



EARLY VISUAL MEDIA LAB

C I C A N T

Laurent Mannoni is the scientific director of heritage of the Cinémathèque française. He is a collector, a curator, a filmmaker and the author of many contributions on the pre-history of cinema.

Victor Flores is an Associate Professor and the Director 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. He serves as the principal investigator for the research project 'Curiositas: Peeping before Virtual Reality' (FCT) (<https://curiositas.ulusofona.pt/>) and as the principal editor of the International Journal on Stereo & Immersive Media. The connection between historical research and technologies has been solidified in his recent projects: 'Decolonising the Panorama of Congo: A Virtual Heritage Artistic Research' (H2020) (<https://conGOPanorama.filmeu.eu>) and the 'Catalogue Raisonné of the Stereoscopic Photography of Carlos Relvas' (<https://carlosrelvascatalogue.pt>). He is currently a member of the executive board of the International Panorama Council. ORCID: <https://orcid.org/0000-0002-1094-0851>

Beatriz Saraiva holds a BA in Art History from the School of Social Sciences and Humanities of NOVA University Lisbon. Her master's thesis focuses on the Musée du Cinéma (later renamed Musée Henri Langlois) of the Cinémathèque française, located in the Palais de Chaillot from 1972 to 1997. Her academic and professional interests in Art History and Cinema led her to pursue career opportunities in institutions like the Arpad Szenes-Vieira da Silva Foundation, the Portuguese Cinematheque and the Calouste Gulbenkian Foundation, where she has worked since 2018 in the Collection's Management and Communication departments of the Museum. ORCID: <https://orcid.org/0009-0006-6356-362X>.

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CURATING MOVING IMAGES: LAURENT MANNONI ON HIS ARCHAEOLOGY OF THE CINEMA

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Abstract

In 2024, the 30th anniversary of Laurent Mannoni's seminal work *The Great Art of Light and Shadow: Archaeology of the Cinema* was marked. Published in 1994 on the occasion of the centenary of cinema, the book is a cornerstone in the study of the origins of moving images, drawing on extensive archival research and an intimate understanding of cinematic technology. Mannoni's approach resonates with the broader field of Media Archaeology as it explored the rich tapestry of innovation and experimentation that preceded the dominant narratives of cinema's birth.

Victor Flores and Beatriz Saraiva engage Mannoni in a retrospective that spans his decades-long career at the Cinémathèque française, where he has played a pivotal role in exploring, preserving, and celebrating the material history of cinema. From his serendipitous early encounters with luminaries like Lotte Eisner to his passion for resurrecting forgotten technologies, Mannoni shares insights into his methodology, the evolution of media archaeology, and the enduring importance of objects like the magic lantern in understanding cinema's trajectory.

As Mannoni reflects on the challenges of conserving film heritage and the role of new technologies, he offers a vision for the future: the dream of a comprehensive French cinema museum, a space that bridges the gap between past and present while honoring the universal art of moving images. This interview took place over a video call connecting Lisbon and Paris on 25 October. It provides a tribute to his life's work and an invitation to reconsider the intricate interplay of light, motion, and machinery that defines the cinematic experience.

VICTOR FLORES *You were almost 30 when the book *The Great Art Of Light And Shadow: Archaeology of the Cinema* was published for the first time in France (Fig.1). Yet this book seems to culminate a long research career because it combines and analyses an impressive variety of historical sources, hitherto little studied or even valued (patents, brochures, manuscripts). It also reveals an in-depth knowledge of cameras and their images. When did you start this book project? How does it fit in with your career at the Cinémathèque française?*

LAURENT MANNONI It's a long story. I started going to the Cinémathèque when I was very young. And it was my mother who decided one day to go to the Cinémathèque with me. I was eight then, and the first film I saw was *The Nibelungs* by Fritz Lang which was a revelation for me. After that, I went to the Cinémathèque on my own during my pre-adolescence and adolescence, and I went more often to the Cinémathèque than to school. So, it was problematic. I had to watch films. I had to watch at least one film a day. It was a massive immersion in cinema. I could have become a cinephile. In other words, people who accumulate films in their minds and want to create a kind of imaginary film library. I could have become one of those, but I turned to film history thanks to a meeting. At the Cinémathèque, I met the first curator of the film museum, Lotte Eisner, who was born in Berlin in 1896 and who had been a journalist in Berlin at *Film-Kurier*, covering film in the late 20s and early 30s. She had been on the set of Fritz Lang's and Pabst's films and was very friendly with Bertolt Brecht and people like Louise Brooks. She had an incredible international network. And this lady I met at the Cinémathèque lived

near me. I was incredibly lucky. And so, she took me under her wing in a way; she took a liking to me. On Saturdays, I would go to her house to make her some tea, and we talked a lot. She told me everything she knew, which was enormous.

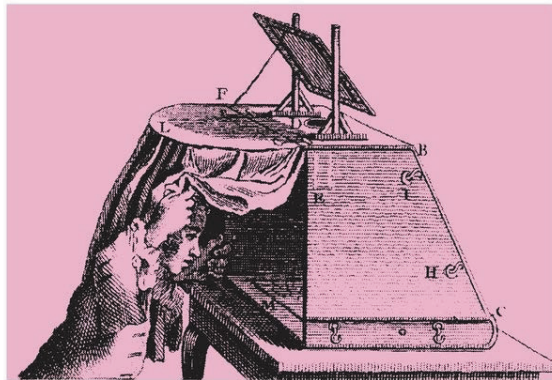
So, one day, when I tried to make her tea at this ceremony, I couldn't find it. I looked in the kitchen, on top of the cupboard, and there were many boxes. So, I took out a beautiful box, painted red with spirit varnish and a small drawing on it. The box was empty. She told me it wasn't a tea box but a magic lantern. I didn't know what it was. She explained it and told me there were very few books on the subject. So that's when I started looking into what this magic box was, and from there, I started going to archives and libraries, looking for the slightest trace of this object in literature. After that, I branched out into other parallel research areas: the beginnings of photography, cinematography, optical games, phantasmagoria, stroboscopy and so on.

Unfortunately, she died in 1983, but she had always told me I had to get into the Cinémathèque. So that stuck in my head. When I started writing this book in earnest in the 90s, I had other activities in the publishing world. I earned a living in publishing by making books and working for various publishers. At one point, I did this manuscript, which was huge, 1,000 pages long. Then, the centenary of cinema approached, so there was this opportunity to publish this work, which was scaled down a little because the manuscript was too big. So, it came out in 1994 for the centenary of cinema. The book is the result of many years of patient research at a time when I was very monomaniacal about this subject. I was practically obsessed with it day and night. The book is the result of my

Laurent Mannoni

THE GREAT ART OF LIGHT AND SHADOW

Archaeology of the Cinema



Introduction by Tom Gunning
Preface by David Robinson

Fig. 1 Cover of *The Great Art of Light and Shadow: Archaeology of the Cinema* published by University of Exeter Press in 2000

research in the Bibliothèque nationale de France, the National Archives and the Archives of Paris. That's how the book came to be published. At the time, it was a bit of a step backwards. I should have published monographs and then a general work on the subject. However, I went in the opposite direction and first published a general work on the question of film archaeology, and then I tended to do monographs. The book dates from 1994, so it's getting a bit old. Many things should be reviewed, and since then, there has been an enormous amount of fascinating research on various subjects. What I wrote about Étienne-Jules Marey in 1994 was revised in a more recent book¹. It's a work of my youth.

BEATRIZ SARAIVA *Thirty years after its publication, what new chapters could be added to this archaeology of cinema?*

L M The Panorama, for example. It's a subject that I didn't treat all that well in the end. I left it aside because there were a lot of reference works already at the time, particularly in England. Some very good books had been published on the subject. But there are other subjects I'd like to talk about today. I spent a lot of time studying Étienne-Jules Marey because he fascinated me completely. I'm unsure I'd return to him today because I've covered everything I wanted about him. Perhaps some sources suddenly come to light and allow us to write books, particularly thanks to the revelation of new archives.

B S *Do you think the recent field of media archaeology studies has contributed to these new chapters?*

L M Currently, a lot is happening in this field. There has been an explosion in the literature on media archaeology and film technology itself. There is now a huge amount of work on the history of film techniques. But there were very few publications in the '80s and '90s. Now, the history of film techniques is even taught at universities. Professors, lecturers, and students have realised that to understand cinema, one must also comprehend its techniques, as they are intimately linked. You cannot create cinema without technique, and a very close relationship exists between aesthetics and technique. What interested me was studying the devices that produce images and vice versa, the desire for images that give rise to new devices. This type of relationship is astonishing and certainly exists in other arts, too, but in a way that is very much present in cinema.

V F *The celebration of the 30th anniversary of this book is an opportunity to recall the turning point it brought about in research methodologies on the origins and prehistory of moving images. In addition to a very long history stretching back to the darkroom, the book has a large corpus covering optical boxes and peep-shows, panoramas and the daguerreotype. In his introduction to the book, Tom Gunning describes this history of four centuries of moving images as 'Mannoni's discovery of cinema'. How important is this long, non-linear history for cinema?*

1. Mannoni, L. (1999). *Etienne-Jules Marey*, Cinematheque Française.

LM It was fun to publish this book for the centenary of cinema. The book aimed to point out that the history of technology and science is very complex and that no one invents cinema in a natural, simple way overnight; that's impossible. Cinema is a fusion of several techniques invented over time. So that's what's interesting about telling this story and trying to explain to everyone that cinema, the cinematograph,

was the writing of movement that dates back perhaps to the beginning of the Renaissance or the Baroque age when suddenly, several experiments became more precise and were described in the scientific literature of the time. And when a certain number of scientists began to crystallise their ideas in writing, it became very interesting because historians could refer to them. It's because of sources and



Fig. 2 View from the storage of the Cinémathèque française

archives that we can establish this history. In the 17th century, something important happened in this archaeology, and that's why the book goes back to the beginnings of moving images in the 17th century. Several personalities like Huygens, Kircher and others began working on the question, which became exciting. But it was a question of trying to understand, in any case, how this new art that had just appeared, which consisted of projecting artificial

images and animating them mechanically, was considerable for the time. However, there was a rivalry between this 'deceptive art', as Charles Patin first described it, and immobile painting or figurative art. There is this new desire to see things move, which was very impressive in the 17th century, which became very clear in the 18th century, and turned into something massive in the 19th century..



Fig. 3 View from the storage of the Cinémathèque Française

My theory was that the Lumière brothers had done a very important job of fusing the magic lantern, photography, stroboscopy, etc. Still, there was a whole genealogy behind them. I relied on the methodology of Lotte Eisner, who had published an article in *Les Cahiers du cinéma* in the 1950s, in which she explained how to write the history of cinema. At the

time, it was quite innovative, and for me, it was the best way of writing a cinema history. She said that you should check the facts carefully, have a good grasp of the circumstances of the time, and so on. In short, these things seem obvious today to students and all historians, but in 1950, this was a novelty for cinema, which still lacked historians.



Fig. 4 View from the storage of the Cinémathèque française

BS *These historical media have not always been a priority for institutions. The Cinémathèque française stands out in this regard, as it has integrated these objects into its collection since its creation. But nowadays, these objects are part of a recognized and appreciated audiovisual heritage. However, this valorization implies their mediation in the museum space, their digitization and their interaction with different audiences. How does the Cinémathèque française meet this challenge?*

LM It's a challenge that I was confronted with at a very young age since my first exhibition was in 1995. So, after the book was published, I did my first exhibition on the archaeology of cinema. It was called *L'Art Trompeur*. And so, I was immediately obliged to ensure the public could understand the objects presented. And so that meant that these objects had to work. That meant explaining the objects, putting them in context, giving precise dates, explaining how they were used, etc. So, it was a job of teaching and a job of archaeology. What's fascinating about this history is getting the machine working again. And that's sometimes quite complicated. For example, it's difficult to redo projections with Émile Reynaud's optical theatre, like it was done recently in the United States, where the antique theatre was transported to make it work.

But it's fascinating because, by making it work, you understand Émile Reynaud, the difficulties of projection at that time, and the technological impasses of the time. The same goes for the magic lantern, when we gave magic lantern shows with old plates that lasted over an hour with a commentator, a musician, and a storyteller. Projecting over 250

complex mechanised plates at a given rhythm was enormously enriching. If, at some point, you don't try to make these objects work, you're still a long way from the object, a long way from understanding the object intimately. It's crucial to try and resurrect these techniques.

We did an exhibition at the Cinémathèque called 'La machine cinéma' (The Cinema Machine) about ten years ago. The beautiful thing in the space was a 35mm projector that worked to project an entire reel of Godard's *Mépris* into a Franscope. And the fact that this machine was up high, running by itself with the sound of the Maltese cross, with the scratches on the film, was very interesting because all the young people stood motionless in front of this enormous projector. They were always absolutely fascinated by this machine and filmed it with their little mobile phones, measuring for themselves the enormous leap forward in technology.

When I wrote my first book, I didn't realise the complexity of the optical theatre. When you describe it, it's already complex. It sounds like a baroque theatre. But when you make it work, you realise that an enormous amount goes into the projectionist's creativity. It's not at all like a film projector. It's a projectionist who sets the pace, who goes backwards and forwards. And that's quite an exercise. You understand these people's incredible work and inventiveness when you understand that. And their impasse, too. Technological dead ends and crazy, idiotic devices are very interesting. I have a great affection for idiotic devices. They're devices that lead nowhere but are extraordinary.

V F *The magic lantern plays a major role in your cinema archaeology. It's true that when we think of cinema and the art of projection, the magic lantern immediately comes to our minds. But shouldn't we also have to think of computers, scientific experiments, experimental art and virtual reality? In other words, doesn't the magic lantern also belong to other archaeologies?*

L M Yes, of course it does. The magic lantern is important for me because if I go to the cinema today, it's to see a projection and a beam of light. Fortunately, I'm always fascinated by the fact that there's a machine, a beam of light, and then there are things that move on this screen and, as Charles Patin described it back in the 17th century, the images roll in the darkness. There is something quite fascinating about this. Little children who go to the cinema always look at the beam and are very interested. I'm always like that. And the problem today is that there's a desire on the part of cinema exhibitors to stop cinema from being projected and turn it into a sort of immense television screen. I was interested in the condition of light. Today, this history is being called into question, which worries me because it's precisely this tradition we've been living by. We may suddenly experience a kind of schism, which could be fatal for certain aspects of the art of cinema. But it's very interesting to draw a parallel between the magic lantern and digital technology, for example. Because if you open a DLP projector, you will see a mechanism that Kircher could have invented. Thousands of little moving mirrors send out beams of light, electronic signals that enable projection. All this can be linked to the Archimedes mirror that Kircher was trying to invent to set fire to fleets. And so, a constant

leap can be made between very distant archaeology and the archaeology of modern times. The makers of DLP haven't read Athanasius Kircher; that's obvious, but it's up to us to draw this parallel, which is very interesting because there's a continuity in the art of catoptrics, which is quite interesting. Television projection is the same: it is based, above all, on the desire to see, to project light. However, very early on, in the 20s and 30s, there were some extremely interesting attempts at television projection based on the stroboscopic techniques of Joseph Plateau and the magic lantern, even before electronics appeared. But many things go way beyond the art of the old magic lantern, and they come up against other phenomena.

B S After all the work you have done with the collection of equipment and objects throughout your career at the Cinémathèque française and the vast literary output you've devoted to these subjects, what remains to be done? What projects do you have *for this collection in the future?*

L M A collection like that of the Cinémathèque is never finished. We must keep collecting. That's what we're actively doing. We always try to fill in the gaps and build on our strengths. So, for us, collecting data is very important. To keep studying, to keep cataloguing. And then we'd like to open a cinema museum because we don't have one in France. We used to have one, Musée Henri Langlois (founder of the Cinémathèque française), that opened in 1972 and closed in 1997. Unfortunately, the museum was destroyed by a fire; since then, we've had no museum. So, the Cinémathèque's current real

problem is showing its collections, because it certainly is one of the finest in the world.

It's huge, and it's spread across several storages. It is a fundamental collection because it's not a French-culture collection. It's a collection that includes objects from all over the world because the founders of the Cinémathèque, Lotte Eisner, Langlois, etc., didn't want to create a French-culture film library. They had the utopia of wanting to bring together world cinema, which is very interesting. Today, we have collections dedicated to German cinema, Russian cinema, Asian cinema, English cinema, etc. It's very rich, and we're still trying to achieve this universal ambition. But we'd love to see

it come to fruition in a major French cinema museum. The landscape has changed since 1997, since the closure of the Musée Henri Langlois. Other museums have opened in Europe and just about everywhere else. So, it's a bit strange that France, which has developed photography through Niépce and Daguerre, cinematography through the Lumières and chronophotograph through Marey, doesn't have a museum worthy of the name. I have a dream, which is to be able to end my career at the Cinémathèque with this museum. But I don't know if that's possible because the current circumstances in France are very complicated. In any case, I hope so

Some great film libraries were created in the 1930s. Some of them preferred to devote themselves solely to collecting film. The Cinémathèque, on the other hand, thanks to Henri Langlois, who was an extraordinary collector, tried to collect everything simultaneously: films, archives, posters, photos, cameras, costumes, objects, scripts, etc. At a certain point in time, the Cinémathèque was able to take on the task of collecting the films themselves and has come to dominate the world of film archives after the war in the 1950s. It became a model for others because it was enormous, with its collections going in all directions. All this was a bit of an inspiration for film libraries. But for all that, other film libraries in Europe and worldwide have not taken the same approach. While many cinémathèques have preferred to collect only film, some major film archives stand out with major technical collections: the Turin Museum, the Eastman Museum in Rochester, and the Berlin Museum, created in 1963. So today, through the film archives of Europe and the rest of the world, we can see several very interesting technical collections. But



Fig. 5 Noakes' triple lantern. Photography by Stéphane Dabrowski. Cinémathèque Française

what is also very embarrassing is that if one visits all the technical collections worldwide, we realise that a considerable part of the film industry's heritage has disappeared.

We'll always be missing a lot of things. There are a lot of archives that have disappeared, a lot of equipment that has disappeared, and machines that are impossible to find now. And so, it's complicated because if you want, for example, to put on a show of sound film projections from the 1910s or the late 1920s, you must bring together all the necessary equipment. It isn't easy. Today at the Cinémathèque, we've managed to project a Vitaphone film with an original loudspeaker and an original machine. It's very complex. And it wasn't quite as accomplished as it was in 1927. Unfortunately, we've reached the limits of the exercise. In other words, so much has been destroyed, the film industry has so much amnesia and so little interest in its history, and has thrown away the most interesting things. So, we're here like plumbers or rubbish collectors. We can try to organise things, but unfortunately, we're a bit late.

V F *Do you think new technologies can help us replace these technologies?*

L M I have my doubts about new technologies. They will never replace the original system. For example, if you want to remake a film in Technicolor in today's digital age, you can't. You can imitate technicolour, but you will never have the plastic beauty of Technicolor. The projection of Technicolor prints will be a very rare spectacle but impossible to reproduce digitally. These are things that belong to a lost art.



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