJ Foundation, contributing to various exhibition projects and the promotion of contemporary artistic heritage. She is currently a PhD candidate in Art History, specialising in Museology and Artistic Heritage, at the NOVA School of Social Sciences and Humanities in Lisbon. Her research focuses on the project "The Art of Peeking: History, Images and Musealisation of Cosmorama Exhibitions in Portugal", exploring the relationship between exhibition practices, visual culture, and the history of museology.

#### **Susana S. Martins**

Susana S. Martins is an Assistant Professor in the Department of Art History at Universidade Nova de Lisboa and serves on the Board of the Art History Institute, NOVA-FCSH/IN2PAST, where she heads the Museum Studies research group (MuSt). She earned her PhD in Photography and Cultural Studies from Katholieke Universiteit Leuven (KULeuven, Belgium). Her research focuses on the intersection of photography, exhibitions, and print cultures. In the field of museum studies, she investigates virtual heritage, the history of exhibitions, and digital museography. She teaches courses on photography, museology, contemporary art and nineteenth-century visual culture. Currently, she is Co-Principal Investigator of the research project *Curiositas: Peeping Before Virtual Reality* (2022–2026), which examines Iberian Cosmoramas. She also co-leads the research line 'Museums, Monuments and their Collections' at the associate laboratory IN2PAST.

#### **Teresa Mendes Flores**

PhD in Communication Sciences from NOVA University Lisbon (2010), she is a full researcher at the NOVA Institute of Communication and Assistant Professor in the Department of Communication Sciences at the School of Social Sciences and Humanities, NOVA University Lisbon. Her research focuses on visual culture, photography and film studies, and the archaeology of optical media. Within this scope, she has specialized in the study of the visual legacies of Portuguese colonialism. She is a researcher in the *Curiositas* project.

#### **Victor Flores**

Victor Flores is an Associate Professor and Head of the PhD Programme in Media Art and Communication at Lusófona University in Lisbon. He coordinates the Early Visual Media Lab (EVML) at the CICANT research centre and the Centre of Excellence in Immersive Media Heritage at the FilmEU European University. His research lies at the intersection of digital humanities and historical immersive media, with a particular focus on archival materials and emerging technologies such as Virtual Reality. He is the founder and principal editor of the *International Journal on Stereo & Immersive Media* and serves as the principal investigator of several research projects, including *Curiositas: Peeping before Virtual Reality* (FCT) [<https://curiositas.ulusofona.pt/>]. Victor Flores is a member of the executive board of the International Panorama Council. He also serves on the Steering Committee of the WIRE programme of the European University FilmEU.

*The Forgotten Medium*

COSMORAMA

CURI  SITAS