

Institution: University of Exeter		
Unit of Assessment: UoA 27 English Language and Literature		
Title of case study: A million pictures: enhancing the curation, dissemination and re-use of neglected magic lantern media heritage		
Period when the underpinning research was undertaken: 1 Jan 2007 to 1 Oct 2020		
Details of staff conducting the underpinning research from the submitting unit:		
Name(s): Joe Kember	Role(s) (e.g. job title): Professor in Film and Visual Culture	Period(s) employed by submitting HEI: 1 January 2004 – present
Period when the claimed impact occurred: 1 January 2015 to 1 Oct 2020		
Is this case study continued from a case study submitted in 2014? No		
1. Summary of the impact		
<p>Kember's research has promoted the curation, preservation, dissemination and re-use of the most important visual medium for entertainment and instruction across Europe and the world between 1860 and 1920: the magic lantern. Magic lantern slides represent a massive, but untapped, source of cultural heritage in personal, academic and heritage collections across the world. In order to create awareness and conditions for re-use of these resources, Kember's work has:</p> <ul style="list-style-type: none"> • Improved the preservation and presentation of global magic lantern heritage, including delivering the world's largest and most data-rich database of lantern slides as a sustainable open access international resource and set up a Community Interest Company to promote it and ensure sustainability. • Increased the dissemination and usage of previously neglected lantern slide collections among heritage professionals, museum visitors and special interest groups in Britain, Europe, and Australia. • Enabled new performances and exhibitions through the creative and educational re-use of lantern slides. 		
2. Underpinning research		
<p>Kember's research on the magic lantern was initially published in <i>Marketing Modernity: Victorian Popular Shows and Early Cinema</i> (2009), and expanded through the AHRC-funded project 'Moving and Projected-Image Exhibition in the South-West, 1820-1914' (2007-2010). These projects were part of the scholarly movements in both Film Studies and the History of Science to develop regional and exhibition-based histories of media, which have now established a more nuanced account of popular exhibitions and their audiences. In the course of Kember's extensive archival research, it became apparent that, while the bulk of nineteenth-century media artefacts (for example, panoramas and films) had long since disappeared, most public collections had retained repositories of glass-plate lantern slides. Poorly understood, fragile and almost always uncatalogued, these repositories remained inaccessible to the public. Public collections, sometimes tens of thousands of slides strong, represented a major but mostly untapped resource of visual materials, requiring both technological and disciplinary expertise in order to make them accessible to museums and broader publics.</p> <p>Subsequently, Kember has worked collaboratively with heritage professionals in small and large collections, as well as researchers across the world, to revivify the lantern. From 2015 to 2018, Kember was PI for A Million Pictures, a project funded by the pan-European Joint Programming Initiative for Heritage, in which Exeter partnered with the Universities of Utrecht, Antwerp, Girona and Salamanca. In the UK, where heritage partners included the Royal Geographical Society, Manchester Museum, Royal Albert Memorial Museum, Exeter, and the Magic Lantern Society, Kember oversaw a thorough survey and digitisation project within the archives, as well as substantial contextual research, allowing these institutions to</p>		

better understand and deploy their collections. From 2016 to 2019, Kember was Partner Investigator for Heritage in the Limelight, an Australian Research Council-funded project involving collaboration between Australian National University, the University of Exeter and the University of Western Australia, as well as major museums in Melbourne, Sydney, Brisbane, Canberra, and Hobart. Kember's role in this project included consultation with heritage professionals working in major Australian archives. Mapping transnational connections in the growth of the magic lantern industry has been a fundamental feature of Kember's research for both A Million Pictures and Heritage in the Limelight, which he has further explored and developed in the publication of three special issues of the journal *Early Popular Visual Culture* with other international scholars [3.5, 3.6].

These projects have enabled a highly productive co-evolution of scholarly and public-facing research. Other published articles have drawn from Kember's work on subjects from temperance entertainments of the late nineteenth century [3.2], to gothic and phantasmagorical shows [3.3], to the transformation of the educational marketplace for lantern slides at the beginning of the twentieth century [3.4]. At the same time, A Million Pictures has enabled extensive digitisation and cataloguing of materials drawn from public collections in the UK, as well as materials from European collections gathered by Dutch, Belgian and Spanish partners. These have been further researched, categorised and uploaded to the Lucerna Magic Lantern Web Resource [3.1]: the open access database selected to host this project data. Lucerna is the only database of lantern slide images to provide systematic cross-referencing of the people, institutions and materials (including slides) involved in the lantern industry; therefore, this type of underpinning research has been of fundamental importance to the field, allowing for scaling and comparison, as well as new opportunities for visual and textual analysis.

3. References to the research

- 3.1 Database: Lucerna Magic Lantern Web Resource (<http://lucerna.exeter.ac.uk/>).
- 3.2 Joe Kember and Richard Crangle, 'Folk Like Us: Emotional Movement from the Screen and the Platform in British Life Model Lantern Slide Sets, 1880-1910', *Fonseca: Journal of Communication* 16 (2018), pp. 115-133. <http://dx.doi.org/10.14201/fjc201816115133>
- 3.3 Joe Kember, "'Specterology": Gothic Showmanship in Nineteenth-Century Popular Shows and Media.' *The Cambridge History of the Gothic*, vol II. Ed. Dale Townshend and Angela Wright (Cambridge: Cambridge University Press, 2020). <https://doi.org/10.1017/9781108561082.009>
- 3.4 Joe Kember, 'The Battle of Attention in British Lantern Shows, 1880-1920,' *A Million Pictures: Magic Lantern Slides in the History of Learning*. Ed. Frank Kessler and Sarah Dellmann (Barnet: John Libbey, 2020). Output available on request.
- 3.5 Journal special issue: 'The International Lantern part 1', ed. Joe Kember, *Early Popular Visual Culture* 17:1 (2019). (Six international contributors, including articles by Kember and other project members of Million Pictures and Heritage in the Limelight). <https://www.tandfonline.com/toc/repv20/17/1?nav=tocList>
- 3.6 Journal double special issue: 'The International Lantern part 2', ed. by Joe Kember, *Early Popular Visual Culture* 17:3/4 (2019). (Nine international contributors including two articles by Kember). <https://www.tandfonline.com/toc/repv20/17/3-4?nav=tocList>

Related grants

- 2015-2018: 'A Million Pictures: Magic Lantern Slides as Artefacts in the Common European History of Learning', PI in UK. JPI Heritage Joint Funding grant, €660,000.
- 2016-2019: 'Heritage in the Limelight: The Magic Lantern in Australia and the World', Partner Investigator. Australian Research Council, AUS \$300,000.

4. Details of the impact

Though magic lantern slides in public collections contain a wealth of historically significant and beautiful imagery, they are fragile, costly to preserve, difficult to exhibit, and often so poorly catalogued that much material remains unknown, even to its owners. Images numbering in the hundreds of thousands (at least) have been lost to the public. Kember, in collaboration with multiple project partners, has brought overlooked collections to the attention of heritage professionals, enabling museums to capitalise fully on their own resources. He has also helped improve accessibility of these resources for the public, generating new and creative methods of disseminating lantern slide imagery.

Improving the preservation and presentation of global magic lantern heritage

Kember's research has enabled better preservation of the fragile material substrate of magic lantern slides and improved accessibility through digital archiving. This work has mostly been conducted in partnership with key museums and archives, as well as with the chief architect of Lucerna, Richard Crangle. Thanks to the digitisation work conducted by the Exeter team for A Million Pictures, Lucerna has more than doubled in size and is now the world's largest dedicated open-access database of lantern slides. It holds more than 43,000 digital images and in excess of 200,000 other slide records [5.7]. Many UK and European heritage organisations have allowed Exeter researchers to identify, digitise and catalogue their slides within Lucerna, including: the Royal Geographical Society (number of slides: 1071); Royal Institution (300); Manchester Museum (8826); Chetham's Library, Manchester (3398); The Hive, Worcester (2174); RAMM, Exeter (4607); Kent Museum of the Moving Image, Deal (1184); Ilfracombe Museum (2115); and Museum Sloten, Netherlands (2108). In collaboration with A Million Pictures European partners, other material has been added by the Exeter team to Lucerna from EYE Film Institute, Netherlands (1895); Museum voor Hedendagse Kunst, Antwerp (250); University Museum, Utrecht, Netherlands (778); and Museu del Cinema, Girona, Spain (1998).

Kember has also drawn on ongoing research on the global lantern trade to advise on identification and archiving of lantern resources in international heritage collections. This work has been conducted with museums in the Netherlands, Belgium and Spain, as well as Australia. For example, a senior collections manager for Museums Victoria notes that, as a consequence of Kember's visit to their archives in Melbourne, 'we have been able to data-enhance our catalogue records to key objects in the collection' [5.6].

This collaborative research has improved the visibility and prominence of lantern slide heritage for heritage organisations, creating a greater understanding of, and access to, the lantern material in their collections. According to Julien Parsons, Senior Collections Officer at RAMM, the digitising and cataloguing of its ~4,500 slides 'completely changed our understanding' of RAMM's lantern slide collection.

'For the first time, we know the detailed content, range and significance of the slides, their history and association with individual people and institutions, and the project has prompted research into other areas of the museum collection.' [5.2].

It has also helped to create digital artefacts that can serve in place of fragile, small-scale, glass plate slides, increasing their institutional usage and exhibition. 'Until now,' says Rachel Petts, a curator at Manchester Museum, 'it has been very difficult to know what to do with these items, as they are often too fragile and difficult to use. The digital images ... created for Lucerna preserve and make our collection accessible for research and exhibitions.' [5.1]

The enhanced sustainability of Lucerna itself has also generated impact. Forming Lucerna CIC and entering into a memorandum of understanding with the University of Exeter, where the database is now based, 'facilitated some important developments of the web resource in areas including internet security, data protection and accessibility', according to Crangle, who chairs the CIC [5.7]. The founding of the body also gave the database 'a legal personality, enabling partnerships and collaborations with other institutions' – an initiative 'inspired and facilitated by Professor Kember' [5.7].

Improving the dissemination and usage of magic lantern slide collections

In the course of A Million Pictures, a total of 16 public talks and shows were given to subject associations by Kember and collaborators [5.9]. Kember has organised major public workshops at the Royal Institution (March 2017) and RAMM (January 2018), each of which delivered new knowledge concerning lantern slides to interested subject associations [5.9]. Direct engagement with the general public has also included a series of interviews on local TV and radio, an article in New York-based arts magazine *Hyperallergic* (subscription base 70,000) and a double-page spread in the *Observer* [5.8]. Kember has contributed interviews drawn from ongoing research to a major MOOC, 'The Living Picture Craze', led by the British Film Institute and launched in 2019. It has attracted 4,242 enrolments [5.10].

Kember's work has also enabled improved usage, exhibition and dissemination of lantern material, and consequently public engagement, with all collaborating institutions receiving high-quality images and metadata of their collections. Among the impact activities generated by museums as a consequence, Fergus Wilde, chief librarian at Chetham's Library, reports that the slide collections have been used in a variety of ways: by local history societies; as 'life-enhancing material for reminiscence therapy'; as material for 'outreach projects to disadvantaged areas of Greater Manchester'; and to create an evening magic lantern show [5.3]. Manchester Museum created a 'Lantarium' display of lantern images during a key exhibition, and is now building a slide display as part of a refurbishment of its exhibition space. The images also provided fresh opportunities for merchandise to sell in its shop [5.1]. At RAMM, 'the collection is now being used for the first time in at least 40 years' in a series of exhibitions, and the restoration of a magic lantern within its collection has enabled the museum to give shows at dementia-friendly events, a steam-punk ball and Museum at Night event [5.2]. All collaborating museums have also reported improved social media outreach and increased interest from researchers and subject associations, with RAMM and the Royal Geographical Society, among others, making images available through their own websites. In Australia, Museums Victoria has reported '*an increase in access to our collections*', acknowledging Kember's involvement in 'this important work' [5.6]. RAMM also found that A Million Pictures was a 'strong factor in ... obtaining an Art Fund/V&A traineeship for a photography curator', thereby contributing to capacity and economic prosperity [5.2].

As the world-leading subject association for magic lantern materials, the Magic Lantern Society (MLS) has been especially significant in disseminating knowledge from A Million Pictures and Heritage in the Limelight to a more specialist membership [5.8]. Funding from A Million Pictures facilitated the delivery of events and sideshows at the society's 2018 Birmingham convention:

'The project has already transformed many aspects of our understanding, especially our knowledge of the remarkable wealth of lantern slides held in public collections.' – MLS chairman Jeremy Brooker [5.4]

Lucerna provides open access to lantern slide collections to an international range of interest groups. Emails to the CIC reveal the wide range of international users that have made use of the database in projects of their own [5.7]:

"Lucerna is more than a database that documents our knowledge: it is a valuable tool for bringing together lantern enthusiasts and those who were not aware that they, too, have a connection to lantern culture and history." – Sarah Dellmann, Lucerna Correspondent and one of the CIC's directors [5.8]

Database analytics similarly reveal that meaningful usage has increased over the period 2015-20, with total page views rising to a mean of approximately 25,000 per month from an international user group [5.7].

Enabling original exhibitions, performances and arts spectacles

Kember's research has led to the commission and promotion of new types of show – enabling innovative and unique forms of creative re-use, disseminating lantern heritage to further, diverse publics. These include the funding the creation of a new peep-show by Promenade Promotions, (pictured), featuring ongoing research and images digitised within A Million Pictures. The show has reached approximately 1,750 people at a variety of events such as Dartmoor Folk Festival, Devizes Street Arts Festival and Beverley Puppet Festival. According to the show's creator, Tony Lidington: 'It has marked a step-change in the company's Promenade Promotions' work and 'contributed to our learning, our repertoire and our reputation' [5.5]. Feedback from children and adults attending these shows, many of whom had never heard of the medium before, include: 'Intriguing! – a window into another era'; 'So interesting! We definitely want to learn more!' [5.9].



A Million Pictures also led to the creation of a science-based lantern show by lanternist Jeremy Brooker, for the historic lecture theatre at the Royal Institution, London (March 2017, [5.9]); and to the development of a further large-scale theatrical show, *Magic and the Muse*, which innovated the projection of slides on to live performers and generated new musical compositions. This show booked out two major theatres, the Birmingham Crescent (April 2017) and Exeter Barnfield (January 2018), reaching c.900 people [5.9]. For galleries and museums, Kember and collaborators have also enabled the creation of new types of public projection, from exhibitions of artworks including slide projections, to children's shows such as RAMM's *Things that go Bump in the Night!* (October 2015, attendance 154) and the 'Mad Hatter's Tea Party', a musical commemoration of the 150th Anniversary of *Alice in Wonderland* (October 2015, attendance 170) [5.9].

5. Sources to corroborate the impact

- 5.1 Testimonial letter from Rachel Petts, Curator, The Manchester Museum, 18 July 2019.
- 5.2 Testimonial letter from Julien Parsons, Senior Collections Officer, Royal Albert Memorial Museum, 16 March 2020.
- 5.3 Testimonial letter from Fergus Wilde, Chief Librarian, Chetham's Library, 27 June 2019.
- 5.4 Testimonial letter from Jeremy Brooker, Chair of the Magic Lantern Society and Professional Lanternist, 13 November 2019.
- 5.5 Testimonial letter from Tony Lidington, Artistic Director of Promenade Promotions Limited, 20 August 2017.
- 5.6 Testimonial letter from Lorenzo Iozzi, Senior Collection Manager (images), Museums Victoria, Melbourne, 15 December 2020.
- 5.7 'Lucerna Impact Report' by Richard Crangle, Chair of Lucerna Community Interest Company, 12 March 2020. Includes quantitative data on Lucerna usage, and qualitative data including testimonials from assorted major users of the database.
- 5.8 Publications relating to various aspects of impact intended for heritage professionals, subject associations, and the general public.
- 5.9 Publicity and list of public engagement events related to A Million Pictures, including questionnaires to workshop participants, Interview transcripts from audience members and photographs relating to 'Lucky Dicky Crangle and the Cinnabar Moth' peepshow featuring Tony Lidington.
- 5.10 Confirmation of contribution to MOOC and enrolments from Gemma Starkey, Manager Online Resources and Learning, BFI.