



PROJECTING KNOWLEDGE

The magic lantern in science communication

13-14 Oct. 2022 | Sociëteit Vereniging, Mariaplaats 14, Utrecht

Conference Program

Audiences

What do we know about audiences of educational lantern lectures, about their social composition, their preferences, expectations, and meaning-making strategies? The goal of this panel is to better understand the limitations and possibilities of historical audience and reception research in lantern studies. By moving away from the default focus on the lecturer's intentions and/or institutional contexts, we rather apply socio-cultural perspectives and reflect on how to characterize and define "the audience" or "the spectator" of lantern lectures and the specific role(s) they played in its performative *dispositif*. Within this framework we discuss possible research topics, methodological strategies, and the potential of unexplored archival sources, while acknowledging the epistemological challenges that are inextricably linked to historical audience and reception research.

Pedagogy

The deployment of the new visual medium of optical lantern projections within academic teaching practices around the turn of the 20th century in the Netherlands was the result of a complex interplay of political, economic, and pedagogical considerations. More and more, historians of science, but also scientists of so-called visual disciplines, such as art history, geography, and botany, call for a thorough reflection on the (scientific) images used in conveying knowledge to academic audiences, to teach students how to see, and to recognize 'working objects' of science. This panel aims to offer insights into the changing academic culture that paved the way for the implementation of the optical lantern and its lantern slides. It will be a first exploration of the role played by the projected images (alongside other teaching aids) in scientific knowledge transmission at Dutch universities, but also how they functioned as a way of refuting, analyzing, and classifying knowledge in practicing science.

Images

By the turn of the 20th century scholars from several disciplines had adopted the projected still image for the transmission of knowledge both in their university teaching, at conferences, and in public lectures. This raises questions about how these images intervened in this process and what kind of knowledge was communicated by them. To what extent were there specific "disciplinary visualities" that informed the projected images? In what ways was this knowledge actualised in situ—a classroom, a lecture hall or even an entertainment venue? The panel will explore in particular the specific role of the projected image as evidence in the context of science communication, both in the sense of providing *Anschaulichkeit* to an argument and to support it as evidence.

Spaces

Rather than being restricted to schools, universities, and adult education centers, the lecture with projection was also a social event performed in other types of venue. In the Netherlands, public illustrated lectures were delivered in a variety of settings, from workers' associations to learned societies, from public concert halls, theater stages, cinemas, and institutes devoted to arts and sciences to hotels and cafés. These venues did not function as a neutral background to knowledge transmission practices and since early on historical stakeholders were aware of the importance of space for a successful public lecture. The panel contributions will focus on specific venues such as the museum, the planetarium as well as multipurpose spaces.

Sources

The limitations imposed on research in archives, museums, libraries, and other repositories are the result of policies (e.g., selection, degree of cataloguing and digitization, restrictions on access, de-accessioning) and practical circumstances (e.g., budget, staff, destructive forces such as decay, fire or war). Even in the case of plentiful source materials these conditions potentially affect the researcher's work. Whatever the case may be, it forces the researcher to remedy, mitigate or circumvent institutional and practical obstacles by working with what is (made) available and, whenever possible, to compensate for missing materials and databases by inference, creativity or speculation. This panel presents three instances of archival wealth, or the lack of it, and how its participants have met these conditions.



Utrecht University

Introduction

Around 1900 the optical lantern had been adopted by scholars as a teaching aid in various academic disciplines as well as in outreach activities (such as public illustrated lectures). Starting in 2018, Projecting Knowledge has studied academic uses and practices of knowledge dissemination with the lantern.

During this two-day conference we would like to discuss and put our findings in perspective. We do this in five panels, consisting of the project's team members and invited speakers who will address central questions we have encountered in our research, followed by plenary discussion.

Our goal during these two days is to have a thorough conversation with all participants to foster our understanding of the complex issues at hand by looking at them from various viewpoints. This will benefit, we hope, not only our project, but also contribute to the broader field of the history of knowledge by stimulating reflection on the role of media in shaping practices of science communication.

Schedule

Thursday, 13 October 2022

10.00-10.40 *Registration*

10.40-11.00 *Welcome*, by Prof. Dr. Els Rose, Director of the Institute for Cultural Research (ICON) – Media and Performance Studies

11.00-12.30 Panel I Audiences | Chair: Frank Kessler

Imag(in)ing Publics through Urban Geography and Print Sources

Dr. Annelies Andries, Institute for Cultural Inquiry (ICON) – Musicology, Utrecht University

Knowing your audience?

Dr. Klaas de Zwaan, Faculty of Humanities, Art and Culture, History, Antiquity, Vrije Universiteit Amsterdam

12.30-14.00 *Lunch*

14.00-15.30 Panel II Pedagogy | Chair: Klaas de Zwaan

The Dutch university, 1880-1940

Prof. Dr. Bert Theunissen, Freudenthal Instituut – History and Philosophy of Science, Utrecht University

The anatomist's toolbox: teaching anatomy to medical students, 1890-1940

Dr. Laurens de Rooy, Curator Museum Vrolik, Academic Medical Hospital Amsterdam

Knowledge transmission through projected images in Dutch universities, 1880-1940

Jamilla Notebaard, Institute for Cultural Inquiry (ICON) – Media and Performance Studies, Utrecht University

15.30-16.00 *Break*

16.00-17.30 Panel III Images | Chair: Jamilla Notebaard

Projected Photographs as Evidence: Testimony and Efficiency

Dr. Scott Curtis, Associate Professor of Radio/Television/Film at Northwestern University in Evanston, Illinois and of Communication at Northwestern University in Qatar

Defamiliarizing the Magic Lantern Show: Wonder, Speculation, and the Explorers Club

Prof. Dr. Alison Griffiths, Distinguished Professor of film and media at Baruch College and the CUNY Graduate Center, New York

Pictures of Knowledge

Prof. Dr. Frank Kessler, Institute for Cultural Inquiry (ICON) – Media and Performance Studies, Utrecht University

Friday, 14 October 2022

11.00-12.30 Panel IV Spaces | Chair: Nico de Klerk

The planetarium dome

Dr. Martin Bush, University of Melbourne / Descartes Center, Utrecht University

Public lectures at Teylers Museum

Trienke van der Spek, Chief Curator of Scientific Collections, Teylers Museum, Haarlem

Spaces of public illustrated lectures in the Netherlands after 1900

Dulce da Rocha Gonçalves, Institute for Cultural Inquiry (ICON) – Media and Performance Studies, Utrecht University

12.30-14.00 *Lunch*

14.00-15.30 Panel V Sources | Chair: Dulce da Rocha Gonçalves

Time Capsules: Lantern slides in their media-archaeological surroundings at the Seminar of Art History, University of Hamburg

Dr. Anke Napp, Director of Historical Image Archives, Seminar of Art History, University of Hamburg

Open-Source Archives: Mitigating and Harnessing Archival Incompleteness for Education and Research

Dr. Vincent Longo, Department of Film, Television, and Media, University of Michigan, Ann Arbor

Imperfect camouflage: reporting public illustrated lectures in Dutch newspapers, 1890-1940

Dr. Nico de Klerk, Institute for Cultural Inquiry (ICON) – Media and Performance Studies, Utrecht University

15.30-16.15 *Break*

16.15-17.15 *Closing statement*
by Prof. Dr. Paul Ziche, Research Institute for Philosophy and Religion Studies – Utrecht University

17.15 *Drinks*

Abstracts & Biographies

Panel I Audiences

Imag(in)ing Publics through Urban Geography and Print Sources

Dr. Annelies Andries, Utrecht University

In my presentation, I discuss two elements that can contribute to a better understanding of the audiences of popular spectacles: 1) The location of a performance space within an urban geography; 2) Depictions and descriptions of audiences in different print sources: artistic manifestos, education manuals, satirical prints, etc. While my case studies draw on materials related to nineteenth-century Parisian hippodromes, they pose questions equally relevant for lantern performances. Both require research methods that put into dialogue various visions of imagined audiences with hypotheses about 'real' audiences.

Annelies Andries is an Assistant Professor at Utrecht University. Her research investigates how European musical culture developed in the wake of long-nineteenth-century military conflicts. She is writing a book on identity formation through opera in Napoleonic France. Her work has been published in *Cambridge Opera Journal*, *Journal of Culture and War Studies*, *French Historical Studies* and others. She is also active as a performance-researcher of nineteenth-century music and writes program notes for opera houses.

Knowing your audience?

Dr. Klaas de Zwaan, Vrije Universiteit Amsterdam

What do we really know about lantern lecture audiences? This paper discusses the opportunities and epistemological challenges of understanding historical audiences and reception, drawing on my own research on propagandistic lantern lectures in the neutral Netherlands during the Boer War and World War I. What sources can be made productive and what approaches and data are left unexplored?

Klaas de Zwaan is lecturer in media studies at the Vrije Universiteit Amsterdam. As postdoc researcher in the EOS-project B-magic, he focused on the uses of the projection lantern as tools for cultural mobilization in times of war. De Zwaan currently co-edits the themed issue 'Mass Media and the Performance of War (1853-1918)' of *Early Popular and Visual Culture* (forthcoming 2023).

Panel II Pedagogy

The Dutch university, 1880-1940
Prof. Dr. Bert Theunissen, Utrecht University

This talk will provide an overview of the changes in Dutch academic teaching practices between 1880-1940. In this period, the universities changed their mission from education to education *and* research. This entailed a fundamental revision of the idea of the university, including its societal role and function.

Bert Theunissen is professor in the History of Science at Utrecht University. He is also the Director of the Descartes Centre for the History and the Philosophy of the Sciences and Humanities. His research covers the history of the life sciences in the nineteenth and twentieth century. In recent years it has focused on the history of genetics and its application, especially on the history of livestock breeding.

The anatomist’s toolbox: teaching anatomy to medical students, 1890-1940
Dr. Laurens de Rooy, Academic Medical Hospital Amsterdam

The classical image of anatomical teaching is that of the ‘anatomy lesson’: the dissection of a dead body – as a demonstration or performed by medical students themselves. Yet, anatomisation has never been the only way of teaching. E.g., preparations (dried or wet-preserved) and skeletons have been used since at least the 17th century. Especially from the end of the 19th century the educational ‘toolbox’ of the anatomist expanded. In this talk the various forms and tools of teaching anatomy in Amsterdam between 1890 and 1940 will be reviewed. What was the share of the magic lantern in this education?

Dr. Laurens de Rooy is curator-director of Museum Vrolik, the anatomical museum of the University of Amsterdam/Amsterdam UMC. He received his PhD in 2009 for a study of the early 20th century anatomist and anthropologist Louis Bolk (1866-1930). De Rooy is a lecturer in Medical History at Amsterdam UMC location AMC. As a researcher he focuses on the history of 19th century and early 20th century zoology, anatomy and anthropology.

Knowledge transmission through projected images in Dutch universities, 1880-1940
Jamilla Notebaard, Utrecht University

The phenomenon of the academic illustrated lecture seems to be so self-evident that hardly any reflections are being made regarding its implications for the types of knowledge, the ways of knowing, or even the changes in pedagogical strategies that that it entailed. This presentation reports on my historical analysis of the complex and far-reaching implications of the introduction of the ‘new’ medium of the optical lantern, ranging from the relevance of the architectural changes to the specific role and function that the integration of images in lectures had on academic knowledge transmission.

Jamilla Notebaard is one of the PhD’s in the “Projecting Knowledge” – project. Her research focuses on the role and the specific affordances of the optical lantern within academic teaching practices in the Netherlands between 1880 and 1940. During her study in history at the University of Amsterdam, she developed a predilection for the history of science and the ways in which knowledge is obtained, discussed, and transmitted.

Panel III Images

Projected Photographs as Evidence: Testimony and Efficiency
Dr. Scott Curtis, Northwestern University

In the late nineteenth century, what made any given photograph useful as scientific evidence? And what did projection add to the utility or evidential status of that photograph? This presentation will briefly outline the need for testimony of different sorts—such as written commentary, data, and drawings or other media—to support the evidential claims of scientific photography in fields such as meteorology or biology. It will then argue that slide projection not only provided testimony, usually in the form of the lecturer, but prompted praise about the pedagogical efficiency of the projected photographic image. These efficiencies relied on features, such as photography’s so-called vividness, that also supported its evidential claims. Testimony, evidence, and efficiency therefore came together in projection to provide powerful rhetorical support for the use of photography in science and education.

Scott Curtis is Associate Professor of Radio/Television/Film at Northwestern University in Evanston, Illinois and of Communication at Northwestern University in Qatar. Curtis specializes in the use of moving images in science and medicine. His is the editor of *Animation* (Rutgers UP, 2019) and author of *The Shape of Spectatorship: Art Science, and Early Cinema in Germany* (Columbia UP, 2015), which explores the collision between moving images and expert modes of viewing—in science, medicine, education, and aesthetics—before 1914. His current project examines the use of animation in scientific research, training, and communication.

Defamiliarizing the Magic Lantern Show: Wonder, Speculation, and the Explorers Club
Prof. Dr. Alison Griffiths, Baruch College, CUNY Graduate Center

This talk explores three ideas that amplify our understanding of lantern slides as evidentiary media: first, the concept of wonder (and its close cousin *curiositas*), a way of grappling with the lantern slide’s dialectical indebtedness to *veritas* and *imaginari*; second, the idea of contra-vignetting, a literal and metaphorical shifting away from the center of an image as the locus of meaning to the margins, part of a broader effort to decolonize the archive; and third, the use of magic lantern slides and motion pictures at the Explorers Club in New York City, an exhibition site that provided fascinating information about the *habitus* of magic lantern projection and reception as well as how wonder and the margins were held in productive tension.

Alison Griffiths is a Distinguished Professor of film and media at Baruch College and the CUNY Graduate Center. She has published three monographs on early ethnographic cinema, immersion, and carceral media (all from Columbia University Press). Her most recent book, the research for which was supported by a Guggenheim Fellowship in 2018, is *Nomadic Cinema: A Cultural Geography of the Expedition Film*. She was awarded a Fulbright Distinguished Chair in Arctic Studies to Norway in 2022, where she will be undertaking research on early representations of Indigenous Sámi at the National Library of Norway in Oslo.

Pictures of Knowledge
Prof. Dr. Frank Kessler, Utrecht University

The use of the optical lantern for knowledge dissemination opened up new possibilities for teaching and public lecturing. It fit in well with pedagogical theories advocating object lessons or *Anschaunungsunterricht*. The projected image, however, does not simply illustrate a verbal discourse, it also shapes the way in which knowledge is communicated. Therefore, it is important to take into account the specific mediality of the projected image and its rhetorical function, the various “disciplinary visualities” it has to conform to, the affordances of the medium, in short: to understand the media *dispositif* in which it intervenes.

Frank Kessler is professor of Media History at Utrecht University, and the project leader of “Projecting Knowledge”, funded by the Dutch National Research Organisation NWO. He is a former president of DOMITOR, the international association for research on early cinema and one of the founders of *KINtop. Jahrbuch zur Erforschung des frühen Films*. His research interests are focused on the emergence of cinema as a mass medium and cultural form. In his current projects he studies the role of the optical lantern as a medium for knowledge transmission in the 19th and early 20th centuries.

Panel IV Spaces

The planetarium dome
Dr. Martin Bush, University of Melbourne / Utrecht University

The invention of the modern planetarium projector in the 1920s was rightly considered a mechanical wonder. Less celebrated is the fact that this was made possible by the creation of the geodesic dome in which the planetarium could operate. Situated within a long line of astronomical demonstrations in theatrical spaces, the planetarium engages its audiences emotionally. A key aspect of this is the planetarium dome, which both holds audiences closely to a unique experience while dissolving the boundaries between place and space.

Martin Bush is a Senior Research Fellow in the School of Historical and Philosophical Studies at the University of Melbourne currently undertaking a Descartes Centre Fellowship project on the Sonnenborgh Observatory slide collection. Martin is a cultural historian of popular science with an emphasis on the visualisation of astronomy in the nineteenth and early twentieth centuries. Other research interests include metascience, public reasoning practices, and the science communication work of the Ngarrindjeri Australian David Unaipon.

Public lectures at Teylers Museum
Trienke van der Spek, Chief Curator of Scientific Collections, Teylers Museum

This talk will provide an historical overview of lectures with image projection, as well as other demonstrations and experiments that were performed in the auditorium of Teylers Museum, in Haarlem.

Trienke van der Spek is chief curator and head of the science collections at Teylers Museum, Haarlem. She previously worked at Rijksmuseum Boerhaave in Leiden as curator and head of collections. Her research interests include the popularisation of science in the nineteenth century and Teylers Museum’s institutional and collection history.

Spaces of public illustrated lectures in the Netherlands after 1900
Dulce da Rocha Gonçalves, Utrecht University

In this paper I situate the public illustrated lecture as a relevant, regular, and common social event within a range of other cultural activities in the Netherlands, after 1900. I will argue that approaching the study of the lantern lecture through its spaces is fundamental to understand the particular

historical contexts in which it was performed, as well as its diverse field of stakeholders and the extent to which it became a fixture in the cultural and social fabric of Dutch society.

Dulce da Rocha Gonçalves is a PhD candidate at Utrecht University within the research project “Projecting Knowledge,” funded by the Dutch National Research Organisation NWO. Her research focuses on the use of the magic lantern in illustrated public lectures organized outside the formal education structure of the Netherlands, between 1880 and 1940. She has a background in visual arts, design and cinema. She was a graduate student at the National School of Theatre and Cinema, in Lisbon, and at Leiden University, where she became interested in media archaeology and archival research.

Panel IV Sources

Time Capsules: Lantern slides in their media-archaeological surroundings at the Seminar of Art History, University of Hamburg
Dr. Anke Napp, University of Hamburg

Four examples show the life cycle of lantern slides as part of a media-archaeological family of photographic and archival documents of the Seminar of Art History in Hamburg. They illustrate methods of knowledge transmission as well as everyday work and problems at the Seminar at a specific point in history and present themselves as time capsules. In 1923, Erwin Panofsky orders slides from a publisher; in war-torn Germany of 1943, the Seminar’s assistant tries to get the photographic materials for her lecture, in 1952, a young curator lends slides from the Seminar, and in 1963 Wolfgang Schöne prepares his fulminant lectures with all resources possible.

Anke Napp studied Medieval History and Art History in Münster and Eichstätt and graduated on the political instrumentation of City Patrons of Southern France. She has published about the Order of the Templars and about the reception of Ancient Egypt in the Middle Ages. Since 2003, she has worked in the image archives of the Seminar of Art History at the University of Hamburg and discovered a new research field in the photographic materials. She privately owns a huge collection of historic film strips and projectors from the 1920s to the 1960s (www.deutsches-bildbandarchiv.de / www.dia-versum.de).

Open-Source Archives: Mitigating and Harnessing Archival Incompleteness for Education and Research
Dr. Vincent Longo, University of Michigan

This talk uses a forthcoming book and digital humanities project about Orson Welles’s unfinished 1939 anti-facist adaptation of *Heart of Darkness* to discuss strategies for mitigating and harnessing the creative potential of various forms of archival limitations, especially incompleteness. The born-digital, open-access version of the book combines new scholarship with digital archives (including all surviving evidence of this production from three different archival institutions), animations, audiovisual essays, interactive maps, and 3D models, to create a comprehensive resource on one of the most famous films never made. Much of this involved collaborating with sixteen undergraduate students who were trained in primary source research and helped to create multimedia projects based on what they found (and sometimes did not find) in the archive.

Dr. Vincent Longo is Director of Honors and a Lecturer in Film, Television, and Media at the University of Michigan. His research focuses on relationships between cinema and live performance (particularly vaudeville and African American jazz), theatrical exhibition and the experiences of marginalized audiences, archival access, and audiovisual essay pedagogy. Dr. Longo is currently finishing a book about the anti-fascist and racial politics of Orson Welles’s unmade adaptation of *Heart of Darkness* (under-contract with University of Michigan Press). He is the recipient of several awards for his work teaching audiovisual essays and archival research to undergraduate students.

Imperfect camouflage: reporting public illustrated lectures in Dutch newspapers, 1890-1940
Dr. Nico de Klerk, Utrecht University

In this panel on the limitations of archival sources my presentation is about one type of secondary sources—newspaper reviews of illustrated lectures—and their reliability. Unlike primary sources, such as lectures, lecture notes or slides, on the face of it this is a plentiful source, thanks to various Dutch databases of digitized newspapers and other periodicals. Nonetheless, careful reading, rather than data mining, reveals that many of these reviews are not what they pretend to be. With no known research on this phenomenon to go on I essay to trace the circumstances and considerations that may have led to this practice.

Before joining 'Projecting knowledge' as a postdoc researcher **Nico de Klerk** worked at the Ludwig Boltzmann Institute for History and Society (now LBI for Digital History), Vienna, on the research project 'Exploring the interwar world: the travelogues of Colin Ross (1885-1945)'. This was preceded by his dissertation *Showing and telling: film heritage institutes and their performance of public accountability* (published in 2017). This work was informed by his twenty years' experience as a collection researcher, archivist, and curator at the then Nederlands Filmmuseum (now Eye Filmmuseum). During most of this time he has been on the editorial board of *The Moving Image: The Journal of the Association of Moving Image Archivists*.