In the main feature article in this issue, Sarah Dellmann explores ready-made lantern slide lecture sets, often marketed by dealers with printed readings to serve as a lecture text. She focuses on one particular set offering a tour through Holland in the early 20th century, which was marketed in several countries and had identifying labels in multiple languages. She points out that these slide sets were important in projecting a picture of the Dutch to the rest of the world. Often the slides represented a sort of nostalgia for the past, emphasizing traditional clothing worn by rural people, wooden shoes, windmills, canals, and traditional Dutch architecture. Even city scenes often provided only fleeting looks at products of the industrial revolution, such as trains and steam ships. People dressed in modern city clothing often were photographed from a distance, whereas those wearing traditional clothing often appeared in close-up portraits. In fact, the slides included in this lecture set were not very different from those used by American lecturer John L. Stoddard several decades earlier.

This issue also includes a short article on analglyph (3D) lantern slides, modified from an article by stereoview collector David Starkman that appeared in a recent issue of Stereo World. The article describes a type of lantern slide that may not be familiar to many of our readers.
Lecturing without an Expert:
Word and Image in Educational “Ready-Made” Lecture Sets

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The role of the lecturer in the performance of a lantern slide show can hardly be underestimated. This goes for spectacular lantern shows with a mainly entertaining function, as well as for lectures with primarily educational aims. Terry Borton’s detailed studies on professional lecturers in the Chautauqua and Lyceum circuits that were published in recent issues of the Gazette clearly show that neither the topic nor the quality of slides alone were enough to achieve a successful lantern show and career. Especially for lectures on non-fiction subjects, the lecturer not only needed to have convincing qualities as a showperson, but also needed to be recognized as an authority on the respective subject. Not surprisingly, then, most of the professional lantern showpersons were indeed experts in the field on which they were lecturing.

Several studies have investigated lantern slides in conjunction with the personal lecture notes of professional and prominent lecturers such as Paul Hoffmann, Jacob Riis, Burton Holmes, and Lyman Howe. These studies provide much insight into the logic of lecturing, but they cover only a very specific kind of lecture: a thoughtfully composed “quality lecture” delivered by an expert who had either traveled to the countries themselves or knew his or her subject very well. Professional lecturers ensured trustworthiness and quality by their name, expert status, formal education, and the agency they worked for. The authority for remarks made during the lantern show was thus connected to themselves as authors and lecturers. Burton Holmes, for example, lectured about his own travels and often presented photographs and films that were taken during his travels.

Alongside with lecturers who toured with their self-made program, another kind of lecture was widespread; I will call this the “ready-made” lecture set. By this I mean the combination of a slide set (i.e. a number of assembled slides marketed as set) and a corresponding lantern reading (i.e. mass-produced lecture notes for such slide sets). Both elements of the ready-made lecture set were planned, produced, and issued by commercial manufacturers. The wide availability of such material and the numerous advertisements in lantern slide catalogs and the trade press indicate that ready-made lecture sets were a common phenomenon by the end of the nineteenth century. It is thus likely that a large number of lantern show audiences attended such ready-made lectures.

The cheap ready-made lecture set needed to gain its authority over the things said and shown differently because the performance of a ready-made lecture set was designed to work independently of the knowledge of the lecturer: the lecturer might or might not be an expert on the subject. How, then, did these “expert-independent” ready-made sets become accepted as transmitting trustworthy knowledge? When the expertise cannot be found in the personality of the lecturer, we must look at which other elements of a lantern performance could produce reliability and believability in the eyes and ears of the audience. I suggest that audiences found such reliability and believability in the combination of word and image. Before I analyze the words and images of one lecture set in detail, I will first give some background information on the emergence and reception of the ready-made lecture set.

From Selling Single Slides to Selling Slide Sets

Most lantern and slide catalogs offered single slides on non-fictional lantern subjects, often with the option to order a specific slide plain or colored (Fig. 1 and back cover). In such catalogs, slides were organized into topics or subjects; geographical slides, for example, were listed first by country or region. All slides that showed views of a particular country or region were listed individually; it was the role of the purchaser to make a selection of slides to put together a coherent set. Around 1870, a new way of selling geographical slides was introduced: while the sale of individual slides continued, pre-selected sets of slides...
By the 1890s, issuing ready-made slide sets with ready-made readings was a usual thing. We might suspect that this new way of offering lantern slides—whether for sale or for hire—changed the way in which lantern shows were prepared and thus changed the role of the lecturer. Selection was no longer a necessary activity of the lecturer, and thoughts about comprehensiveness and the order (“How many and which views do I need to include in a lecture that deals with the World Exposition? Where to begin? What information to include?”) could be left to the compiler of the slide set and the author of the reading. Not the lecturer, but the distributors of lantern slides took the responsibility to come up with “Something to Say,” as Benerman & Wilson put it, about the slides. In other words, providing slide sets with a corresponding reading created the opportunity for lecturers to not conduct research on the subject matter themselves, and, for better or worse, freed them from the necessity to write their own comments.

Of course, the availability of ready-made lecture sets did not prevent lecturers from mixing and matching the slides of such sets with others, nor did ready-made lecture sets force a lecturer to respect the order of the slides as intended by the distributor, or to follow the reading word by word.

In copies of lantern readings at the Slide Readings Library of the UK Magic Lantern Society (http://www.magiclantern.org.uk/readings/) we find evidence of both uses: some readings are extensively annotated in the margins and the pages show heavy traces of use, while other examples seem barely touched. Some distributors of slide sets with accompanying lecture notes even warned their lecturers to not simply read out the lecture notes. For example, the Royal Society for the Protection of Cruelty against Animals placed a note in capital letters above the list of available slide sets and readings:

"Also could be purchased. Pre-selected slide sets soon were offered with a corresponding reading. An early example of this selling practice appears in an advertisement for “Wilson’s Lantern Lectures” appearing in several editions of the 1876 volume of the The Philadelphia Photographer (Fig. 2)."

Also, in the foreword to their 1876 catalog, Benerman and Wilson announced:

"In order to make ‘Traveling by Magic’ the more interesting and instructive, we have selected from this catalogue several ‘Journeys,’ arranged them in sets of hundred slides each, in geographical order, and with them supply ‘Lectures,’ or ‘Readings,’ or ‘Something to Say’ about each slide. Special catalogues of these we supply on receipt of 20 cents...."
Concerns about the de-professionalization of the lecturer’s business were soon expressed by lanternists who considered themselves experts. In the article “Three Requisites for a Successful Lantern Lecture”, published in 1904 in the trade journal The Optical Lantern and Cinematograph Journal, Reverend T. Perkins identified the poor quality of the ready-made lecture sets as a main reason for the decline of interest in lantern lectures. Rather than the advent of the cinematograph, said Perkins, the problem lay in the ready-made lecture sets with their corresponding readings, which enabled people who were not familiar with a specific subject matter to perform a lantern set:

The other cause of the decrease of popular favor...was due to the introduction of the system of letting out sets of slides on hire with an accompanying reading. The reading was often poor, of the guide book order, destitute of all literary grace, and was read at the exhibition of slides, a few hours after their arrival, by someone who possibly knew nothing of the subject and had not had time even to read it through beforehand. Thus, even if the slides were good, the lecture was so dull and dreary that no one who had endured one lecture of this kind would care to go through another.

In the remainder of this article, I will analyze one of the “dull and dreary,” but still highly popular ready-made lecture sets on the Netherlands. QUER DURCH HOLLAND (“Crisscross through the Netherlands”)9 was a widely distributed slide set on the Netherlands, at least in Europe.10 The set comprised 24 slides and an accompanying lantern reading, titled Vortrag zu den Bildern Quer durch Holland (“Lecture to accompany the slides Crisscross through the Netherlands”). I will specifically examine how word and image, the slides and the comment from the reading, are connected to achieve authority over the subject matter during a performance.

The aim of the following analysis is thus not to reconstruct how lantern slides and commentary were actually performed, but how the producers of ready-made lecture sets used specific visual and textual strategies that enabled anybody to give a lantern lecture on the subject. The ready-made lecture set, at least so it seems from their omnipresence in catalogs, was a lucrative a business model. Very probably, the ready-made lecture set appealed to more buyers than offering lantern slides exclusively for experts who needed to conduct extensive research in order to compose a lecture.
“Ready-Made” Lecture Sets

Projektion für Alle: The Series

QUER DURCH HOLLAND is the seventh set of the series Projektion für Alle (“Projection for everyone”). Most sets in this series, issued prior to the First World War (No. 1 to 44), are photographic slide sets about European countries and regions. An advertising leaflet for the series Projektion für Alle claimed educational value for home use and in schools:

The long winter evenings will be beneficially filled in an educational and entertaining manner by projecting the instructive P.f.A. [Projektion für Alle] sets of distant countries...at school and in the intimacy of family (Fig. 4). (Recto, advertising flyer, undated, c. 1928, my translation).12

Note here that the projection of slides “in the intimacy of family” implicitly refers to an educational viewing situation without a professional lecturer. The educational value is thus, from the beginning on, not intended to come from the knowledge within the family but from information provided by the ready-made lecture set that the family studies.

Fig. 4. Advertising flyer by Edition Liesegang that praises the educational value of lantern slide sets in their stock. Courtesy: Private Collection.

Quer durch Holland: The Set

The slides’ titles are given in three languages (German, French and English) and are visible in the frame of the glass slides (see front cover). The multi-language titles indicate that the slide sets were distributed internationally. Judging from the collections I have seen, QUER DURCH HOLLAND was very widely distributed, at least in Germany and in the Netherlands. The accompanying reading was included in the purchase of the set, and not sold separately, as usually was the case with British readings. However, despite the multi-language titles, the reading was available only in German; at least I did not find any reference to translated versions to date. If lantern shows of this set to a non-German speaking community used the reading as inspiration, translated the text literally, or ignored it all together, cannot be reconstructed from the sources available to me. Even though German was, next to French and English, an academic language in Europe at that time, not every teacher or educator can be assumed to have spoken German fluently.

Quer durch Holland: The Slides

QUER DURCH HOLLAND consisted of twenty-four photographic slides. The six different versions I have seen were not colored, although they were also offered colored. The images are ordered according to a logical travel route, starting in the north-east of the Netherlands (Groningen), going west to the north-west (Enkhuizen), then going south (to Rotterdam) and then east again (Utrecht, Arnhem). The travel narrative is explicit in the reading as well; sometimes the means of transportation between two slides (i.e. two towns) is mentioned.

The images show street views and market scenes, buildings and monuments (see front cover). Most city views show streets along canals with either a church tower or a windmill in the background. The island of Marken – then as today a tourist hot spot – is the most prominent location in this set; five slides out of twenty-four are dedicated to that village (Fig. 5). No image shows modern elements such as steamships, trams or railroads; the only traces of modern life are gas lanterns, visible in slides 2, 3, and 4 (Fig. 6) and advertising on buildings in the background (slides 22 and 23; Fig. 7). The figures in the city views are too small to be seen in detail (e.g. slides 8, 19, 21, 24; Fig. 8); whereas the fisher families of the villages Marken and Scheveningen in traditional costume are large enough to be studied in detail and pose for the camera (Fig. 5). From the images alone, the Netherlands seems to be a country in which rowboats, sailboats and horse carriages were the only means of transportation around 1906.
"Ready-Made" Lecture Sets

Fig. 5. Slides 9-13 depicting the Island of Marken. Courtesy: EYE Film Institute Netherlands.

Fig. 6. Slide 3, with gas street light as the only sign of modern life in 1906.
The text of the reading (Fig. 9) is, generally speaking, more modern than the image. The reading addresses modern phenomena, but these modern phenomena are not visible in the image: in the comment to the slide 22 “Rotterdam, The Cool Singel”, the modernity of the port, the big ocean steamers, the busy trade of the city and the pollution caused by factories are mentioned, but the image shows nothing of that. Instead, one of the last reminders of the old town is put into picture: a small street with narrow houses along a canal (Fig. 10). The commenting text to the slide 20 on the coastal town of Scheveningen mentions the modern pier and the fact that it is constructed from steel – but the image only shows fisherwomen in traditional clothing (Fig. 11). The comment to slide 16 (Fig. 12), showing the empty market square of Edam, informs that on market days, this place is a very busy cheese market and mentions the export of Edam cheese to the world. Briefly, hors cadre, the Netherlands are acknowledged for having modern elements, too, but these elements are not presented in images.
Fig. 10. Slide 22 showing a view of Rotterdam that omits more modern elements of the city. Courtesy: EYE Film Institute Netherlands.

Fig. 11. Slide 20. View of the waterfront of Scheveningen showing traditional fishing boats, but not modern docks and ships. Courtesy: EYE Film Institute Netherlands.

Fig. 12. Slide 16. View of the cheese market in Edam. Courtesy: EYE Film Institute Netherlands.

**QUER DURCH HOLLAND: The Narrative**

The reading is mostly written in first person plural (“we travel”, “we see”) when it concerns the activity of traveling, and in third person when background information is given (“This is the port.”). In the comments, the traveling “we” often takes steam trains (e.g. comment to slide 6; Fig. 13) which are never visible themselves. The comment on the first slide, “Groningen. Market Place and Martini Church” (see front cover) reads:

Today, we want to perambulate a country off the beaten tracks, which holds magnificent nature views for the painter and relish of art for the traveler. Holland with its art treasures offers many things of interest. *The entire country* is pervaded by canals. The larger ones which are navigable go through the cities and were artificially installed, the lower parts of the land are protected by embankments. We enter Holland up in the North and first pay a visit to the city of Groningen, which, with its 80,000 inhabitants, presents the Dutch type right away…. The architecture of the houses along the place breathes the well-known Dutch style of architecture (my translation, emphasis added).14
We now part from Holland with the experience of having encountered a special country and nation whose ancestors have achieved great recognition for art and painting and which forms are still reflected today in the nature of the country and the customs of the nation (comment to slide 24, my translation, emphasis added).

The text in the reading claims to show more than the beaten tracks and tourist destinations, and the title “Crisscross Through Holland” also evokes the idea of covering the country entirely. The set includes views from the provinces in the North and West of the country (Groningen, Friesland, North Holland, South Holland, Utrecht and Gelderland), the Southern and Eastern provinces (Zeeland, Brabant, Limburg, Drente, Overijssel) are absent. Tourist destinations are highlighted (five slides out of 24 are dedicated to the Island of Marken alone). The reading emphasizes the Dutchness of sites and sights by emphasizing, wherever possible, that everything visible is “Dutch”:

Leeuwarden, Port street and old tower (Fig. 15). In this picture, a piece of Dutch town life is revealed (comment to slide 2, my translation, emphasis added).

Leeuwarden, Voorstreek Street (Fig. 16). The image presents a Dutch canal, the little houses look picturesque and the entire image is marked by calmness. (comment to slide 3, my translation, emphasis added).
Zaandam is a friendly town of real Dutch appearance, the little buildings of one floor are painted in green and red and are surrounded by neatly trimmed gardens (Fig. 18). (comment to slide 14, my translation, emphasis added)

The Wijngartengracht...is an effigy of Dutch cleanliness (Fig. 19). (comment to slide 15, my translation, emphasis added)

In all these cases, the national attribute “Dutch” would not have been necessary if the reading aimed solely to describe views or the oeuvre of a poet. By adding the adjective “Dutch”, the images are related to the topic of the slide set, i.e. a travel through the Netherlands (here named “Holland”), and the audience is constantly reminded of the fact that the image before them shows something related to the Netherlands. This is obviously a circular logic: by qualifying visible instances as “Dutch”, the image is related to the topic of the slide set, the Netherlands. Hence, this view is relevant which justifies its inclusion in the set and, even stronger, presents this view as one of the twenty-four views that are considered to give a comprehensive visualization of the Netherlands. In the performance of this slide set to an audience (be it in the family or in a more formal educational setting), the anchoring of images in a textual comment that largely applies categories of the national) underlines the relevance of the images with respect to the subject matter.

In this park, a monument was erected to the famous Dutch poet Joost van den Vondel (Fig. 17). (comment to slide 7, my translation, emphasis added).

In Fig. 15, Slide 2. Door St. and old tower, Leeuwarden. Courtesy: EYE Film Institute Netherlands.

In Fig. 16, Slide 3. Voorstreek St., Leeuwarden. Courtesy: EYE Film Institute Netherlands.

In Fig. 17, Slide 7. Vondel Park, Amsterdam. Courtesy: EYE Film Institute Netherlands.
formal characteristics of the so described phenomenon. It is conspicuous that only those aspects are described as “Dutch” that are in line with the cliché and repeated statements of tourist discourse: the cleanliness of Edam (Fig. 19) is “Dutch,” but the dirt in Rotterdam (Fig. 10) (comment on slide 22) is not; colorfully painted wooden houses are “Dutch” but modern buildings are not; the canals are “Dutch” but steam trains are not. Together with the image selection, QUER DURCH HOLLAND reinforces clichés and generalizing statements. It is true that the reading mentions modern aspects of life in the Netherlands around 1906—but these aspects are not described as “Dutch.”

**Saving the Non-Expert Lecturer from Critical Questions**

As described above, the authority of the lecturer is achieved by the reading that does not challenge stereotypical ideas about the Netherlands, not in words and certainly not in the images. In fact, both word and image, slides and reading, are tied to supposed common knowledge about the Netherlands: the lecture does not contain surprising information but is rather a hotchpotch of all kinds of statements and beliefs that circulated widely about the Netherlands at that time: a clean and calm rural country barely touches by industrialization and whose inhabitants dressed in traditional costume. The narrative of the set follows a widely used pattern for the presentation of geographical content: a linear travel narrative that begins with the arrival and ends with leaving the country. The reading furthermore ties the statements about the Dutch being a nation of painters to the conclusion of the end, thus providing narrative closure at the level of both form and content. In addition, the perspective of the narrative presents the lecturer as “traveling together with the audience,” which might create a close bond between the audience and the lecturer, because the lecturer becomes part of the virtually travelling party.

Throughout the reading, the adjective “Dutch” does not explain a phenomenon, but marks a phenomenon as relevant with respect to what there is to be known about the Netherlands. In this slide set, the adjective “Dutch” treats single instances as examples of what “Dutchness” looks like, without determining the essence, quality or
testing audience would need to be quite knowledgeable of the Netherlands. The chance that the lecturer would face critical voices from the audience is therefore limited, and that enabled even non-experts to pass as authorities on the subject matter during the presentation.

Conclusion

In the course of my research on lantern slide sets on the Netherlands and the Dutch, I observed similar rhetorical strategies in other ready-made lecture sets. Even though very cheap and hardly original, the readings of educational ready-made slide sets were carefully composed. Such readings are still under-researched, but prove to be a promising source to the study of the use of lantern slides in educational settings and on non-fictional topics. Ready-made lecture sets used specific authorization strategies that bestowed expertise on the lecturer. In some cases, the text of the lecture was authenticated by referring to the author’s expert status. But as we can see, even if the author of the reading is unknown, the reading in the performance of the slide set still works in a convincing way and manages to produce a sort of “subject expertise authority” when read out in combination with the slides. In the reading, the descriptions of the image (i.e. pointing to a visible fact that can be witnessed by the audience) are tied to bits of supposed common knowledge and stereotypical tropes about the Netherlands that can circulated in all kinds of contemporary popular media. The facts in word and image are presented in a narrative of a discovering traveler; the audience is addressed as partaking on a guided tour with the lecturer as the guide or teacher. With the right equipment of word and image, of reading and slide set, everyone could perform being an expert – at least for the duration of the lantern show.

About the Author

Sarah Dellmann is a Postdoctoral researcher and lecturer at the Department for Media and Culture Studies, Utrecht University, the Netherlands. In her thesis Images of Dutchness, which she defended in 2015, she investigated popular images of the Netherlands and the Dutch between 1800-1914. Sarah also assists in giving lantern shows.

The lantern slides that illustrate this article were digitized as part of her involvement in the research project A Million Pictures - Magic Lantern Slide Heritage as Artefacts in the Common European History of Learning. For more information, see http://www.uu.nl/a-million-pictures or e-mail to s.dellmann@uu.nl.

Notes and References


9. Projektion für Alle, Quer durch Holland [Cris Cross through the Netherlands], slide set of 24 slides. Issued as set number VII in the series Projektion Für Alle, 1906. Courtesy EYE Film Institute Netherlands.

10. The entire list of slide sets about the Netherlands I have identified thus far is documented in the Lucerna Magic Lantern web resource http://slides.uni-trier.de/set/. Search by “Subject Keyword
“Ready-Made” Lecture Sets

11. For the complete list of the 96 slide sets issued in the series Projektion für Alle, see the Lucerna Magic lantern web resource: [http://slides.uni-trier.de/series/index.php?id=19](http://slides.uni-trier.de/series/index.php?id=19)


19. This, for example, is the case for the reading Kakteen und andere Sukkulenten [Cactuses and other succulent plants] that accompanied a slide set with the same title. The author’s name is indicated directly after the title of the lecture, including the academic degree and place of residence: “Prof. Dr. Spilger, Bensheim”. See Prof. Dr. Spilger, Kakteen und andere Sukkulenten [Lantern Reading], Dodeka-Reihe 459 (Düsseldorf, no date). Courtesy: EYE Film Institute Netherlands.
Recently I was shown something I had never seen or heard of before—single plate anaglyph lantern slides, designed to be projected in 3D (Fig. 1). According to Ray Zone, Wilhelm Rollman may have been the first person to project 3D images in complementary colors, around 1853. However, general credit for the first to project stereoscopic images in anaglyph form goes to Charles d'Almeida in France. In 1858, d'Almeida used two magic lanterns, one with a red filter and the other with a green filter, to project stereoscopic lantern slide pairs by superimposing the two images on a screen. The audience wore matching red and green glasses to view the three-dimensional image. While Zone described other methods of stereoscopic projection that followed d'Almeida, using mechanical alternating shutters (Rateau, France/Britain, 1897), alternate frame optically printed filmstrips (Grivolas, France, 1901), and even early polarization (Anderton, Britain, 1895), the method of projecting an actual anaglyph lantern slide in a single projector seems to be conspicuously overlooked in the stereoscopic literature. So, seeing and holding an actual anaglyph lantern slide was quite a revelation.

The lantern slides were labeled "Procédé Tauleigne Mazo" (Process Tauleigne Mazo). J.A.B. Tauleigne and Elijah Mazo were photographic inventors in France who developed a three-color photographic process, which is mentioned quite a few times in online literature. E. Mazo was also an optician, photographer, and camera manufacturer, located at 8 Boulevard Magenta, Paris, France. In addition, research provided by Kim Timby revealed that E. Mazo produced a catalog titled (English translation) "E. Mazo: Manufacturers of Accessories, Devices and Views for Projection". Catalog No. 46, for the years 1910 and 1911, lists series of ready-made anaglyphic lantern slides for sale. The catalog states (English translation): "These views for stereoscopic projection use the system created by Mr. Abbot Tauleigne, on the anaglyph principle of Mr. Ducos du Hauron. The views are placed in a single lantern projector and projected on ANY screen. The depth is perceived by all of the spectators without exception, provided that they observe the image projected on the screen by means of a "vision selector" (Vision selector being an early description of 3-D glasses). Mazo parted with Tauleigne to improve upon the Dr. Taube mordant dye process which removed the silver-iodide, thereby leaving a transparent dye image, a process that produced strongly colored photographs. It apparently also was perfectly suited to making anaglyph lantern slides.

Fig. 1. Anaglyph lantern slide designed to be projected from a single lantern to produce a 3D image when viewed through special colored glasses. See p. 23 for a color version.

An article in the British Journal of Photography for 1910 gives a detailed description of the process for making anaglyphic lantern slides, written by Mazo himself:

**THE TAULEIGNE-MAZO STEREO PROJECTION AND THREE-COLOUR PROCESSES.**

(Since referring in the last issue of the "Colour Photography" Supplement to the trichromy process of Mr. A. Tauleigne, we have received
from Mr. E. Mazo, the well-known Paris constructor of optical apparatus, the description of the process as it will shortly be placed upon the market. Mr. Mazo has collaborated with Mr. Tauleigne, and the method, as now offered for the purposes of amateur photographers, is the result of their joint labours. The following is the abridged text of Mr. Mazo’s communication. -- Eds. “Colour Photography” Supplement.)

The two processes are distinct. One is concerned with the production of stereoscopic relief on the lantern screen, the other with colour photography from nature. Both are patented in Great Britain and other countries, and both are based upon the well-known principles first enunciated by Ducos du Hauron, namely, that the blending of complementary colours, as embodied in the “anaglyph” method, and that of combining three primary colours.

Just as in the case of the Autochrome and Omnicolore plates, the projection of which was described by Du Hauron as long ago as 1868, both processes have long been known to be possible, and, indeed, been practised by amateurs of more serious inclinations until the very great technical difficulties became too obvious.

Misters Tauleigne and Mazo have, however, found that the process can be very greatly simplified by the production of a silver image, which directly fixes the saline colour. It would be well to emphasise first the difficulties involved in the older processes, from which will be seen the superiority of the new process as regards means of working.

**Stereoscopic Lantern Projection.**

For success in obtaining stereoscopic relief on the lantern screen the principles of stereoscopy must be kept in mind. Just as in nature, objects are seen in stereoscopic relief when two images, one from each eye, are simultaneously transmitted to the brain, so, on the lantern screen, the stereoscopic relief will be observed when there are projected on the screen the two pictures of the stereoscopic pair, and when each eye is allowed to perceive only one picture.

This may be done by staining the right-hand picture red, the left-hand picture green, and placing before the right eye of the observer a green filter and before the left eye a red filter. When projection is thus viewed the stereoscopic relief of the original subject is seen.

According to the Mazo process, all that is necessary is to make positive transparencies from the stereoscopic negative. The images in these positives are then converted, one into red and the other into green, the silver image itself being subsequently removed, so that the final result is a perfectly clear and transparent image in colour only. These two transparencies are placed one above the other and projected together with the one lantern, the spectators being provided with a pair of tinted glasses for viewing the relief effect.

As previously practised, this process has usually necessitated the use of two lanterns [Fig. 2], the lenses in which were provided, one with a red screen and the other with a blue or green screen. The adjustment of the pictures on the screen was a matter of considerable difficulty, whilst, owing to the presence of a black silver image and also of a coloured screen, a very powerful light was necessary. Further, it was it difficult to register the two pictures in the lantern and on the screen to such an extent that the process could be employed only for a very small number of views in succession.

By taking advantage of the new method by which the silver image is converted into a transparent dye image, the projection on the screen is of great brilliancy, and as the two positives may be placed one upon the other, in the lantern, only one of the latter is necessary, and the positives also being adjusted once for all when placed in the lantern, there is no delay in registering each picture at the time of the actual exhibition.  

At this point the rest of the article is about a simplified three color process developed by Tauleigne and Mazo which uses the same technique for creating transparent colored lantern slides as the stereoscopic lantern slides method, but in the three primary col-
ors, and in perfect registration, to provide a full color image in a way that was simpler than other methods of that time.

**My "modern interpretation"**

By using one of the techniques Tauliegne had developed for their three-color glass plate process, they converted the separate left and right eye lantern slide plates into transparent green and red image slides. The process made the slides more transparent, as the black and white silver image had been removed in their process, leaving just a single color transparent image (red or green). By then sandwiching the two slides together and taping them to form a single slide for projection (Fig. 3), an anaglyph slide could be projected with a single magic lantern projector.

This eliminated the need for two projectors, each fitted with red and green filters, and, at the same time, provided a much brighter image from a single projector. In retrospect this idea seems so obvious, and such a great improvement, that it is surprising that it has remained unmentioned (as far as I have been able to find) in later literature on the subject of stereoscopy. An Internet search shows that, while rare, these anaglyphic lantern slides do occasionally show up in online auctions.

**The Léon Gimpel Stereo Autochrome Process**

While researching Tauliegne and Mazo, Kim Timby in Paris sent information about an anaglyphic stereo autochrome process:

*I also remember that a French photographer named Léon Gimpel made anaglyphs on autochrome plates at some point. I'm assuming his...*
tion method using stereoscopic slides, taken with a camera subsequently marketed by Gaumont. The previous year Gimpel had made anaglyph pictures—anaglyphos from the Greek, "carved in relief"—from shots of the Observatoire de Paris; eight of them appeared June 28, 1924 in L'Illustration, accompanied by two-color glasses.

The moon image was auctioned by SVV Millon & Associés on November 10, 2011 and sold for 10,000 Euros! In the Millon auction catalog there were a total of nine anaglyphic stereo autochrome images shown. While it makes sense that the Autochrome process was used to make anaglyph lantern slides, these are also quite a 3D rarity! The images may be seen in color in the online version of the catalog, which may be found at:


I find it interesting that while the moon lantern slide was described as anaglyphic Autochrome by Léon Gimpel, it was also stated to be obtained from a negative that was made with the Tauleigne-Mazo process. While a stereo autochrome has the advantage of being made in color on one plate, versus two sandwiched plates in the Tauleigne-Mazo process, autochromes have the disadvantage of being very dense and requiring a lot of light, making them much less desirable for lantern slide projection.

Acknowledgements

This article is dedicated to Ray Zone, who had an encyclopedic knowledge of 3D history, and who's spirit hovers over my shoulder whenever I write on historical 3D subjects. Special thanks to Susan Pinsky, my muse, my spellchecker, my Editor, and my partner in life. Also special thanks to Claudia Kunin, Anaglyph Artist and friend, who showed us her collection of Tauleigne-Mazo Anaglyph lantern slides that inspired this article. And a final thanks to Kim Timby of Paris, France, who provided research, information, and translation from French sources.

Notes and References

2. For more on Ducos du Hauron, see Zone, "Ghosts in Relief" (ref. 1).
5. Presented at the Société française de photographie May 19; see their


This well researched article provides a comprehensive look at a program on Hiawatha given on the summer Chautauqua circuit in the early 1900s by Katherine Ertz-Bowden and Charles Bowden. The program, which combined colored lantern slides with motion pictures, was based on a play produced by Ojibway Indian actors. The show toured mostly in the upper Midwest for several years, with Katherine providing the lecture narrative and Charles operating the stereopticon. The Bowdens’ show also was discussed and illustrated in: Terry Borton. 2015. The professional life of “magic lantern” illustrated lecturers. With introductions to most professionals performing from the 1890s to the 1920s. Part 2. The Magic Lantern Gazette 27 (2/3) (Summer/Fall 2015):3-37. The current article also briefly discusses the Bowdens’ lantern slide and movie recreation of the Oberammergau Passion Play, which most likely employed lantern slides made by the official German photographer, who held sole rights to photograph the play itself [see: Kentwood D. Wells. 2007. The Oberammergau Passion Play in lantern slides: The story behind the pictures. The Magic Lantern Gazette 19 (1):3-16]. Using a rich trove of archival material, Uhrich analyzes the Bowdens illustrated lectures, which combined showmanship with an educational mission. The article makes a major contribution to our understanding of the professional lives of illustrated lecturers in the early 20th century.
This article explores the use of visual aids, from textbook illustrations to stereographs to lantern slides in the teaching of geography in early 20th century America. In this era, advocates of visual education saw visual aids in the classroom as essential to developing a new and more effective way of learning among students. Textbook publishers and purveyors of stereoscopic views and lantern slides rushed to fill the demand. One problem with this project was that while visual materials for students became abundant, teaching students to effectively view and interpret images was more difficult. There also were logistic difficulties—showing students stereoscopic cards in a classroom with only one or two stereoscopes shared among them proved ineffective. This meant either buying more stereoscopes or finding ways for students to share the viewing experience. Companies like the Keystone View Company issued sets of lantern slides with the same images as the stereo views, like the Keystone 600 series, discussed in more detail by Artemis Willis in the next article. Because Keystone absorbed competing companies and purchased collections of lantern slides, the images viewed by students in different parts of the country became remarkably uniform, despite the lack of centralized planning of educational curricula for public schools.

Because constantly updating lantern slides and stereo views was impractical, much of this material became outdated, resulting in a fairly uniform set of images remaining in use for decades in many public schools. Some local school committees reinforced this trend by instructing teachers to use images that relied on stereotypes of particular regions or cultures. The author cites the example of the Boston School Committee in 1920 urging teachers to use images of Holland that emphasized “traditional” views of the country that did not fully depict the reality of Holland in the 20th century—dikes, windmills, fishing boats, canals, wooden shoes, and traditional clothing. These are the same themes mentioned in Sarah Dellman’s article in this issue of the Gazette. Non-Western countries came in for even more stereotyped treatment, often tinged with overtones of racial inequality. Many countries or colonies in the “Third World” were depicted as if the Industrial Revolution had never reached their shores—lands of thatched huts and banana, pineapple, and coffee plantations. African Americans were depicted in scenes such as picking cotton on Southern plantations, images not much different from depictions of slavery decades earlier, although the use of African American labor was attributed not to their descent from slaves, but to their supposed adaptation to hot climates.

In this well researched article, Magic Lantern Society member Artemis Willis explores the use of the Keystone “600 Set” in American public schools in the early to mid-20th century. This set included both stereoscopic views and lantern slides made from the same negatives, which could be used by teachers independently or as complements to one another for both individual viewing and group projection.

One thing that is striking about this story is just how late the use of these visual media extended into the 20th century. Both stereoscopic photographic views intended for individual viewing and photographic lantern slides had a long history going back to pre-Civil War America, a history that is briefly chronicled at the end of this article. Yet the Keystone View Company was not founded until 1892, and its peak influence as an educational resource did not occur until well into the 20th century. Keystone began distributing the set in the 1920s and continued until 1963, when I was in high school. The Keystone set thus combined two much older visual technologies to develop a modern visual education system, as well as combining two modes of viewing images, peep practice and screen practice, with origins going back centuries. It survived the development of the 35 mm color slide, presumably because of the unique combination of stereoscopic views with projected images, something not easily replicated in the 35 mm era. For some time, the use of these images in classrooms was more common than the use of motion pictures.

The basic organization of the 600 set was geographical, with the United States privileged over other developed countries, which in turn received more coverage than “Third World” countries, many of which merited only a single slide, unless the slide displayed western technology, such as the Panama Canal. This organization carried along with it the usual cultural and racial stereotypes common in American media at least until the 1960s.

A unique feature of the 600 Set was extensive cross-indexing, so slides from many geographical regions could be combined into lessons on topics such as agriculture and forestry, manufacturing, or transportation. The use of the images in this way was facilitated by descriptive texts supplied for each individual stereo view or lantern slide, so that teachers were not dependent on the original order of the views to put together a series of coherent lectures on a wide variety of topics.

This article gives a lively account of a magic lantern travel show, dubbed the Cosmopoligraphicon, that was presented in Melbourne, Australia during the Victoria Gold Rush of 1855. The author uses unusually detailed newspaper reports of the contents of the show to reconstruct the sensory experience of the audience. The show featured dissolving views of various parts of the world, using hand-painted slides, since this program pre-dated the widespread availability of photographic slides. The views were punctuated with special effects dissolving views such as the eruption of Mt. Vesuvius and scenes of a shipwreck. Similar scenes had been featured in dissolving view shows in England since the 1830s. The show was accompanied by music and a lecturer/narrator who explained the views. The author uses the newspaper reviews to evaluate audience reactions to the show from a colonial point of view, with a particular emphasis on dissolving views of scenes like “the old village church” evoking memories of the “home country,” at least for immigrants from Britain.


The November 2016 issue of *Early Popular Visual Culture* is devoted to a series of articles on “Objects, Archives, and Collections,” mostly written by members of our Society and the British Magic Lantern Society. Stephen Bottomore begins with a tour through a lifetime of scholarly research and the remarkable changes that have occurred in access to scholarly resources in the digital age. I could closely relate to this article because it reflects my own experience doing research on magic lanterns and other topics. Bottomore recalls the long hours spent searching through now-vanished library card catalogs, which led researchers to potential sources of information, but without any real indication of the contents of these sources. He describes the tedious process of taking notes on index cards or paper notebooks, the difficulties of determining what libraries held a particular book or periodical in the era before online catalogs, etc. Things are different now—thousands of books have been digitized and are available online through Google Books, Internet Archive, and other sites, and these are word searchable. One can go directly to the page of Kircher’s 1671 book that shows the first published illustration of a magic lantern or download Marcy’s complete *Sciopticon Manual.*
Some of the major benefits of these new digital tools include a massive saving in time spent tracking down sources, an enormous expansion of the range of materials available to researchers, and the ability to find even the most trivial references to a subject, such as one line of a poem referring to magic lanterns in an American periodical from the 1850s. There are a few disadvantages as well. Some online databases of periodicals, newspapers, and printed ephemera require access to a major library, such as a university library that holds a subscription to the database. Another problem is not knowing what has not been digitized and included in a database, or what has been recently added. In researching an article on the use of magic lanterns in American churches before 1860 [The Magic Lantern Gazette 27 (4) (Winter 2015)], I found that one Philadelphia paper that accounted for more than half the references to magic lanterns in Sunday schools was not added to the database America’s Historical Newspapers until 2009, so a search before that date would have yielded a very incomplete sample (it may still be incomplete). Sometimes there is no avoiding the use of old-fashioned methods. In researching John Fallon’s stereopticon [The Magic Lantern Gazette 23 (3) (Fall 2011)], I once drove several hours to the somewhat down-at-heels industrial city of Lawrence, Massachusetts, to find in the public library obituaries of Fallon on microfilms of his home-town newspapers. It took most of a day, but I found what I was looking for. Anyone who has had similar experiences in their research will enjoy reading Bottomore’s article.


Several articles in this issue relate even more directly to magic lanterns. For example, Phillip Roberts emphasizes the importance of collections of physical objects such as magic lanterns and slides for magic lantern research. In conducting research on the important British lantern manufacturer Philip Carpenter, he has had access to collections of Carpenter material in several British museums, as well as a full range of scholarly resources and archives. He notes that much of the early research on magic lantern history was done by private collectors, many associated with the two major Magic Lantern Societies. Often the subjects of such research were dictated by what materials were particularly common or interesting in collections. However, many private collections are not permanent, and their contents are not widely known. Many collectors are not active scholars, and many scholars have no collections at all. Hence the focus of this special issue on the importance of preserving such material in publically available locations. Much of the article focuses on his own remarkably fine-scale research on Carpenter and his place in the mass production of magic lanterns. He envisions this type of research expanding outward to contribute to the history of media, entertainment, manufacturing, and other aspects of cultural history.


Sarah Dellmann discusses the challenges facing researchers attempting to access collections of lantern slides scattered across Europe in museums and archives. Such institutions often hold impressive collections, but also tend to lack curatorial experts who can properly catalog materials in a way that makes them accessible to scholars. Often such collections are not cataloged at all, especially at the level of individual slides, and even those that are cataloged often are not fully digitized, making them largely invisible to outside researchers. She gives several examples of the long, tedious detective work needed to fully identify a small number of lantern slides with scenes of Holland. Just assigning them to the correct sets and determining how many such sets existed required research in both public and private collections of lantern slides, slide catalogs, and readings to accompany the slides.

There are now efforts underway to correct this problem, most notably Lucerna: the Magic Lantern Web Resource (http://slides.uni-trier.de/) and A Million Pictures: Magic Lantern Slide Heritage as Artefacts in the Common European History of Learning (http://a-million-pictures.wp.hum.uu.nl/). The former is largely a volunteer effort, with most of the information contributed by only a few individuals, whereas the latter is a cooperative venture among several universities with funding from the European Commission. North America lags well behind in this sort of effort, although some universities and other institutions are beginning to recognize the value of lantern slides as visual resources and have begun to make them available as digitized images online. This is particularly true of collections with some local interest, such as works of a local photographer or images of a local industry early in the 20th century. The problem of limited curatorial knowledge remains, and these attempts to put slides online often have been assisted by members of our society and other private collectors. A shortage of scholars working on magic lanterns and a lack of funding for large collaborative projects further inhibit progress in this area.

The remainder of this special issue of the journal contains other articles about research in magic lantern and cinema history, including Stephen Herbert on the life and death of the Museum of the Moving Image in London; Frank Gray on the resources and programs of Screen Archive Southeast; and Deac Rossell on the use of surviving artefacts in early cinema research.

The placement of this interesting chapter in a fairly obscure book among an eclectic collection of other chapters on a variety of topics may limit its readership, although fortunately the book is freely available online. The chapter deals mainly with the early history of the stereopticon in America, but also discusses how writers both well-known and obscure dealt with the stereopticon descriptively and metaphorically. The narrative begins with the use of the stereopticon in mental hospitals in the 1850s and 1860s as a means of educating, entertaining, and treating patients. This use of the stereopticon was started by a collaboration between Dr. Thomas Kirkbride of the Pennsylvania Hospital for the Insane and the Langenheim brothers, who developed the process of producing positive photographic images on glass for projection onto a screen. Dr. Kirkbride’s Moral Treatment of the insane was widely adopted in other asylums. Psychiatrists in the 19th century believed that insanity resulted from gaps in trains of thought in the brain, or incorrect joining together of disparate ideas. The stereopticon was widely viewed as an instrument to provide a coherent narrative that bridged the gaps in a troubled mind. This effect was enhanced by the realism that resulted from great magnification of photographic images on the screen, and further enhanced by the seamless transition between images made possible by a binual dissolving stereopticon.

The second part of this chapter deals with ways that writers engaged with the two essential traits of the stereopticon, magnification of images and dissolving effects. These writers include anonymous journalists who wrote descriptive pieces on stereopticon shows for newspapers and other periodicals, as well as named, but often obscure, writers of short stories in the same sorts of periodicals. In the early days of traveling stereopticon shows, including the tours of John Fallon’s original stereopticon, reviews emphasized the scientific advances incorporated into the stereopticon and the true-to-life images it produced, rather than the content of the shows. The author cites one anonymously written story, “An Infusional Romance,” that described the adventures of microscopic organisms as projected by the magic lantern. The author also describes the dream-like impressions created by dissolving views, both in factual descriptions of dissolving view exhibitions and as a literary metaphor in which ever-changing dissolving views were compared to the changing scenes in dreams and reveries.


Jonathan Potter explores the role of the stereoscope in Victorian culture, especially as it affected the psychology of perception and the relationship between reality and fantasy. Hand-held stereoscopes designed for individual viewing were the virtual reality devices of the Victorian era, both in the United States and Britain. The stereoscope, which was nearly omnipresent in middle class Victorian homes, allowed viewers to imagine they were viewing actual solid, three-dimensional objects by combining two ordinary flat photographs. In an era flooded with visual media, including illustrated books and periodicals, photographs, even magic lantern slides, the stereoscope stood out for its realistic depiction of objects, people, and places. When the stereopticon was first introduced by that name in the 1860s, audiences imagined that the projected images of sculpture and other objects actually appeared three-dimensional, no doubt influenced by previous experience with the stereoscope. Scientists and others published articles in the early 1860s explaining that this apparent three-dimensionality of projected images was simply an illusion created by brightly lit images that seemed to pop out of a screen against a dark background.

Writings in Victorian periodicals, both descriptive accounts of the stereoscope, and short fictional stories, were greatly influenced by the perceptual experience of the stereoscope. Writers used the stereoscope to describe experiences of the imagination, dreams, memories, and fantasies. The author points out that the private viewing of stereoscopic views normally was not accompanied by a fixed narration, as would have been the case with a magic lantern show or lecture, thereby allowing the imagination of the viewer to run free. He gives a number of examples of largely forgotten short stories from various periodicals in which the stereoscope plays a central role. One melodramatic story from the Ladies Cabinet of Fashion combines references to both the stereoscope and the magic lantern. Before a young sailor named James leaves his fiancée Alice to go to sea, he views a stereoscopic image of her and exclaims over the realistic depiction of Alice, an image that will keep his memory of her alive when he is away. At the end of the story, there is a magic lantern show at a birthday party at the home of Alice’s parents. Just as a family friend is about to inform Alice of the possible wreck of James’s ship, the lanternist inserts a brightly lit and rather ghostly image of James in the middle of a show dominated by ghost stories. Alice collapses in horror, but James survives and eventually returns, only to find Alice dead.
Color versions of Fig. 1 (top) and Fig. 3 (bottom) from "Anaglyph Lantern Slides."
Above: 1885/86 Catalog of Dutch lantern slide producer and reseller Merkelbach & Co.  
Stadsarchief Amsterdam [Archive of the Municipality of Amsterdam]

Front Cover: First slide of the set “Quer durch Holland.”  
EYE Film Institute Netherlands.