De Geest van Maju: The ghost lecture in the **Netherlands**

O Fantasma de Maju: a lição-demonstração de fantasmas nos Países Baixos

DULCE DA ROCHA GONÇALVES

Utrecht University, The Netherlands d.m.darochagoncalves@uu.nl

Abstract

The ghost-themed optical exhibition was very popular in the nineteenth century: from Robertson's Phantasmagoria in post-Revolutionary Paris to Pepper's Ghost at the London Polytechnic in the 1860s, audiences rushed to witness the ghostly demonstrations, also known as ghost lectures. Recently, scholars such as Bernard Lightman and Iwan Rhys Morus have argued for a re-evaluation of historical practices such as these, which used to be considered mere spectacular entertainment: what was the role of these media experiences in making their audience relate to the new industrial and technological world around them? This article will focus on the arrival of the most famous of all ghost lectures, Pepper's Ghost, which was brought to the Netherlands by Levie Kinsbergen Maju (1823-1886): I will trace the performances of the re-labelled De Geest van Maju (The Ghost of Maju) on Dutch fairgrounds and in permanent indoor theaters. The information I have gathered derives mainly from primary sources such as historical newspaper advertisements and reports. Additionally, I will approach the historical information through the concept of dispositif, following the proposal of media historian Frank Kessler: what aspects are at work in the *dispositif* of the ghost lecture? And how

Keywords

is this approach productive in terms of understanding Pepper's Ghost and De Geest van Maju as historically situated media practices?

Ghost lecture | Pepper's Ghost | magic lantern | L. K. Maju | dispositif

Resumo

No século dezanove, a demonstração de fantasmas era um tipo de espetáculo de tecnologia óptica muito popular: Da Phantasmagoria de Robertson numa Paris pós-revolucionária ao Fantasma de Pepper no Politécnico de Londres na década de 1860, o público acorria com entusiasmo para testemunhar estas demonstrações fantasmagóricas, também conhecidas sob a designação de lição-demonstração de fantasmas. Recentemente, historiadores como Bernard Lightman e Iwan Rhys Morus defendem uma reavaliação de práticas históricas como esta, anteriormente consideradas meramente espetáculos de entretenimento: Qual era o papel deste tipo de experiências de tecnologias dos media no estabelecimento de uma relação entre a audiência e o emergente novo mundo industrial e tecnológico? Este artigo aborda a chegada da mais famosa lição-demonstração de fantasmas, o Fantasma de Pepper, importado para os Países Baixos por Levie Kinsbergen Maju (1823-1886). Será apresentado um roteiro das performances do rebaptizado De Geest van Maju (o Fantasma de Maju) nas feiras e teatros holandeses. A informação recolhida provém, na sua maior parte, de fontes primárias como anúncios e notícias publicadas em jornais contemporâneos. Para além disso, a informação histórica será analisada através do conceito de dispositif, seguindo a proposta do historiador dos media Frank Kessler. Que elementos fazem parte da configuração do dispositif da lição-demonstração de fantasmas? E quais os conhecimentos que podem ser produzidos através desta linha de investigação, considerando o Fantasma de Pepper e o Fantasma de Maju como práticas situadas em contextos históricos específicos?

Palavras-chave

Lição-demonstração de fantasmas | Fantasma de Pepper | lanterna mágica | L. K. Maju | dispositif

The Ghosts at the Oude-Schans

"Have you already seen the ghosts?" is at the moment here in the city, a question that immediately follows the common "How are you?" when you meet an acquaintance whom you have not seen in the last eight days. (Algemeen Handelsblad 1833)



De Geestverschijningen op de Oude-Schans, lithography print by Johannes Hilverdink, from a drawing from Cornelis de Kruyff | (c) Courtesy Rijksmuseum, Amsterdam.

In the early days of October 1833, ghosts were the talk of the town in Amsterdam. They could reportedly be seen on the non-residential side of the Oude-Schans, a wide canal just east of Nieuwmarkt square, as "they hovered along the warehouses on the Oude-Schans like wandering lights over a swamp." (Algemeen Handelsblad 1833) Far from being frightened of witnessing such a prospect, Amsterdam city dwellers converged in great numbers on the Oude-Schans after dark in order to enjoy the sight. According to a first-hand account of the experience, the ghosts only revealed themselves according to a very particular schedule:

The ghosts of the Oude-Schans are not of a common type. They do not appear at the unpleasant hour of midnight. No! Soon after darkness has fallen, sometimes even before the streets are lit, they show their ethereal appearance, and when the clock on the Montalbans tower strikes twelve, they disappear for good. The habitués of the Oude-Schans already know this, and barely after the twelfth stroke has faded, they leave promptly and assuredly, that there is nothing left to see, as spectators of a theater show after the fall of the curtain, after the final act of the last piece of the program. (Algemeen Handelsblad 1833)

While the writer of this account waited for the sought-after sight among his fellow "spectators" assembled at the embankment, and eventually returned home without having spotted the ghosts, this ghostly occurrence seems to have generated sufficient contemporary interest in order not only to draw crowds, but also newspaper reports, several illustrations (such as the one presented in Image 1), a song, and a place in the urban folktales of Amsterdam. (ter Gouw 1871, 664) While lacking confirmation, one of the most generally accepted explanations refers to a group of students projecting images with a magic lantern as the culprits of the situation. (De Oude Tijd 1869, 354)

It is not clear, however, if this open-air ghost projection ever actually took place: for one, the first-hand testimony mentioned above seems to point to this conclusion. But more dependable seems to be the idea that an audience really assembled there expecting to see something. And they knew very well what to expect. The Dutch were in fact well aware of projections used in phantasmagoria shows, or, in the vernacular, geestverschijningen. The audience at the Oude-Schans behaved as if attending an open-air version of one of these shows: Geestverschijningen op de Oude-Schans, writes the illustrator as a caption of the depicted scene (Image 1). At least since 1805, fantasmagories were advertised in the Netherlands, usually as the last piece of séances of amusing physics performed in theaters and on fairgrounds across the country.1

Ghost projections were among the most popular visual media experiences for nineteenth century audiences. Arguably, one of the most famous examples is Pepper's Ghost, the ghost illusion at the Royal Polytechnic in London that was presented for the first time by John Henry Pepper during Christmas of 1862. (Brooker 2007, 193) After being dismissed as sheer entertainment by academia for a number of years, recent scholarship has emphasized the relevance of Pepper, and Pepper's Ghost, and proposed a reevaluation of the role of magic and illusion in negotiating scientific and technological developments in the nineteenth century.² Pepper was one of the most famous popular scientific lecturers of the Victorian age for whom the *lecture* space was the natural environment for his ghost. (Lightman 2007, 121) Pepper's ghost lecture arrived in the

See, for instance, (Amsterdamse Courant 1805; Courrier d'Amsterdam 1811a; Feuille d'Affiches, Annonces et Avis Divers de Groningue 1812; Nederlandsche Staatscourant 1817; Journal de La Province de Limbourg 1818; Middelburgsche Courant 1831).

² See, for instance, (Weeden 2008; Morus 2007; Lightman 2009; Secord 2002; During 2002; Lachapelle 2015).

Netherlands during the month of May of 1864, directly from the Polytechnic and via Dutch showman Levie Kinsbergen Maju (1823-1886). Eventually, Pepper's ghost became popularly known in the Netherlands as de geest van Maju. In this article I trace its arrival and exhibition across the country, while also examining how its relocation contributed to the media experience of historical audiences.

Previous Dutch scholarship has examined optical and projection-based media experiences. Willem Albert Wagenaar, Annet Duller and Margreet Wagenaar-Fischer (2014) have focused on lantern and slide production in the Netherlands, as well as optical forerunners such as peepshows and festive illumination, mostly during the seventeenth, eighteenth and early twentieth century. Vera Tietjens-Schuurman has remarked upon an important change that took place around the beginning of the nineteenth century: while up to this time, projection shows had been often delivered by itinerant lanternists, also known as Luikerwallen since many came from the region of Luik (Liège) in Wallonia, who wandered the streets announcing their act and in search of a paying audience, after the 1800s it was the audience that would seek the sites where the show would take place. (1979, 17-18) This development is in line with the slow transition from temporary itinerant entertainment sites, such as tents, to the construction of permanent and more specialized venues such as indoor theaters, during the nineteenth century in the Netherlands. (Logger et al. 2007, 26) But before this transition was complete, the fairground was a leading environment where the Dutch audience could attend optical shows. In Marja Keyser's survey of the Amsterdam fairground in the nineteenth century, optical shows were frequent acts presented by "physikers, mechanikers en goochelaars" (physicians, mechanics and magicians): these optical shows included phantasmagorias, but also dissolving views, panoramas, dioramas, cosmoramas, cycloramas and optical theaters. (1976, 26, 54-66) Keyser also briefly mentions De Geest van Maju as the most popular ghost show to feature in the Amsterdam fairground. However, Keyser mistakenly attributes the identity of Maju to another member of the Kinsbergen family, Roelof Hermanus Kinsbergen, a statement that she herself concedes as being possibly incorrect. (Keyser 1976, 27-28)

In the last years, historians have benefited from improved access to a large number of historical documents due to the ongoing process of archival digitalization. In the Netherlands, a robust search engine developed by the Dutch Royal Library, Delpher, allows free online access to millions of historical newspapers, periodicals and books, from the fifteenth century to the present, gathered from a number of scientific and heritage institutions and libraries.3 In addition to this digital archive, Dutch historical publications and documents can also be accessed through an online resource which aggregates information from municipal archives and collections, some of which are also digitized.4

³ The research engine can be accessed at www.delpher.nl

⁴ This online resource can be accessed at www.archieven.nl

The combination of these two online resources provides a significant geographic coverage of national but also, importantly, local publications. Based on these sources, I will present new and detailed insights regarding the performance of De Geest van Maju in the Netherlands, as well as its largely overlooked Dutch showman, L. K. Maju, and his particular connection to the London Polytechnic. In order to investigate Maju's international contacts, I have also complemented the Dutch digital sources with information gathered from international counterparts, namely from Belgium (BelgicaPress) and the United Kingdom (British Newspaper Archive).5

Art historian Noam Elcott recently formulated the concept of the phantasmagoric dispositif in order to understand media experiences in which images, such as ghost images projected outside a visible classical frame or screen, share a space-time continuum with the spectator. (Elcott 2016, 56) Elcott's use of the notion of dispositif focuses on the stable characteristics of the phantasmagoric configuration in order to differentiate it from what he terms the cinematic and domestic dispositifs. In this article I will use a different approach to the concept of dispositif: in addition to the stable features of the ghost lecture as a device, I will also focus on the unstable characteristics of the ghost lecture in comparing Pepper's Ghost to the Geest van Maju as historically situated media practices. For this, I will be following the historical pragmatic approach proposed by media historian Frank Kessler. (Kessler 2011)

A long tradition of projecting and explaining ghosts

Ghosts are intrinsically connected to the history of projection. Currently, the generally accepted evidence for dating and attributing the invention of the magic lantern is a sketch of a dancing skeleton in several positions drawn by Dutch scientist Christiaan Huygens (1629-1695) in 1659. Huygens' caption read: "For representations by means of convex glasses in a lantern". (Mannoni 2000, 38) But Huygens did not believe that the lantern could be an object for scientific practice or communication; he rather considered it "an instrument of entertainment for the 'pleasure of the evening'".(2000, 41)

However, a long tradition exists of connecting ghost visions to scientific principles. Since Pliny's Natural History (AD 77) there have been efforts to explain phantoms and apparitions as the result of projection using plane and concave mirrors. (Hecht 1984, 2) In the seventeenth century, German Jesuit Athanasius Kircher (1602-1680), for a long time credited as the inventor of the magic lantern, used the projection of devilish apparitions to explain natural phenomena (even if he did not deny the existence of demons in his theological worldview). Koen Vermeir has described Kircher's projections as a form of analogical demonstration, which he defines as a "magical symbol visualizing invisible and hidden processes in nature." (Vermeir 2005, 156) Charles Musser

⁵ Free access is also available to the Belgian online archive (<u>www.belgicapress.be</u>), however the British Newspaper Archive requires a membership fee (https://www.britishnewspaperarchive.co.uk/).

considers Kircher's ghost explanations a defining moment in the relationship between the projected image and the observer. He writes that Kircher "urged practitioners (exhibitors) to explain the actual process to audiences so that these spectators would clearly understand that the show was a catoptric art (involving reflection and optics), not a magical one." (Musser 1990, 17) Musser considers this moment, the moment that the spectator is able to attribute the existence of ghostly apparitions to human agency and not to magical or supernatural forces, as the starting point of the history of screen practices, the moment in which the observer is transformed into "the historically constituted subject we now call the spectator." (Musser 1990, 18)

In the eighteenth century, the projection of ghosts became a famous type of entertainment show. According to Tom Gunning, these shows "incorporated [Kircher's] demystification process into their elaborate magic lantern spectacles that claimed to present "phantasms of the dead or absent" to a paying public." (Gunning 2007, 108) Presented Paris in 1789, the Fantasmagorie of Étienne-Gaspard Robertson (1763—1837) was one of the most well-known ghost shows. Robertson, however, considered his performances to be more than entertainment: in his own words, he considered his sessions as "lectures on the Phantasmagoria, a science that studies all the physical means that for all time and in every nation have been used to persuade people of the resurrection and re-apparition of the dead." (Mannoni 1996, 397). Robertson's very successful ghost lectures were not considered true scientific endeavors, neither by the audience, nor by the contemporary scientific community. According to Laurent Mannoni,

His attempts to make his show resemble a class in scientific experiment or a philosophical denunciation of the 'empire of prejudice', were completely in vain. Parisians went to the Pavillon de l'Échiquier [Robertson's first venue for his Phantasmagoria] to be entertained, to experience thrills, not to be instructed. (2000, 151)

The first mention of Fantasmagorie (or Geestenverschyning as they clarify in the same advertisement), that can be found in the digital newspaper archive of the Royal Dutch Library dates from 1805: M. Mayu & Comp. announces that the fantasmagorie of a ghost-ballet will close the exhibition of physics and mechanics at the coffeehouse Keyzerlyke, in Amsterdam.⁶ (Amsterdamse Courant 1805) In 1811, a Mr. Bienvenu, professor of experimental physics, delivered his "amusing and instructive" experimental lectures in several theaters, of which the Fantasmagorie was the highlight of optical illusions. (Courrier d'Amsterdam 1811a; Courrier d'Amsterdam 1811b; Rotterdamse Courant 1811) In the early 1830s, K. Maju, the stage name of Meijer Kinsbergen, the father

The similarities between the name M. Mayu and the father of Levie Kinsbergen Maju, (Meijer) K. Maju, may suggest they were the same person. However, this is not the case: in an elucidative quarrel published in the newspapers, D. L. Bamberg accuses K. Maju, Meijer, as appropriating the name of Mayu. (Overijsselsche Courant 1823).

of Levie Kinbergen Maju, toured the fairgrounds across the Netherlands with his program of mechanical automata, pantomime and Fantasmagorie: his production seems to have focused more on theatrical performances than on amusing experiments that other ghost exhibitors featured in their programs. (Middelburgsche Courant 1831; Leeuwarder Courant 1833) In the following years, Fantasmagories were advertised in diverse fairground programs such as conjuring shows and even acrobatics. (Journal de La Haye 1840; Rotterdamsche Courant 1844). This mixture of amusing physics, conjuring and ghost projections, was in line with what was happening in other countries during that period. (Lachapelle 2015, 18) International performers such as Henri Robin also performed in the Netherlands during that period, with his popular scientific and spectacular program of amusing physics. (Vanhoutte and Wynants 2017a, 154) However, Robin's own ghost illusion, which led to a public controversy involving Pepper's Ghost regarding who was the true inventor of the device, was not yet part of the program that he presented in the Netherlands. (Vanhoutte and Wynants 2017a, 154; Lachapelle 2015, 31)

Pepper's Ghost at the Royal Polytechnic Institution in London

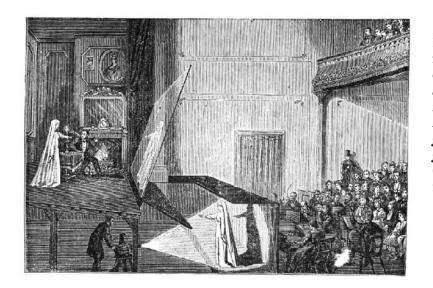


Image 2 Pepper's Ghost in the frontispiece of the Dutch edition of The Magic lantern: how to buy and how to use it, also how to raise a ghost: De tooverlantaarn. De wijze van samenstelling en gebruik, alsmede de kunst om een geest op te wekken. Amsterdam: C. L. Brinkman. (Een Spook 1873) | (c) Public domain

The days of witchcraft and sorcery are happily past; and when in this nineteenth century any phenomenon savouring of the inventions of romantic fiction gains the public ear, explanatory suggestions, based on known principles of science, are immediately forthcoming, and the mystery is soon solved.

This was well illustrated in the case of the popular illusion called "the Ghost," which attracted so much attention at the Polytechnic Institution a few years ago.

(A mere Phantom 1874, 94)

The name giver of the Polytechnic Ghost, John Henry Pepper (1821 – 1900), started lecturing at the Polytechnic in 1847 and rose to the position of Resident Director of the Institution in 1854. (Smith 2005, 140) He is credited with having transformed the Polytechnic into the epitome of Victorian rational entertainment as it pushed the boundaries of scientific instruction and theatrical recreations. (Lightman 2007, 116) Rational entertainment, explains Richard Altick, was an idea which articulated and pacified the moral challenge between the path towards self-improvement through instruction and the "innate human desire to enjoy oneself, irrespective of any lasting benefit." (Altick 1978, 227) A myriad of performances could be included under this designation. According to Jeremy Brooker, the Polytechnic was a venue which permitted "a wide range of encounters from small-scale demonstrations of glass blowing to popular lectures on 'serious' subjects and burlesque entertainments, loosely brought together in the name of 'rational entertainment'." (Brooker 2007, 189) A common evening program at the Polytechnic would last 2 hours and be divided into three sections: a lecture on astronomy, one lecture on mineralogy and one section for dissolving views, for instance. (Brooker 2013, 69)

Pepper's Ghost was "an apparatus for producing 'spectral optical illusions' by the use of mirrors in conjunction with living actors." (Altick 1978, 505) It was based on a reflecting glass positioned at a particular angle in which the projected image of a hidden actor could be displayed: the reflection would be then seen in amalgamation with the living actors on the stage (Image 2). The ghost lectures that were delivered at the Polytechnic between 1862 and 1863 featured different scenes such as The Strange Lecture (the very first), The Artist's studio, The reading of the Love Letter and The Knight watching over his Armour, among others. (Brooker 2007, 195) An invention of Henry Dircks perfected by Pepper, the device was the object of several misappropriation accusations (involving Henri Robin, for example) and patent infringement procedures, which Pepper discusses at length in his publication of 1890, The true History of the Ghost and all about Metempsychosis. (Pepper 1890) Pepper's Ghost was an extremely successful performance: besides the money earned with granting licenses for the patented exhibition of the Ghost, Pepper remarks that ticket admissions for the fifteen-month run of the first Ghost scene at the Polytechnic, amounted to twelve thousand pounds. (1890, 12) As Brooker observes, the Polytechnic, with its scientific aspiration and instructive intent, had created "the most famous of all ghosts." (2007, 203)

Some years later, the popular guidebook for lanternists The Magic lantern: how to buy and how to use it, also how to raise a ghost, besides the direct allusion made in the subtitle of the book, included not only a section devoted to guidelines on how to operate the device, but also an illustration of Pepper's Ghost in the frontispiece (Image 2). Raising Pepper's Ghost could by now be attempted by any fearless lanternist, but with what degree of success was a totally different matter.

In April 1864, a pre-announcement in Algemeen Handelsblad stated that "Maju! Member of the Royal Polytechnic and the Royal Colosseum" would be imminently arriving from London with the patented instruments of Professor Pepper (and Dircks, although the inventor's name would not always be present in these advertisements) to perform the "inimitable and wonderful Ghost Illusion" in the biggest cities in the Netherlands; the first performances would take place at the fairground of The Hague. (Algemeen Handelsblad 1864a)

Levie Kinsbergen Maju was not an unknown name to the Dutch public. Since the 1850s he had performed conjuring acts and "fantastic mechanical experiments" on fairgrounds and in theaters and coffee houses across the Netherlands under the name of L. K. Maju, Professor of Sleight-of-Hand. (Provinciale Overijsselsche En Zwolsche Courant 1850; Groninger Courant 1853; Dagblad van Zuidholland En 's Gravenhage 1856) However, by the summer of 1863, Maju had become a regular feature of the program of the Royal Colosseum in London. Exploiting his nationality as an exotic feature, he performed under the title L. Kinsbergen-Maju, Professor of Magic to the King of Holland. (The Globe 1863) After the Colosseum closed, in January 1864, Maju stayed in London and became part of the program of the Polytechnic, earning a mention in a humorous account of the daily procedures of the institution:

(...) and then, a séance by Herr Maju, the celebrated Dutch prestidigitateur. This gentleman is really amusing. He plays tricks with mice and birds, and disguises them in false skins and feathers, until you begin to believe all Dr. Darwin's theories of development. Presently, however, the mouse or the canary takes deliberate aim with a small quarter of an ounce field-piece at the canary or the mouse. He fires. The charm is snapt. The mouse becomes a canary and the canary becomes a mouse, and Herr Maju and Professor Pepper live happily everafter. (Lloyd's Weekly Newspaper 1864)

During this period Maju secured a license for Pepper's patented device (which he later said had cost him two hundred pounds), about which he expounded in the first advertisements he placed in the Dutch newspapers: no, it was not an invention of A. Sylvester, "who has a small shop and is a portrait photographer by profession"; he dismisses the claims that an attempt at this performance had been made at the Portuguese Court and also addresses the controversy with Henry Robin's device, "the show had been performed only for the English Court, and possibly the French Court, because Mr. Robin, from the theater of the Boulevard du Temple, had payed 1000 pounds to

⁷ I have published elsewhere an interactive map displaying the range of Maju's performances, as well as their temporal and spatial distribution between the 1850s and the 1880s. See (da Rocha Gonçalves 2020b), access via https://sagepus.blogspot.com/2020/10/on-trail-of-19th-century-science.html.

Professor Pepper, concerning only the patent rights for Paris"; that he had secured a six month agreement for the Netherlands for which he was the *only* authorized exhibitor; that he had assisted Pepper in performing the Ghost to the British royal family, and that it would be the exact same way that he would show it in the Netherlands, "without any quackery." (Dagblad van Zuidholland En 's Gravenhage 1864b)

Besides the newspaper announcements paved by Maju, there is evidence of other promotion material that was circulated at least in The Hague in May 1864 before his arrival at the local fairground in that same month, the first performance in the Netherlands. An elucidating newspaper report describes the suspenseful marketing strategy:

Since a few days, the sight of many inhabitants has been arrested by seven letters in doors and passages and in squares and street corners, seven letters, from which one is red and six are black; they form the words: "De Geest." [The Ghost]. What do these words mean? Which ghost do they mean? Would there be a ghost circling our streets? What is the ghost coming to do here? One hears these questions a lot. Now we can give the answer to these questions. (Dagblad van Zuidholland En 's Gravenhage 1864a)

The Ghost was well received in the Netherlands. The reports were favorable, and a visit was highly recommended. Many descriptions were published of Maju's performance: the "cloud-like" ghosts interacted with real people — such as the ghost and the person attempting to sit in the same chair (Algemeen Handelsblad 1864b); Maju explained how the ghost illusion was produced and reassured the audience that the spirits, visible in a mysterious atmosphere of near darkness, were in fact harmless (Rotterdamsche Courant 1865); and the shapes of the ghost were subject to change, as reported on the show's move from the fairground tent in the Botermarkt in Amsterdam, to the permanent indoor theater Odeon, in the same city. (Algemeen Handelsblad 1864c)

Between May and September 1864, I have been able to trace Maju's Ghost performances on the fairgrounds of Dordrecht, Den Helder, Leiden and Amsterdam, and in permanent indoor theaters in Amsterdam and Breda. (Nieuwe Rotterdamsche Courant: Staats-, Handels-, Nieuws- En Advertentieblad 1864; Bredasche Courant 1864) During the 1864-65 winter season, Maju took the Ghost to Belgium for a few months. By November the Belgian newspapers Journal de Bruxelles (1864a) and Het Handelsblad van Antwerpen (1864) announced that Maju would be exploiting Pepper's patent of the Ghost Illusion in the country: for most of the month, "Professeur Maju of the Royal Polytechnic of London" held daily presentations of *Le Fantôme* in the Théâtre des Variétés (Salle van Dyck) in Brussels. (Journal de Bruxelles 1864b)

In the summer of 1865, Maju toured the Dutch fairgrounds again: between May and August he presented the Ghost in Assen, Deventer, Leeuwarden, Zwolle, Rotterdam, Haarlem and Arnhem. At this point, he seems to have included several variations, such as the interaction between spectators and the ghost, "the spectator speaks with the

Image 3 Detail of Wat de kermis te zien geeft/ Nieuwe Nederlandsche Kinderprenten, paper print published by George Lodewijk Funke, 1865 – 1875 (c) Courtesy Rijksmuseum, Amsterdam.

ghost and he answers correctly questions about expressions or color of clothes" (Provinciale Drentsche En Asser Courant 1865); or a performance advertised as "how can people see their own ghost", which seems to imply that the illusion device was set-up in such a way that the reflection of a spectator would be projected — this particular performance was advertised as running every hour, for more than six consecutive hours. (Nieuwe Rotterdamsche Courant: Staats-, Handels-, Nieuws- En Advertentieblad 1865)

During the winter season of 1865-1866 Maju returned with his conjuring acts to the London Polytechnic program. (London Evening Standard 1865) Coming back to the Netherlands again in May 1866, he repeated the operation and imported the latest cabinet-based illusions *Proteus* and *The Sphinx* from the Polytechnic: this time, however, the performance skipped the fairground circuit and was delivered directly in the Paleis voor Volksvlijt, the Dutch "Crystal Palace". (Algemeen Handelsblad 1866) After this, Maju kept the Polytechnic type of lecture as a central feature of his professional activities: he presented a range of optical illusions, dissolving views, microscopic projections and technological novelties, in a program usually featuring three or four acts. 8 The diversity of the program catered to the different interests of the audience, but for some a Maju lecture still meant an appearance of the Ghost, as one contemporary reporter remarked:

For the lovers of natural science, Maju offered, by means of his [microscope] device, much to see, mostly from the animal kingdom, that raised their interest to such an extent that

See also my article "Science between the fairground and the academy: The case of Dutch science popularizer L. K. Maju (1823–1886)," (da Rocha Gonçalves 2020a).

he didn't disappoint them, together with the clear explanations given by Mr. Maju. Another section of the audience was more pleased with the statuettes, landscapes, seascapes, etc. which were projected on the screen, so that there was something for everyone. There were also those who felt totally disappointed, because they had imagined that Mr. Maju would be working with his optical mirrors and wanted to see "the ghost." However, "the ghost" could not come unless much more money would have been available. (Opregte Steenwijker Courant 1871)

Maju's ghost performance seems to have been so successful that the term De geest van Maju lived on in the Netherlands as a popular expression. Leo Boudewijns explains that 'de geest van Maju' was named as the culprit of "unexplained" phenomena such as creaking wooden floors, self-closing doors or strange noises coming from the attic: in such a situation, the ghost of Maju was readily the one to blame! (2001, 5) But, possibly, the most notable use of the expression "de geest van Maju' while alluding to the unsubstantial apparitions of his performances can be found in the work of renowned Dutch writer and Maju's contemporary Eduard Douwes Dekker, better known under his pen name Multatuli. In the footnote of his *Idea nr. 175*, Multatuli writes:

There is. Look at it, 'the word' par excellence, the Logos! Here I think I have found philosophy's best, most solid, and only foundation. It's no use reasoning with someone who does not accept this assumption. One can walk through him as through a ghost of Maju [geest van Maju]. (1879)

The Ghost Lecture as Dispositif

The concept of dispositif has been used in academia in many different frameworks. Michel Foucault described the concept of dispositif as the system of relations between "a thoroughly heterogeneous ensemble consisting of discourses, institutions, architectural forms, regulatory decisions, laws (...) — in short, the said as much as the unsaid."(1980, 194) With this approach, he aimed to create a framework to study the power relations articulated between the state and the population through strategic dispositifs, such as imprisonment for instance. (Foucault 1980, 195). Giorgio Agamben also follows Foucault's perspective regarding power relations, and he highlights the subjectification action of the dispositif: the idea that dispositifs transform human beings into subjects, for instance the *dispositif* of the mobile phone transforms human beings into mobile phone users. (Agamben 2009, 14) In terms of visual media scholarship, Jean-Louis Baudry has proposed the concept of cinematic dispositif:9 Baudry's approach singles out the work

⁹ It has been remarked that the concept first emerged in the work of Jean-Louis Baudry connected to film studies, and only later in Michel Foucault's work. See Frank Kessler, "Notes on Dispositif," November 2007, www. frankkessler.nl/wp-content/uploads/2010/05/Dispositif-Notes.pdf).

of Plato and Freud in connection to the experience of cinematic spectatorship, by comparing the darkened movie venue to Plato's cave, where the chained human beings observed an impression of reality which they mistook for reality itself, while at the same time forging what Freud would describe as a metapsychological connection with the projected image. (Baudry 1976, 107)

Frank Kessler proposes another framework for the concept of *dispositif* adapted to media historical research.10 Kessler suggests arranging Foucault's "heterogeneous ensemble" of elements, in terms of visual media experiences, into a triangular configuration with three constitutive poles: the techno-pragmatic pole, the textual pole, and the user-spectator pole. (Kessler 2018, 56). As such, the relations between the different elements can be approached from the perspective of these three poles. The techno-pragmatic pole includes physical and social constraints and affordances ranging from the size and arrangement of the room, to the technology present, such as magic lanterns and screens, or the ideology (or main purpose) of the organizing institution. The techno-pragmatic pole enables a communication space for the transmission of the media text and also commits the spectators to a particular goal, for instance to be informed, entertained, persuaded. The textual pole includes not only the projected images and sounds such as performed or recorded music or sound effects, but also the voice of a presenter or lecturer for instance. The user-spectator pole is situated in relation to these two: the spectator accepts the assigned role on the basis of certain expectations as a response to being addressed in a particular mode by the media text, which, in turn, is made available by the rhetoric possibilities enabled by the communication space. (Kessler 2018, 55–56) Therefore, in terms of its analytical dimension, the *dispositif* approach enables us to understand the media experience as a system of inter-dependent elements. Thus, what happens when one considers the ghost lecture as a dispositif?

A central premise of the ghost lecture as a dispositif, is the fact that, as Elcott characterizes it, the spectators' bodies share the same time-space continuum with seemingly disembodied images of ghosts. But, more importantly, this visual experience, this media text, is made possible only by meticulous showmanship and the flawless operation of the technological device: the illusion works only by rendering the technological apparatus "invisible" to the spectators. In other words, for the audience to accept the success of these ghostly apparitions, the technology needed to be convincingly eclipsed. As Iwan Rhys Morus says, audiences of a ghost lecture "were seeing a multi-layered set of technologies and performances that were designed to conceal as much as to reveal." (2012, 47) As an example, the screen, the glass surface positioned in front of the stage, as well as the actor that provides the ghost reflection, must remain "invisible" to the audience (Image 2 and 3). These issues of a techno-pragmatic nature have repercussions to the

¹⁰ See also (Kessler 2020; Vogl-Bienek n.d.).

textual dimension of this *dispositif*: the successful handling of the technological apparatus becomes part of the media text by implicitly addressing the audience with the very particular question "how does this work"? Robertson's audiences, for example, refused to consider his phantasmagoria instructive, refused to understand it as a lecture, for their expectations were to "be entertained and to experience thrills." (Mannoni 2000, 151) The Victorian audience of Pepper's ghost lecture, on the other hand, expected something else: as indicated by Morus, "the Ghost's virtue lay in the challenges it posed to the audience of deciphering the trick behind its production." (2007, 362) In terms of rhetorical strategy, the ghost lecture is a demonstration lecture of a very particular kind: paradoxically, for the ghost lecture to succeed, the very technology it claims to demonstrate must remain invisible. Technology, thus, must work as magic. In the mid-nineteenth century this was important, because it connected technology to a wholesome type of magic: the ghost lecture "provided a means of making the rational magical." (Morus 2007, 362) Reportedly, spectators of Pepper's Ghost at the Polytechnic "wondered whether they were awake or dreaming." (During 2002, 143) The format of the ghost lecture enabled science to "conjure ghosts." (Vanhoutte and Wynants 2017a, 165)

Another important aspect of the dispositif approach as a historical tool is that it goes beyond understanding the ghost lecture purely as a media experience detached from particular conjunctural elements: the dispositif approach highlights the mutability of media texts across different viewing situations, different intentions, different expectations at different historical moments. (Kessler 2011, 23) By encouraging the integration of the media text within a historically situated practice, this reveals a range of different factual historical experiences, as opposed to something otherwise perceived as a monolithic media object, functioning, as it were, outside history. Elcott's approach, as well as Baudry's proposal, focus on the stable, universal characteristics of the dispositif, while Kessler critiques this ahistorical perspective. (2018, 54) For the current discussion, there are two main unstable aspects of a techno-pragmatic nature grounded in the historical particularities of this case that need to be addressed: the characteristics and discourses connected to the diverse performance spaces in London and in the Netherlands; and the two front-stage showmen whose names became permanently attached to the performance, Pepper and Maju.

In terms of performance spaces, the only recovered illustration so far of *De Geest* van Maju (Image 3 and 4) paints the picture of an exhibition context very different from the one at Pepper's Polytechnic: the cord dancers, the jugglers, the animal trainers and the carousels of the fairground are depicted as the neighboring acts of the Ghost in the Netherlands, as opposed to the edifying lectures and experiences of a "science center" such as the Polytechnic. (Lightman 2007, 116) At this time, the fairground was the object of impassioned discussions in the Netherlands, the "kermiskwestie", or fairground question: even if it was not a new topic of controversy, by the middle of the nineteenth century, and following the so-called "civilizing offensive" movement, the fairground

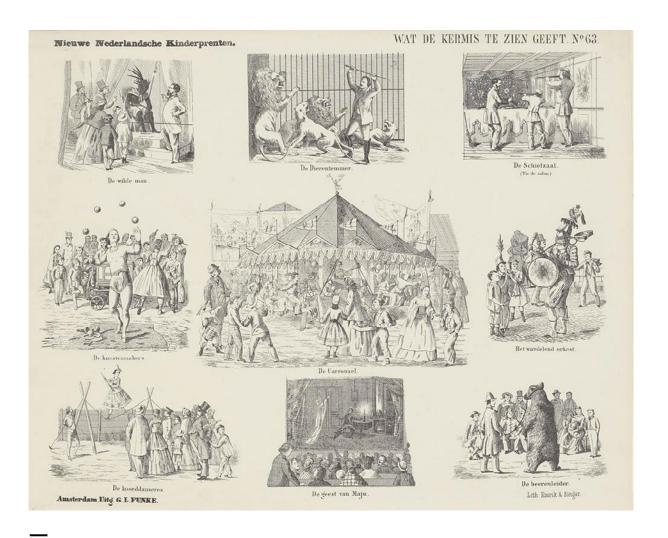


Image 4 Wat de kermis te zien geeft/ Nieuwe Nederlandsche Kinderprenten, paper print published by George Lodewijk Funke, 1865-1875 (c) Courtesy Rijksmuseum, Amsterdam.

was the object of complaints mainly regarding "excessive drinking and vulgar entertainment." (Dekker 1996, 193; de Rooy 1995, 12)

Even if never explicitly mentioned in his advertisements, which is comprehensible since he probably did not want to hinder his position towards either side of the discussion, Maju seems to have been well aware of this polarizing issue, for he presented his "unadorned lecture" as exceptional among other fairground acts. In the introduction of the booklet that described the three ghost scenes that comprised his performance in the summer of 1865, Maju writes:

I have, through many monetary sacrifices, managed to produce something for the audience in the Netherlands the likes of which they have never seen, and because of the unadorned lecturing, or the omission of all so-called quackery it can not be compared to fairground entertainment, since it deserves a top ranking in the field of true art. ("Tekst-Boekje van Professor Peppers Geest, of Ontastbare Menschen, Geheel Nieuwe Illusie" 1879)

Regardless of Maju's efforts, it is unclear if De Geest van Maju was considered an example of acceptable rational entertainment for those who asked for the abolition of the Dutch fairground. Nevertheless, Maju was apparently able to seamlessly navigate between presenting the Ghost at the fairground and in permanent indoor theaters such as the Odeon in Amsterdam and the Schouwburg of Breda. (Algemeen Handelsblad 1864c; Bredasche Courant 1864) This is relevant because besides inferring the reach of the ghost lecture towards more diversified audiences, it also reveals that Maju was able to swiftly adapt the technological apparatus to different physical settings. Besides, it seems that Maju was aware of the ongoing transition from the temporary fairground as a privileged site for entertainment, to the more modern, and possibly more refined permanent sites in the city. (Klöters 1995, 83)

Pepper, appointed professor of chemistry by the board of the Polytechnic, was considered to be too theatrical for a popular science lecturer, a trait of which the staging of the Ghost might be the ultimate example: Pepper was "a self-fashioned theatrical lecturer par excellence." (Lightman 2007, 122-23; Smith 2005, 140) Conversely, Maju seems to have bridged a conjuring background towards lecturing and technological exhibition. At the Polytechnic, while Pepper still had scientific credentials despite his theatrical penchant, Maju performed prestidigitation acts and "the most astonishing experiments in natural magic and legerdemain." (London Evening Standard 1865) His professional activities fit in with what Simon During describes as magic assemblage, for which sleight of hand and conjuring was considered as a "threshold skill for a career which involved investment in, and the presentation of, a number of para-magical genres" (2002, 69). Among these para-magical genres, Simon During places the magic lantern and new technologies that could be considered "magical." (2002, 69) After importing the cabinet-based illusion *The Sphinx* from the Polytechnic in the summer of 1866, Maju became more and more involved with new technologies and lantern lectures. By the end of the 1870s, when Pepper returned to the Polytechnic and presented the new illusion Metempsychosis (an illusion which would be exploited extensively as a fairground attraction), Maju was presenting Edison's phonograph, not only to the general public but also to the Royal Dutch Academy of Sciences. 11 So if Pepper seems to have transitioned from a background of science and technology towards producing spectacular performances, Maju, whose background was in stage magic, realigned his performances towards scientific demonstrations and technological novelties.

¹¹ About the illusion Metempsychosis at the Polytechnic see (Brooker 2007, 200); about Metempsychosis as a fairground attraction see (Jonckheere and Vanhoutte 2019, 275); about Maju's phonograph lectures in the Netherlands see, for instance, the contemporary newspaper reports in (Het Nieuws van Den Dag: Kleine Courant 1878; Nederlandsche Staatscourant 1878), and also (da Rocha Gonçalves 2020a).

There is a big distinction to be made in terms of presenting a technological apparatus as its inventor, or only as its exhibitor. As (co)-inventor of the technological device, Pepper had the benefit of authority over the Ghost, even before it became a successful performance, something which was not the case for Maju. Despite the fact that the Pepper's name was dropped in the Dutch context, and its expression changed to the Ghost of Maju, Maju never claimed to be the inventor of the Ghost nor advertised it under different designations. On the contrary, he repeatedly advertised the Ghost with Pepper's and the Polytechnic's name, and he would lose no opportunity, also in later years, to brand himself as a "member of the Polytechnic." (Algemeen Handelsblad 1867) This branding strategy seems to have functioned as a way of providing legitimization and authority to his performance: the alliance with the London Polytechnic placed him in the context of technological expertise and scientific entertainment. It signaled to the Dutch audience that their expectations should not be directed towards Maju, the conjuror that they might recognize from the 1850s, but towards Maju, member of the Royal Polytechnic in London.

Considering Pepper's Ghost and De Geest van Maju as historically situated media practices under the framework of the *dispositif* approach allows for understanding these performances in terms of their similarities (they were in fact based in the same patented device) but also, importantly, in terms of their distinctive features. The diversity of elements which the dispositif approach brings to the fore directly influence and shape the experience of historical audiences. As discussed above, in the early 1860s, the fairground circuit in the Netherlands and the Royal Polytechnic Institution in London negotiated particular social and cultural discourses, some even of a contradictory nature such as their position in terms of popular edification efforts. Pepper, professor of chemistry, and Maju, professor of natural magic, commanded, without doubt, different figures upon a stage, even if during the ghost lecture they both assumed the same role: as narrators, they explained the ghostly apparitions and "how to see through the effects." (Morus 2012, 48; Rotterdamsche Courant 1865) In any case, Pepper and Maju had something in common: they both demonstrated flawless showmanship and command of the technological apparatus to make the Ghost a public success. And this was no lesser feature for the "superlative piece of stagecraft" that was the ghost lecture. (Morus 2007, 366)

Postscript: A ghost in Dam Square

For centuries the ghost has been used to challenge our knowledge of the world: from Kircher's demystification efforts to Pepper's exaltation of technological expertise, the ghost has been used to explain the workings of nature as well as the workings of technology. As Vanhoutte and Wynants remarked, the shifting and elusive, not-hereand-not-there nature of the ghost make it the perfect figure to understand the limbo of successfully combining science and magic on a stage. (2017b, 165) And Tom Gunning describes the ghost as the ultimate mediator: "the phantasm mediates between

presence and absence, possession and loss, reality and sign, opening up a realm not only of mourning and symbolic action but also of play and artistry." (2007, 120)

The Dutch of the nineteenth century seemed to have been quite fond of the ghost device. In the Algemeen Handelsblad of September 29, 1874, a short article reported on a recent impromptu evening gathering of hundreds of people at Dam Square, in Amsterdam. While the title of the text mentioned "a ghost," this idea was immediately debunked by the explanation that a "phenomenon of optical illusion" had been the reason for the interest of the crowd. Furthermore, the ghostly appearance of a white lady in the dome of the tower had been tentatively justified with the fact that the tower clock had been recently restored and a possible new reflection could have created the image. This theory had been quickly put to the test: "some men that were in the Groote Club, climbed the roof to inspect the cause of such remarkable reflection." (1874) Alas, it was to no avail. But while the actual cause of these apparitions remained a mystery for the curious onlookers, one thing was certain: they were not afraid. The audience at Dam Square, as the one at the Oude-Schans some decades before, knew very well that there were no such things as ghosts. And, by climbing the roof in search of its rational explanation, they were, as the spectators of the ghost lecture, trying to answer the question that was somehow being posed to them: How does it work? How can we explain the ghost?

Bibliography

- A mere Phantom. 1874. The Magic Lantern: How to Buy and How to Use It, Also How to Raise a Ghost. London: Houlston and Sons.
- Agamben, Giorgio. 2009. "What Is an Apparatus?" And Other Essays. Translated by David Kishick and Stefan Pedatella. Stanford, California: Stanford University Press.
- Algemeen Handelsblad. 1833. "De Spoken.," October 17, 1833. http://resolver.kb.nl/ resolve?urn=ddd:010069219:mpeg21:p004.
- ----. 1864a. "Advertentie De Geest van London," April 23, 1864. http://resolver.kb.nl/ resolve?urn=ddd:010139158:mpeg21:p006.
- --. 1864b. "Concert En Tooneelnieuws," September 19, 1864. http://resolver.kb.nl/ resolve?urn=ddd:010139344:mpeg21:p004.
- ---. 1864c. "Concert En Tooneelnieuws Maju," September 26, 1864. http://resolver.kb.nl/ resolve?urn=ddd:010139353:mpeg21:p004.
- ---. 1866. "Voorstelling Maju De Sphinx En Proteus," May 14, 1866. http://resolver.kb.nl/ resolve?urn=ddd:010140703:mpeg21:p003.
- ----. 1867. "Advertentie Maju Polytechnic," February 9, 1867. http://resolver.kb.nl/ resolve?urn=ddd:010138571:mpeg21:p006.
- ---. 1874. "Een Spook Op Den Dam.," September 29, 1874. http://resolver.kb.nl/ resolve?urn=ddd:010104093:mpeg21:p002.
- Altick, Richard Daniel. 1978. The Shows of London. Cambridge, Massachusetts London, England: The Belknap Press of Harvard University Press.
- Amsterdamse Courant. 1805. "Advertentie M. Mayu En Comp.," January 12, 1805. http://resolver.kb.nl/ resolve?urn=ddd:010719753:mpeg21:p004.

- Baudry, Jean-Louis. 1976. "The Apparatus." Translated by Jean Andrews and Bertrand Augst. Camera Obscura: Feminism, Culture, and Media Studies 1, n. 1: 104-26.
 - https://doi.org/10.1215/02705346-1-1_1-104.
- Boudewijns, Leo. 2001. De geest van Maju: muziekverhalen, anekdotes uit de platen- en CD-wereld. Baarn: De Prom.
- Bredasche Courant. 1864. "Maju Breda," June 12, 1864. http://resolver.kb.nl/ resolve?urn=ddd:010155546:mpeg21:p004.
- Brooker, Jeremy. 2007. "The Polytechnic Ghost". Early Popular Visual Culture 5, n. 2: 189–206. https://doi.org/10.1080/17460650701433517.
- -. 2013. The Temple of Minerva: Magic and the Magic Lantern at the Royal Polytechnic Institution, London, 1837-1901. London: The Magic Lantern Society.
- Courrier d'Amsterdam. 1811a. "Advertentie Monsieur Bienvenu," April 10, 1811. http://resolver.kb.nl/ resolve?urn=ddd:010244952:mpeg21:p003.
- –. 1811b. "Théatre Allemand Bienvenu," April 24, 1811. http://resolver.kb.nl/ resolve?urn=ddd:010244966:mpeg21:p003.
- Dagblad van Zuidholland En 's Gravenhage. 1856. "Advertentie Maju Kermis 1856," May 10, 1856. http://resolver.kb.nl/resolve?urn=ddd:000011450:mpeg21:p004.
- ---. 1864a. "Binnenland Residentie-Nieuws," May 3, 1864. http://resolver.kb.nl/ resolve?urn=ddd:000022001:mpeg21:p002.
- ---. 1864b. "Advertentie De Geest," May 8, 1864. http://resolver.kb.nl/ resolve?urn=ddd:000022005:mpeg21:p004.
- De Oude Tijd. 1869. A.C. Kruseman. https://resolver.kb.nl/resolve?urn=MMSFUBA02:000050800.
- Dekker, Betty. 1996. "De Vereeniging Tot Veredeling van Het Volksvermaak Te Amsterdam, 1871-1910. Van Volksverheffing Tot Oranjevereniging". De Negentiende Eeuw 20, n. 3: 192-204. https://webdoc. ubn.ru.nl/tijd/n/negeee/vol20_1996/veretovev.pdf.
- During, Simon. 2002. Modern Enchantments: The Cultural Power of Secular Magic. Cambridge, Mass: Harvard University Press.
- Een Spook. 1873. De Tooverlantaarn. De Wijze van Samenstelling En Gebruik, Alsmede de Kunst Om Een Geest Op Te Wekken. Amsterdam: C. L. Brinkman.
- Elcott, Noam M. 2016. "The Phantasmagoric Dispositif: An Assembly of Bodies and Images in Real Time and Space". *Grey Room* 62: 42-71. https://doi.org/10.1162/GREY a 00187.
- Feuille d'Affiches, Annonces et Avis Divers de Groningue. 1812. "Advertentie Verhagen & Co.," September 25, 1812. http://resolver.kb.nl/resolve?urn=ddd:010172810:mpeg21:p007.
- Foucault, Michel. 1980. Power/Knowledge: Selected Interviews and Other Writings 1972 1977. Edited by Colin Gordon. New York: Vintage Books.
- Gouw, Jan ter. 1871. De Volksvermaken. Haarlem: Erven F. Bohn.
- Groninger Courant. 1853. "Advertentie Maju Concertzaal," April 5, 1853. http://resolver.kb.nl/ resolve?urn=ddd:010772974:mpeg21:p005.
- Gunning, Tom. 2007. "To Scan a Ghost: The Ontology of Mediated Vision". *Grey Room*, no. 26: 94–127. https://www.jstor.org/stable/20442752.
- Hecht, Hermann. 1984. "The History of Projecting Phantoms, Ghosts and Apparitions: Part 1". New Magic Lantern Journal 3, nº1: 2-6. http://www.magiclantern.org.uk/new-magic-lantern-journal/ pdfs/4008584a.pdf.
- Het Handelsblad van Antwerpen. 1864. "Binnenland," November 4, 1864. https://uurl.kbr.be/1095501. Het Nieuws van Den Dag: Kleine Courant. 1878. "Gemengd Nieuws". October 17, 1878. http://resolver. kb.nl/resolve?urn=ddd:010061617:mpeg21:p002.
- Jonckheere, Evelien, and Kurt Vanhoutte. 2019. "Métempsycose as Attraction on the Fairground: The Migration of a Ghost." Early Popular Visual Culture 17, no 3-4: 261-78. https://doi.org/10.1080/17460 654.2019.1667645.
- Journal de Bruxelles. 1864a. "Arts, Sciences et Lettres," November 1, 1864. https://uurl.kbr.be/1340571. ---. 1864b. "Spectacles et Concerts," November 11, 1864. https://uurl.kbr.be/1340580.

- Journal de La Haye. 1840. "Advertentie D. L. Bamberg," May 9, 1840. http://resolver.kb.nl/ resolve?urn=ddd:010093036:mpeg21:p004.
- Journal de La Province de Limbourg. 1818. "Advertentie Hoestenberghe," May 13, 1818. http://resolver. kb.nl/resolve?urn=ddd:010041988:mpeg21:p004.
- Kessler, Frank. 2011. "Recadrages: pour une pragmatique historique du dispositif cinématographique." Recherches sémiotiques 31: 15-32. https://doi.org/10.7202/1027438ar.
- -. 2018. "The Multiple Dispositifs of (Early) Cinema." Cinémas: Revue d'études cinématographiques 29 (1): 51. https://doi.org/10.7202/1071098ar.
- -. 2020. "The Educational Magic Lantern Dispositif." In A Million Pictures: Magic Lantern Slides in the History of Learning, edited by Sarah Dellmann and Frank Kessler. New Barnet: John Libbey.
- Keyser, Marja. 1976. Komt Dat Zien! De Amsterdamse Kermis in de Negentiende Eeuw. Amsterdam: B. M. Israel.
- Klöters, Jacques. 1995. "Amusement in de Dagen van Olim." InDat Is de Kleine Man...: 100 Jaar Joden in Het Amsterdamse Amusement, 1840-1940, edited by Joost Groeneboer and Hetty Berg, 83-116. Zwolle: Uitgeverij Waanders; Joods Historisch Museum.
- Lachapelle, Sofie. 2015. Conjuring Science: A History of Scientific Entertainment and Stage Magic in Modern France. https://doi.org/10.1057/9781137492975.
- Leeuwarder Courant. 1833. "Advertentie K. Maju Leeuwarden," July 12, 1833. http://resolver.kb.nl/ resolve?urn=ddd:010582071:mpeg21:p004.
- Lightman, Bernard. 2007. "Lecturing in the Spatial Economy of Science." In Science in the Marketplace: Nineteenth-Century Sites and Experiences, edited by Aileen Fyfe and Bernard Lightman, 97-132. Chicago, IL, United States: University of Chicago Press.
- ... 2009. Victorian Popularizers of Science: Designing Nature for New Audiences. Chicago, IL, United States: University of Chicago Press.
- Lloyd's Weekly Newspaper. 1864. "Polytechnic Institution," May 15, 1864. https://www. britishnewspaperarchive.co.uk/viewer/bl/0000079/18640515/035/0008.
- Logger, Bob, Eric Alexander, Menso Carpentier Alting, Nico van der Krogt, and Nathalie Wevers, eds. 2007. Theaters in Nederland sinds de zeventiende eeuw. Amsterdam: Theater Instituut Nederland.
- London Evening Standard. 1865. "Advertisement Royal Polytechnic," December 26, 1865. https://www. britishnewspaperarchive.co.uk/viewer/bl/0000609/18651226/011/0001.
- Mannoni, Laurent. 1996. "The Phantasmagoria." Film History 8 (4): 390-415.
- -. 2000. The Great Art of Light and Shadow: Archaeology of the Cinema. Translated by Richard Crangle. Exeter Studies in Film History. Exeter: Univ. of Exeter Press.
- Middelburgsche Courant. 1831. "Advertentie K. Maju Middelburg," July 30, 1831. http://resolver.kb.nl/ resolve?urn=ddd:010270194:mpeg21:p002.
- Morus, Iwan Rhys. 2007. "'More the Aspect of Magic than Anything Natural": The Philosophy of Demonstration". In Science in the Marketplace: Nineteenth-Century Sites and Experiences, edited by Aileen Fyfe and Bernard Lightman, 336-70. Chicago, IL, United States: University of Chicago Press.
- . 2012. "Illuminating Illusions, or, the Victorian Art of Seeing Things". Early Popular Visual Culture 10, nº1: 37-50. https://doi.org/10.1080/17460654.2012.638806.
- Multatuli. 1879. *Ideën I*. Amsterdam: G. L. Funke.
- Musser, Charles. 1990. The Emergence of Cinema: The American Screen to 1907. New York, N.Y.: Charles Scribner's Sons,.
- Nederlandsche Staatscourant. 1817. "Advertentie Mr. Comte," September 27, 1817. http://resolver.kb.nl/ resolve?urn=ddd:010052062:mpeg21:p004.
- Nederlandsche Staatscourant. 1878. "Koninklijke Akademie van Wetenschappen.," October 31, 1878. http://resolver.kb.nl/resolve?urn=MMKBo8:000146802:mpeg21:p002.
- Nieuwe Rotterdamsche Courant: Staats-, Handels-, Nieuws- En Advertentieblad. 1864. "Advertentie Dordrecht," May 24, 1864. http://resolver.kb.nl/resolve?urn=ddd:010111234:mpeg21:p004.
- ---. 1865. "Advertentie Geest Rotterdam," August 10, 1865. http://resolver.kb.nl/ resolve?urn=ddd:010111612:mpeg21:p004.

- Opregte Steenwijker Courant. 1871. "Steenwijk, 3 Februarij," February 6, 1871. http://resolver.kb.nl/ resolve?urn=MMGASL01:000361032:mpeg21:p00004.
- Overijsselsche Courant. 1823. "Advertentie D. L. Bamberg," August 1, 1823. http://resolver.kb.nl/ resolve?urn=ddd:010118339:mpeg21:p002.
- Pepper, John Henry. 1890. The True History of the Ghost and All About Metempsychosis. London, Paris, New York and Melbourne: Cassel & Company, Limited.
- Provinciale Drentsche En Asser Courant. 1865. "Assen, 26 Mei," May 27, 1865. http://resolver.kb.nl/ resolve?urn=ddd:010775753:mpeg21:p003.
- Provinciale Overijsselsche En Zwolsche Courant. 1850. "Advertentie Maju Koffijhuis," February 26, 1850. http://resolver.kb.nl/resolve?urn=ddd:010121509:mpeg21:p002.
- Rocha Gonçalves, Dulce da. 2020a. "Science between the Fairground and the Academy: The Case of Dutch Science Popularizer L. K. Maju (1823-1886)". Public Understanding of Science 29, nº 8: 881-91. https://doi.org/10.1177/0963662520965093.
- . 2020b. "On the Trail of 19th Century Science Performers: The Case of L. K. Maju." Sage Public Understanding of Science (blog). October 21, 2020. https://sagepus.blogspot.com/2020/10/on-trail-of-19th-century-science.html.
- Rooy, Piet de. 1995. "Toen Zijn de Mannen Uithuizig Geworden." InDat Is de Kleine Man...: 100 Jaar Joden in Het Amsterdamse Amusement, 1840-1940, edited by Joost Groeneboer and Hetty Berg, 9-23. Zwolle: Uitgeverij Waanders; Joods Historisch Museum.
- Rotterdamsche Courant. 1844. "Advertentie Boesnach," August 10, 1844. http://resolver.kb.nl/ resolve?urn=ddd:010394694:mpeg21:p004.
- Rotterdamsche Courant. 1865. "De Geest.," August 17, 1865. http://resolver.kb.nl/ resolve?urn=ddd:010975799:mpeg21:p002.
- Rotterdamse Courant. 1811. "Théatre Rotterdam Bienvenu," May 25, 1811. http://resolver.kb.nl/ resolve?urn=ddd:010123732:mpeg21:p003.
- Secord, James Andrew. 2002. "Portraits of Science: Quick and Magical Shaper of Science". Science 297, nº. 5587: 1648-49. https://doi.org/10.1126/science.297.5587.1648.
- Smith, Lester. 2005. "Entertainment and Amusement, Lectures and Instruction: Lectures at the Royal Polytechnic Institution". In Realms of Light: Uses and Perceptions of the Magic Lantern from the 17th to the 21st Century, 138-45. Ripon: Magic Lantern Society.
- "Tekst-Boekje van Professor Peppers Geest, of Ontastbare Menschen, Geheel Nieuwe Illusie." 1879. Gaspard Philippe Charles van Breugel. Programma's, strooi- en aanplakbiljetten en andere stukken betreffende de Haarlemse kermis (met veel voorbeelden van reuzen, dwergen en andere 'wonderen der natuur'), 1870-1874, 1879. Noord-Hollands Archief.
- The Globe. 1863. "Advertisement Royal Colosseum," June 1, 1863. https://www.britishnewspaperarchive. co.uk/viewer/bl/0001652/18630601/011/0001.
- Tietjens-Schuurman, Vera. 1979. Van Toverlantaarn Tot Kinematograaf. Rottevalle, Friesland: Stichting Peter Bonnet Museum.
- Vanhoutte, Kurt, and Nele Wynants. 2017a. "On the Passage of a Man of the Theatre through a Rather Brief Moment in Time: Henri Robin, Performing Astronomy in Nineteenth Century Paris". Early Popular Visual Culture 15, n.º 2: 152-74. https://doi.org/10.1080/17460654.2017.1318520.
- –. 2017b. "Magie en wetenschap in de spektakelcultuur van de negentiende eeuw: Henri Robin in de Lage Landen". Journal for Media History 20, no. 2: 30-53. DOI: 10.18146/2213-7653.2017.330.
- Vermeir, Koen. 2005. "The Magic of the Magic Lantern (1660-1700): On Analogical Demonstration and the Visualization of the Invisible." The British Journal for the History of Science 38, no. 2: 127-59. https://doi.org/10.1017/S0007087405006709.
- Vogl-Bienek, Ludwig. n.d. "The Dispositif of the Historical Art of Projection. Heuristic Concept for Interdisciplinary Research Dispositif of the Historical Art of Projection." E-Laterna Historical Art of Projection. Accessed April 20, 2020. http://tcdho1.uni-trier.de:9191/en/sections/fundamentals/ copy_of_magic-lantern/the-dispositif-of-the-historical-art-of-projection.-heuristic-concept-forinterdisciplinary-research-new-version.

Wagenaar, Willem Albert, Annet Duller, Margreet Fischer-Wagenaar, and Wim Tigges. 2014. Dutch Perspectives: 350 Years of Visual Entertainment Based on the Research of Willem Albert Wagenaar and Annet Duller. London: Magic Lantern Society.

Weeden, Brenda. 2008. *The Education of the Eye: History of the Royal Polytechnic Institution*; 1838 — 1881. The History of the University of Westminster 1. London: Granta Edition.

Biographical note

Dulce da Rocha Gonçalves has a background in visual arts, design and cinema. She obtained her first MA in Dramaturgy and Directing (Cinematographic Project) from the National School of Theatre and Cinema, in Lisbon. In 2018, she received her second master's degree (cum laude) in Film and Photographic Studies from Leiden University, in the Netherlands. Her thesis focused on media archaeology and the archive. Currently she is a PhD candidate at the Institute for Cultural Inquiry in Utrecht University in the project 'Projecting Knowledge — The Magic Lantern as a Tool for Mediated Science Communication in the Netherlands, 1880-1940'.

ORCID iD

0000-0002-5467-7610

Acknowledgements and funding

This work is part of the research program "Projecting Knowledge — The Magic Lantern as a Tool for Mediated Science Communication in the Netherlands, 1880-1940" with project number VC.GW17.079 / 6214, which is financed by the Dutch Research Council (NWO)...

Morada institucional

Muntstraat 2-2a, 3512 EV Utrecht, The Netherlands.

Received Recebido: 2020-05-09 Accepted Aceite: 2020-10-05

DOI https://doi.org/10.34619/rss7-d797