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The Moving Image, Volume 16, Number 1, Spring 2016, pp. 17-34 (Article)

Published by University of Minnesota Press

DOI: <https://doi.org/10.5749/movingimage.16.1.0017>



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THE BEGINNINGS OF CINEMA AS A MUSEUM EXHIBIT

DIMITRIOS LATSIS

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The recent rise in scholarship on the history and theory of film archives has brought a welcome emphasis on the aspects of the moving image that extend beyond the movie theater to: amateur, nontheatrical venues; cinémathèques; and museums.¹ In the last two cases, attention has focused almost exclusively on the rise of institutions like the Museum of Modern Art's (MoMA) Film Library and Henri Langlois's Cinémathèque Française, their film collecting and programming activities, and (only secondarily) on the exhibitions they occasionally organized and their role in introducing cinema into the museum. Little attention has been paid to the long history of exhibits and displays in galleries and museums of all kinds that showcased cinema as a visual technology well before the 1930s, when initial efforts were made to institutionalize film collection around the world.² Such early collections and exhibitions of devices, memorabilia, and film-related artifacts reveal a different understanding of cinema, emphasizing its technical and material nature over its status as a visual and narrative art that came to dominate in archives and museums later on. Tracing their origins and the motivations of curators, donors, and amateur film historians involved in preserving the history of a medium barely a few decades old reveals a systematic attempt to legitimize cinema as a technology, an art, and a form of mass entertainment. Despite the mixed success of these efforts, one can say that, in a very real sense, the writing of film history began in museums.

Two of the earliest cases of institutions active in collecting and exhibiting film-related devices as well as documenting the development of the medium were the Smithsonian Institution's National Museum and the Science Museum in London.³ Starting as early as 1898 and continuing in the first decades of the twentieth century, museum professionals on both sides of the Atlantic set standards that continue to influence the status of cinema within the walls of institutions of learning, research, and culture.⁴ The Smithsonian's curator of photography, Thomas Smillie (1843–1917), and London-born inventor, exhibitor, film equipment dealer, and amateur historian Will Day (1873–1936), whose collection was for a time exhibited in the Science Museum, acquired and showcased both pre-cinematic and cinematic technologies in displays that celebrated the new medium's promise for science. At the same time, they challenged high art's exclusive hold on the great museums of the Victorian era. By recognizing the artistic and technological significance of the inventions of Muybridge, Armat, Paul, the Lumières, and many others, and placing them in the context of advances in visualization and the exploding amusement culture of the turn of the century, these individuals shared poet Vachel Lindsay's ambitious vision of a "Universal Film Museum," where cinema would be fully integrated into the canon of the other arts.⁵ Despite these lofty aspirations, as

the following “archival snapshot” will make clear, the definition of cinema at the time of its induction into these national institutions shows a remarkably consistent view of the medium as a sort of auxiliary, a mere chain in the technological evolution of visual media, despite the cultural and methodological disparities in its exhibition. From concept to exhibit, from collection to display, the place of the moving image in early-twentieth-century museums reflects the priorities and economic realities of the times as well as an institutional bias favoring pragmatic tools over visionary proclamations of cinema as “the art of the century.”

A joint consideration of these two cases can illuminate their differences and their shared characteristics. These, in turn, reveal that the early reception of film in museums was at times enthusiastic (in terms of its potential appeal to the public) and at times haphazard (in terms of curatorial and collecting priorities). Will Day was a private collector with extensive connections to the British film industry. He was driven by an encyclopedic curiosity about various toys, instruments, and media, which are still studied today as part of an archeology of cinema. Thomas Smillie has been called the “first *de facto* curator of photography in the United States, if not the world.”⁶ He was the Smithsonian’s in-house photographer, tasked with documenting scientific experiments and institutional life. He came to recognize the value of photography and the moving image not just as tools for documentation but also as technological advancements that deserved a place in the venerable Washington museum, the “nation’s attic.” Both Smillie and Day concentrated their collecting efforts on devices. This focus on their manner of operation and relation to older inventions differed from the subsequent focus that intuitions like MoMA placed on the artistic and documentary content of film as an art form. Rather, they directly anticipated the way cinema and its history are showcased in museums around the world today, from New York’s Museum of the Moving Image to the Australian Centre for the Moving Image in Melbourne.

The questions that these early curators must have asked themselves are the very same that museum professionals continue to ask today after the advent of the digital era: How should cinema be exhibited? Through devices? Production artifacts? Interactive displays? Film projections? There are manifest tensions between a conception of film history based on devices and one based on films, one relying on public and one on private initiative, one predicated on collecting and another focused on exhibiting. In Europe and the United States, these questions date to the first two decades of the twentieth century, long before visionaries like Langlois, Iris Barry, or Ernest Lindgren were tasked with finding a place for film in the museum.

CINEMA IN THE “NATION’S ATTIC”: THE SMITHSONIAN’S COLLECTION OF MOTION PICTURE DEVICES

Visitors to the Smithsonian’s US National Museum in June 1913 would have casually strolled by dinosaur fossils, Abraham Lincoln memorabilia, and the newly donated “Wright Flyer,” before coming to the museum’s northwest court, where the collection of fine arts was exhibited.⁷ In addition to George Catlin’s Indian Gallery and several other paintings of historical and national interest, a series of glass cases was dedicated to “the history and development of photography.” While collections of photographic material were nothing new in 1913, almost a century after Nicéphore Niépce’s experiments, the arrangement and presentation of the Smithsonian’s artifacts in the Hall of Photography hinted at the artistic and the technical importance of the medium. X-rays, microscopy, high-speed and underwater cinematography, astronomy, and other applications of photography were shown next to camera models ranging from Daguerreotypes to the latest Brownie, while color photography and the works of artist–photographers like H. P. Robinson and Joseph Stieglitz had pride of place. Along with these innovations, a display chronicling the development of the motion picture was included, which, as the Smithsonian’s chief photographer, T. W. Smillie, describes, included

the zoötrope, first used for showing drawings representing motion and afterwards with photographs; a model of the Muybridge arrangement for photographing men and animals in motion with several prints; and a complete series of the motion picture cameras and projectors invented by Mr C. Francis Jenkins, of Washington.⁸

A contemporary photograph of the display, later published in the *Journal of the Society of Motion Picture Engineers*, shows a wide array of apparatus like “intermittent and continuous film-feed cameras; projectors, perforators, printers; developing apparatus; stereoscopic cameras and projectors; paper film and card exhibitors,” as well as prints of Eadweard Muybridge’s animal and human locomotion experiments and a model of his original chronophotographic array at the Leland Stanford farm in Palo Alto, California (Figure 1).⁹

The objects chosen to represent the motion picture and the individuals associated with them reveal an understanding of the medium along the lines traced by early historians like Terry Ramsaye and Guillaume-Michel Coissac.¹⁰ This model revolved around a few “great individuals,” inventors, and tinkerers (with no distinction made

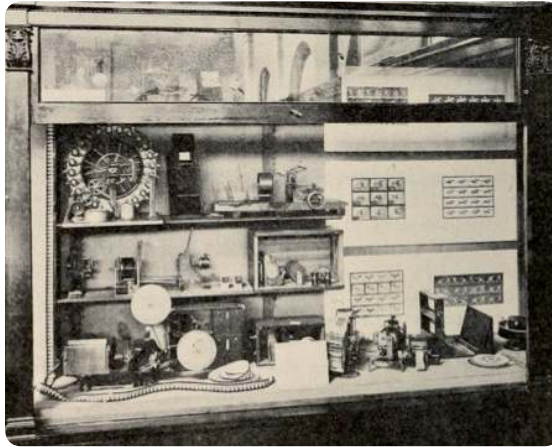


Figure 1. US National Museum motion picture exhibit. From *Transactions of the Society of Motion Picture Engineers* 26 (November 1926): 30.

between scientists and amateurs). It also adopted an evolutionary rationale, from “primitive” devices like optical toys and photomechanical illusions to scientific instruments that took advantage of the principle of persistence of vision. In an article for *American Cinematographer* titled “Film Evolution Shown in Smithsonian Collection,” A. J. Olmsted (Smillie’s successor as curator of photography) enumerated the various artifacts on display to show how far cinema had come since its early days and also reminded his readers that in “the beginning was an effort to amuse.”¹¹ The implicit organizing principle for the display, however, was that the only way cinema could be featured in a museum was by foregrounding its technical parameters and situating it within a larger narrative that Jonathan Crary has described as the great “unsettling of vision” in the long nineteenth century.¹²

Alison Trope has argued that,

historically, science museums (in comparison to art institutions) have more readily accepted the cinematographic apparatus into their institutional walls. . . . The average science museum has had less at stake, perhaps, in positioning and exhibiting cinema as the latest technological equipment; the average art museum, on the other hand, has had to grapple with its institutional roots and the definition of fine art in its recognition and acceptance of an entirely new art medium.¹³

In other words, science and technology museums like the Smithsonian’s National Museum or London’s Science Museum (as we will see later) did not have to classify film as an art to allocate it a place in their galleries based on its mechanical properties; it was

enough that projectors, cameras, and instruments for the analysis of movement had contributed to advancements in optics and an understanding of locomotion and anatomy.

In fact, the motion picture and the technologies that enabled its recording, reproduction, and projection were traditionally conceptualized as separate entities in institutions of research and learning. The Library of Congress had from early on accepted only photographic deposits of film frames as part of its process of assigning copyright.¹⁴ By the 1940s, deliberations were taking place over which body of the US government (the Library of Congress or the National Archives), if any, would be responsible for assembling and maintaining a collection of films of “national importance.” However, a collection of artifacts was never entertained as a prospect in these discussions. The emphasis instead was on the aging (and highly volatile) reels of celluloid that constituted only the final product of film production.¹⁵

Poet Vachel Lindsay also indirectly endorsed this course of action when he envisioned an ideal museum showing films side by side in “Art Museum study rooms” that brought together all the fine arts and allowed for comparisons between them.¹⁶ For him, cinema’s stature was comparable to the other arts and thus suited for inclusion in the same institutions of study and appreciation. Needless to say, Lindsay’s plans never materialized during his lifetime. In a more general sense, however, it is significant to note that the initial model of exhibition adopted by the Smithsonian had more to do with cinema’s status as a technology and, at most, a “mechanical art.” Two decades had to pass before film archives of a national and international scope were established in the 1930s to safeguard what was left of cinema’s beginnings as an art. Two more decades would go by before museums would start to collect both artifacts *and* film prints and incorporate them in their curatorial agenda in equal measure. Even then, however, the separation inaugurated by the diverging approaches of the Smithsonian and the Library of Congress persisted, as evidenced in the division between the British Film Institute’s National Film Archive from the (now defunct) Museum of the Moving Image in London, or that between the Cinémathèque Française and the Archives Françaises du Film of the Centre National du Cinéma, a schism that took place in the wake of the Langlois affair in the late 1960s.¹⁷

Despite his technological determinism, Smillie must be credited with being the first to recognize the importance of several aspects of the medium’s prehistory in an era when very few cared much about the cinema’s past, let alone deeming it worthy of a place in a national museum.¹⁸ From the acquisition of the *Animal Locomotion* portfolio in 1887, the year it was published, until 1930, the Smithsonian assembled one of the largest collections of Muybridge’s work, including “gelatin dry-plate positives, cyanotype proofs,

collotype prints [1,356], and lantern slides, as well as patent models [2], and apparatus,” in addition to all of his published work.¹⁹ To get a sense of how little significance was attributed to such artifacts at the time, it suffices to note that one of the largest donations of Muybridge materials to the Smithsonian occurred when the Commercial Museum in Philadelphia was about to throw away a cache of unique collotype prints and glass transparencies dating back to Muybridge’s days at the University of Pennsylvania.²⁰

THE QUEST FOR PRECEDENCE: THE SMITHSONIAN AS ARBITRATOR IN THE JENKINS–ARMAT DISPUTE

The name C. Francis Jenkins might not sound familiar today outside of specialized circles, but its prominent inclusion in Smillie’s exhibit and in the Smithsonian’s collection is proof positive of the role that guile and self-promotion can play in shaping the historical record and in influencing the way it is commemorated in the august halls of museums everywhere.²¹ Indeed, judging by Olmsted’s 1922 account, one could be excused for thinking that the motion picture section of the National Museum’s Hall of Photography was conceived with the principal intent of promoting Jenkins’s work and genius.²²

Jenkins, along with Thomas Armat, had had a hand in solving issues related to the intermittency of early film projectors. The partners were among the first to exhibit motion pictures to a paying audience in the 1895 Cotton States and International Exposition in Atlanta.²³ Their Phantoscope was later repackaged by Edison as that company’s famous Vitascope, the American answer to the Lumières’ Cinématographe.²⁴

Jenkins went on to become a prominent member of Washington’s photographic community. He served in leadership roles in the Society of Motion Picture Engineers and conducted important early television experiments. As Gene Kelkres, H. Mark Gosser, and John Hiller have demonstrated, the precise extent of Jenkins’s involvement with the development of the Phantoscope has never been substantiated. That did not stop Jenkins from preemptively claiming credit for it as well as for many crucial components of moving image projection. In addition to his self-published histories, pamphlets, and speeches, as early as 1897, Jenkins approached the Smithsonian with the aim of donating “his” devices, telling the story of the “development of the art of chronophotography.”²⁵

Jenkins’s gifts formed the nucleus of what eventually became the National Museum of American History’s “early cinema collection.”²⁶ His generosity came under scrutiny when, in the early 1920s, the staff of the Graphic Arts Division (to which Smillie had belonged), along with Philadelphia’s Franklin Institute, were asked to adjudicate Jenkins’s legal dispute with Armat over whose ideas had precedence in the elaboration

of the relevant inventions.²⁷ It is particularly notable that a national museum should have had such a central role in establishing the historical record with regard to an invention that was viewed by most contemporaries as nothing more than a purveyor of amusement. Even though curatorial ethics and the pitfalls of teleology were many decades away from entering the vocabulary of historians and museum professionals, this case provides evidence that the historiography of cinema has been influenced by such considerations since its beginnings.

Olmsted's description of the Smithsonian collection published in *American Cinematographer* concluded with the writer's pronouncement that "there are many gaps in the exhibit and efforts are being made to fill them. It is expected the coming years will find a very much enlarged collection commensurate with the importance, and the vast capital invested in this industry."²⁸ The same thoughts must have been going through Will Day's mind at the same time in the United Kingdom. Day had contributed to the nascent British film industry as a projectionist, exhibitor, and, later, supplier of equipment. His own collection's strengths and its development were thus completely different than Smillie's, guided as it was by his commercial and technical interests and contacts. Like W. K. L. Dickson, Day would write an unpublished history of the medium emphasizing the educational potential of film. He belongs to a vanguard of amateur historians with personal involvement in cinema's early years who, with no institutional help, had the foresight to save, document, and "curate" the material and visual heritage of motion pictures.²⁹ Day's collection is better known than the Smithsonian's, owing, in part, to his status and connections within the motion picture industry in Great Britain and to the intervention of Henri Langlois, who led the effort for its acquisition in 1959 by the French state on behalf of the Cinémathèque Française.³⁰ Its original exhibition context in London, however, is less well known, and it is useful to consider it as a counterpart to the example of the Smithsonian for its different conception of cinema and its exhibition in a museum.

THE FIRST PRIVATE COLLECTION OF CINEMATIC HISTORY: WILL DAY'S TREASURES FROM LONDON TO PARIS

The Science Museum in London is one of two institutions (along with the Victoria and Albert Museum) that is part of the legacy of the Crystal Palace Fair of 1851. In that respect, it is different than the Smithsonian, which, at least during its first century, was characterized by an interdisciplinary syncretism, collecting artifacts of both the arts and sciences. Cinema's presence in the London museum, however, was similar to its place

within the US National Museum: it was placed in the section on photography and within an overall narrative of inventions and technological progress. This marked the beginnings of what curator Michael Harvey has diagnosed as “the division between science and art that underlies both the perception of the history of the media that this Museum represents, and the nature and content of our collection.”³¹ This in turn reflected “the relative values of art and technical objects on the open market.”³²

The “great man” principle of organization was another trait that the two institutions shared. Nevertheless, in the case of the Science Museum, the emphasis was understandably on British inventors, to such an extent as to call into question the Lumières’ and Edison’s contributions. The “cinematography collection” was started after a gift of six objects by Robert W. Paul in 1913. Subsequent donations from inventors like William Friese-Green, Arthur Newman, Louis Le Prince, and Charles Urban were employed to construct a history of cinema along strongly nationalistic lines. Undoubtedly, the single largest building block of that history was Day’s loan of more than five hundred individual items to the museum in 1922, which were put on display that August in two large galleries.³³

What was distinctive about the Day Collection was its strength in what historians now call pre-cinema. These artifacts determined the way in which it was incorporated into the museum’s evolving exhibits (although the building itself would not be finished until 1928).³⁴ As David Robinson has revealed, Day “scoured antique shops and street markets to buy magic lanterns, ancient books, prints, manuscripts and all the varied and ingenious devices whose names generally ended in -scope or -trope or -rama.”³⁵ To be sure, the collection included such unique pieces as an Edison Kinetoscope and the original Lumière Cinématographe, but most early visitors singled out the earlier devices, writing about them in quasi-archeological terms. A short piece that appeared in the journal *Primary Education* in 1922, “Movies in China 5000 BC,” enumerated some of the rarest pieces: Athanasius Kircher’s treatise *Ars Magna Lucis et Umbrae* (1646) and “Chinese wax figures as used in shadow shows several thousand years before Christ.”³⁶ The eclecticism and diversity of media on display resembled a cabinet of curiosities and mirrored the museum’s more general mission, placed halfway between authoritative science and Barnumesque spectacle. Even scientific periodicals that noted the exhibit’s opening dwelled on its “fascinating old toys,” such as the thaumatrope, praising Day for possessing “what is virtually the whole history of motion-picture portrayal.”³⁷

A photograph of one of the wall cases housing these “toys” shows a setup not very different from that chosen by Smillie, but organized for visual rather than pedagogical effect (Figure 2). Phenakistoscopes of all sizes sit next to lantern slides and a zoetrope,

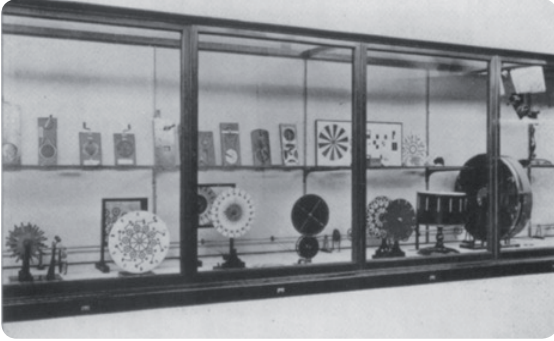


Figure 2. Part of the Will Day Collection as displayed at the Science Museum Photography exhibit during the 1930s. Cinémathèque Française, Collection des appareils.

in a display that would be visually attractive to a museumgoer even today. What is more, many of the devices could be activated with the push of a button, allowing visitors to experience their operating principles. Such an interactive element in a museum exhibit at this early stage reinforces the conception of cinema as primarily a mechanical art that could attract the audience's attention with a behind-the-scenes look at its inner workings.³⁸ Cameras and larger projectors occupied nearby floor-to-ceiling glass cases in what, even by today's standards, is a remarkably complete assemblage of exhibits on the history of the seventh art.³⁹

Even though Day was hailed as a “contributor to the nation's exhibits at South Kensington” and received praise from *Nature* for “so adequately displaying and tending” to this “unique and exceptionally comprehensive” collection, his motives were far from purely scientific or charitable.⁴⁰ Starting in the late 1920s, Day had sought to sell this collection, and in 1930, he published an illustrated catalog to attract potential buyers.⁴¹ Despite the fact that, as early as 1917, the British authorities had expressed the view that “it is of the utmost importance to protect this precious collection for the nation,” when it came time to put their money where their mouth was, they backed off, reluctant to appropriate any funds for its acquisition.⁴² For its part, the Science Museum claimed that it was “unable to accept the whole for display because much of it deals with sidelines, and the policy of the museum is to illustrate only the main stages in the developments of such an invention.”⁴³ Day's collection might have had an enthusiastic reception from the public, but the place of cinema within the museum remained uneasy and hard to justify—a mere “sideline” within a larger narrative of scientific progress.

“It is, perhaps, unfortunate that the collection is to be sold as a whole,” opined a writer in *Nature*:

We should naturally like to know that the objects representing the pioneer work of W. Friese-Green, R. W. Paul, Birt Acres, and other Englishmen, had a chance

of remaining in England. France would doubtless welcome an opportunity to acquire the apparatus of the brothers Lumière, without having to purchase the entire collection.⁴⁴

France purchased the entire collection in 1959, thanks to the intervention of minister of culture André Malraux. Day's championing of his fellow countrymen's contributions to cinema shows that, in contrast to the rather haphazard process by which the Smithsonian acquired its holdings, Europeans recognized cinema as a part of national patrimony early on; even the extent to which it was valued depended on the country and the political circumstances.⁴⁵ This speaks to a larger debate within film history as to whether cinema and its development was a local or mostly national affair. With reference to Britain in particular, Jonathan Auerbach has demonstrated how local practices on both a technical and an artistic basis followed widely divergent trajectories in different nations.⁴⁶ The same can no doubt be said about the reception of cinema in official state institutions like archives and museums.

CONCLUSION: CINEMA EXHIBITED

Beyond the nationalistic and somewhat opportunistic fashion in which Day organized and promoted his collection—his asking price for the collection in 1930 was ten thousand pounds, the equivalent of four million pounds today—he also used it in his activities as an educator and film producer. This reveals an understanding of the museum and its organization that was certainly ahead of its time. He sought to incorporate the footage he collected in documentary films and chronicled their history in his unpublished history manuscript. He lectured and held demonstrations, following in the footsteps of Muybridge, Marey, Dickson, and others who had combined edification and scientific popularization in their public appearances. His control of the collection enabled him to construct an ever-shifting narrative around it, something that was not possible in the context of a more traditional display in an institution like the Smithsonian or its London counterpart. This is what ultimately distinguishes his collection from the devices displayed at the Smithsonian, which are largely held in storage nowadays. By contrast, in the museum of the Cinémathèque Française, Day's collection has retained its coherence as the largest assembly of devices from cinema's early history while, at the same time, contributing to the larger story of the medium's technological and artistic evolution.⁴⁷

As was true for the turn of the twentieth century, the decade that inaugurated the twenty-first century has seen profound changes in the ways cinema is collected,

preserved, exhibited, and historicized. Questions of materiality, intermediality, ethics, and national and institutional contexts remain as relevant to curatorial decisions as they were for Thomas Smillie and Will Day.⁴⁸ In their advocacy for film's place in the museum, the acquisition of the traces of the medium's experimental phase and early growth, their displays of artifacts were organized around a central, guiding idea: for Smillie the evolution of photographic technology; for Day the long history and prehistory of the moving image. Attempting to define what "film heritage" might look like, they set precedents for many facets of subsequent curatorial and archival practice.

Film curatorship has long come into its own as the "art of interpreting the aesthetics, history, and technology of cinema."⁴⁹ It has given rise to museums that are entirely dedicated to the moving image. At the same time, cinema's inclusion in national museums today reveals a lingering understanding of it as an adjunct to larger cultural and technological categories (entertainment industry, optical technologies), as in Smillie and Day's time.⁵⁰ While the medium's future is playing out in online platforms divorced of any material or physical basis, yet tracing connections across time and media that could only be dreamed of a century ago, it is vital to keep in mind how cinema's presence in the museum began only a few years after its invention—and how it was originally displayed as part of the larger story of the arts and technology.

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NOTES

1. See Dominique Païni, *Le temps exposé: le cinéma de la salle au musée* (Paris: Cahiers du cinéma, 2002); Hans-Christian Eberl, *Museum und Film* (Vienna: Turia + Kant, 2003); Haidee Wasson, *Museum Movies: The Museum of Modern Art and the Birth of Art Cinema* (Berkeley: University of California Press, 2005); Stephen Bottomore, "Film Museums: A Bibliography," *Film History* 18 (2006): 327–49; David Robinson, "Film Museums I Have Known and (Sometimes) Loved," *Film History* 18 (2006): 237–60; Alison Griffiths, *Shivers Down Your Spine: Cinema, Museums, and the Immersive View* (New York: Columbia University Press, 2008); Paula Amad, *Counter-archive: Film, the Everyday, and Albert Kahn's Archives de la Planète* (New York: Columbia University Press, 2010); Alison Trope, *Stardust Monuments: The Saving and Selling of Hollywood* (Lebanon, N.H.: Dartmouth College Press, 2011); Caroline Frick, *Saving Cinema: The Politics of Preservation* (New York: Oxford University Press, 2011); Angela Dalle Vacche, ed., *Film, Art, New Media:*

Museum without Walls! (New York: Palgrave Macmillan, 2012); and Éric Le Roy, *Cinémathèques et archives du film* (Paris: Armand Colin, 2013).

2. See the chronology in Le Roy, *Cinémathèques et archives du film*, 199–200.

3. For institutional histories of the relevant collections, see Diane Vogt-O'Connor and Joan Redding, *Guide to Photographic Collections at the Smithsonian Institution* (Washington, D.C.: Smithsonian Institution Press, 1989–95), and David Bowen Thomas, *The Science Museum Photography Collection* (London: Her Majesty's Stationery Office, 1969).

4. Bolesław Matuszewski famously proposed the foundation of a museum of cinema in 1898. See his *Une nouvelle source de l'histoire du cinéma* (*Création d'un dépôt de cinématographie historique*), reprinted in facsimile in Boleslas Matuszewski, *Écrits cinématographiques*, ed. Magdalena Mazarakis (Paris: Association française de recherche sur l'histoire du cinéma/Cinémathèque Française, 2006).

5. Vachel Lindsay, *The Art of the Moving Picture* (New York: Macmillan, 1915); see also Peter Decherney, "Vachel Lindsay and the Universal Film Museum," in *Hollywood and the Culture Elite: How the Movies Became American*, 13–40 (New York: Columbia University Press, 2005).

6. David E. Haberstich, "Photography at the Smithsonian Institution: A History," *Picturescope* 32, no. 1 (1985): 6. Smillie's interest in still photography and his involvement in camera clubs and technical societies throughout his career explain to a certain extent the fact that moving image technologies have always formed part of the photographic collections of the Smithsonian rather than being a separate department. I would like to thank David Haberstich, Michele Delaney, John Hiller, Shannon Thomas Perich, and Wendy Shay for sharing their knowledge about the Smithsonian's Division of Photographic History and its development as well as for guiding my own search through the "nation's attic."

7. This is now the Arts and Industries Building, located next to the Smithsonian Castle on the National Mall. My description is based on Smithsonian Institution, *Report on the Progress and Condition of the U.S. National Museum for the Year Ending June 30, 1914* (Washington, D.C.: Smithsonian Institution, 1915), and accounts in the general and photographic press.

8. Smithsonian Institution, *Report on the Progress and Condition of the U.S. National Museum*, 65. The earliest mention of the motion picture portion of the exhibit was in an article that Smillie wrote in 1911 describing the collection then "being prepared for installation. . . . Motion Picture photographs [*sic*] will be represented by a large number of the early motion pictures [*sic*] by Muybridge and by the whole series of Mr C. Francis Jenkins's models." Smillie, "The Section of Photography of the United States National Museum," *American Photography*, September 1911, 514–16. As Alison Griffiths has noted, "from about 1911 onwards, the [Smithsonian] was engaged in a variety of photography-based multimedia-type activities," marking the advent of a "screen culture" in the museum at a remarkably early point in the history of cinema. Griffiths, *Shivers Down Your Spine*, 198.

9. Otto Nelson, "Early History and Growth of Motion Picture Industry," *Transactions of the Society of Motion Picture Engineers* 26 (November 1926): 28–33.

10. Terry Ramsaye, *A Million and One Nights: A History of the Modern Motion Picture* (New York: Simon and Schuster, 1925); G.-M. Coissac, *Histoire du cinématographe: de ses origines à nos jours* (Paris: Éditions du Cinéopse, 1925).

11. Olmsted [occasionally spelled Olmstead], "Film Evolution Shown in Smithsonian Collection," *American Cinematographer* 3, no. 7 (1922): 16, 24; the article includes the photograph seen in Figure 1. An operating Mutoscope was included in the gallery in what must surely be the first interactive display in the history of cinematic exhibits. For many of those attending the exhibit, the Mutoscope would have been among their choices of commercial entertainment only a few years previously. In less than the span of a generation, it was deployed to represent a vintage form of diversion, its "museification" complete. Griffiths considers this early interactive dimension of the Smithsonian's exhibits in *Shivers Down Your Spine*, 199ff.

12. Jonathan Crary, *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century* (Cambridge, Mass.: MIT Press, 1992).

13. Alison Trope, "Le Cinema pour le Cinema: Making a Museum of the Moving Image," *The Moving Image* 1, no. 1 (2001): 31.

14. For more on the Library's early collection, see Doug Herrick, "Toward a National Film Collection: Motion Pictures at the Library of Congress," *Film Library Quarterly* 213, no. 2-3 (1980): 5-25.

15. Other units within the Smithsonian did, however, collect actual films, notably for use as anthropological, historical, or institutional documents. Cf. John Hiller, "Film History for the Public: The First National Movie Collection," *Film History* 11 (1999): 384n7. There was an informal agreement between these three institutions that the National Archives and Records Administration was to collect government films, the Library of Congress nongovernment film, and the Smithsonian objects and apparatus. This was never rigidly observed, though it is still the general pattern.

16. Lindsay, *Art of the Moving Picture*, 8.

17. When the Cinémathèque Française acquired the Day Collection in 1959, its significant holdings of early films by "Edison, Paul, Acres, the Lumières, Méliès and the Gaumont, Pathé and Biograph companies" went to the newly established Archives Françaises du Film, while the devices were reserved for Langlois's museum and the documents, trade journals, and catalogs for the Bibliothèque du Film. This was contrary to Day's wishes. Indeed, Laurent Mannoni later complained that "the original films were separated from the devices, the notes and original catalogs were separated from the films and the machines, many pieces were thus rendered orphans. It is up to us now to reconstitute the puzzle." Mannoni, "La Collection des Appareils de Will Day: Machines bizarres et films étrangers, les délices du chercheur," in *The Will Day Historical Collection of Cinematograph and Moving Picture Equipment*, ed. Michelle Aubert, Laurent Mannoni, and David Robinson (Paris: Association française sur l'histoire du cinéma, 1997), 148.

18. Hiller argues that this is "the oldest such collection in the United States and possibly in the world." It is certainly the oldest collection of cinematic artifacts in a national museum. In the 1990s, Hiller initiated a database of all cinema-related devices in American museums, a project that would surely be

worth pursuing further today. Hiller, "Film History for the Public," 370–86. See also Hiller, "The Movie-Machine Collection, National Museum of American History," *History of Photography* 24, no. 1 (2000): 60–63.

19. L. Novick, "Review of Muybridge Items in Division of Photographic History," Smithsonian Institution internal memorandum, circa 1985, Archives of the Division of Photographic History, National Museum of American History, Smithsonian Institution. This represents accessions made in 1894–95, 1908, 1920, 1923, and 1927. See also the Gordon Hendricks Motion Picture History Papers, Archive Center, NMAH.

20. In a memorandum, the museum's director, W. P. Wilson, bluntly estimated that the total weighed "somewhere between 100 and 200 pounds." Other artifacts were acquired from receivers' sales and as a result of the curator's persistent inquiries "because of a new-found appreciation of Muybridge's role in the development of motion pictures." L. Novick, "Review of Muybridge Items in Division of Photographic History."

21. For a recent biography, see Donald G. Godfrey, *C. Francis Jenkins, Pioneer of Film and Television* (Urbana: University of Illinois Press, 2014), esp. 37–49 on Jenkins's dealings with the Smithsonian.

22. See also Olmsted's later report on the same exhibit for the Society of Motion Picture Engineers in Olmstead, "The Motion Picture Collection at the National Museum," *Journal of the Society of Motion Picture Engineers* 26, no. 3 (1936): 265–69. The same issue includes articles by Earl Theisen, an important early collector, and H. G. Percey, both of which are invaluable resources for the early history of collection and exhibition of film artifacts in museums, libraries, and world's fairs.

23. Gene Kerkres, "A Forgotten First: The Armat-Jenkins Partnership and the Atlanta Projection," *Quarterly Review of Film Studies* 9, no. 1 (1984): 45–58. The Latham family's Eidoloscope had been exhibited in New York City since May 1895 and was also on exhibit in downtown Atlanta during the Cotton States Exposition (September–October 1895).

24. In the most thorough examination of the dispute and the Smithsonian's role in it, H. Mark Gosser persuasively argues that Armat and Jenkins's "beater projector was the first practical American intermittent-movement projector." Gosser, "The Armat-Jenkins Dispute and the Museums," *Film History* 1, no. 1 (1988): 1–12. See also National Archives, Patent Interference 18,461, Latham v. Casler v. Armat.

25. See documents accompanying accession record 22057, Registrar's Files, National Museum of American History.

26. The collection currently comprises 32 motion picture cameras; 105 projectors; 120 pieces of miscellaneous editing, sound, and other apparatus; more than 50 pieces of notable motion picture film; and more than 80 posters, photographs, and other ephemera—this includes such treasures as Latham's Eidoloscope, an Edison Projecting Kinetoscope, William "Billy" Bitzer's Mutograph camera, and the first Technicolor camera. See Ryan Lintelman, "NMAH Photographic History Collection: Early Cinema Collection Scope and Content Notes. July 2008," Records of the Division of Photographic History, NMAH.

27. Gosser, "Armat-Jenkins Dispute and the Museums." See also Thomas

Armat to A. J. Olmsted, March 23, 1940, Smithsonian Institution accession file 156,023, PHC 4189. On June 6, 1921, Armat wrote to Dr. Charles D. Walcott, secretary of the Smithsonian Institution, protesting information about C. Francis Jenkins that was published in the *Washington Times*, May 22, 1921. He denied that Jenkins projected film in Richmond, Indiana, on June 6, 1894, and claimed that several of Jenkins's devices exhibited at the National Museum were mislabeled, specifically the "Intermittent Film Projector, First Kinetoscope and Rotary Lens Camera." He asked to be allowed to present evidence disproving Jenkins's claims. In June 1922, Thomas Edison wrote a letter supporting Armat's complaints. After review, on August 28, 1922, W. de C. Ravenel, administrative assistant to the secretary, wrote Armat saying that they had examined the motion picture devices deposited by Jenkins, "voluminous evidence submitted" by Armat, and statements by Jenkins and reached the conclusion that "the machine labeled 'Intermittent Film Projector Invented by C. Francis Jenkins' was erroneously labeled and has been withdrawn. The Jenkins rotary lens camera was passed by the Patent Office and the Smithsonian does not feel it can alter it. The machine labeled 'First Kinetoscope' is erroneous and will be changed."

28. Olmsted, "Film Evolution Shown in Smithsonian Collection," 24.

29. This is not to say that their activities were bereft of personal interest. Day was at least as prone to self-aggrandizement as Dickson, and he was also driven by nationalistic motives. His fellow countryman William Friese-Greene's reputation as the inventor of kinetography "stemmed very largely from Day's uncritical championing of his cause," as Stephen Bottomore has observed. Bottomore, "Will Day (Wilfred Ernest Lytton Day)," <http://www.victorian-cinema.net/day>. Like Jenkins, Day, too, claimed to be "the first patentee (with J. L. Baird) of Television."

30. Cf. Laurent Mannoni, "'Wither Thou Lead Me?': en suivant l'ombre de Will Day," *Cinémathèque*, no. 6 (Autumn 1994): 166–77; the essays in Aubert et al., *Will Day Historical Collection*; and Michael Harvey, "The Cinematography Collection of the National Museum of Photography, Film, and Television," in *Celebrating 1895: The Centenary of Cinema*, ed. John Fullerton, 3–12 (London: John Libbey, 1998).

31. Harvey, "Cinematography Collection of the National Museum of Photography, Film, and Television," 4. Harvey evokes C. P. Snow's "two cultures" paradigm. From a more pragmatic perspective, one could attribute this division to cinema's overtly technical and capital-intensive nature as a medium that set it apart from the other arts—at least in the minds of early curators.

32. Harvey, "Cinematography Collection of the National Museum of Photography, Film, and Television," 6.

33. Day had put his collection on display earlier in the 1917 National Welfare Exhibition in Liverpool. Cf. Stephen Bottomore, "De la bicyclette au cinéma: Une biographie de Will Day," in Aubert et al., *Will Day Historical Collection*, 23. Throughout these various exhibits, the collection remained Day's property, and he exercised a good deal of control over how it was organized for display. The chronological progression in the arrangement of the artifacts in the Science Museum followed closely Day's manuscript *25,000 Years to Trap a Shadow* (see note 34).

34. This is also reflected in the title of Day's unpublished history of the medium, *25,000 Years to Trap a Shadow*. The Smithsonian had also acquired a number of "pre-cinematic and chronophotographic" devices as early as 1908, including camera obscuras, zoetropes, phantasmascopes, and praxinoscopes, but these were not put on display until much later.

35. Robinson, "Film Museums I Have Known," 238. Cf. also Robinson, "L'ombre qui n'avait jamais été atrapée," in Aubert et al., *Will Day Historical Collection*, 75–94.

36. "Movies in China 5000 B.C.," *Primary Education*, November 1922, 608.

37. "Kinema Exhibition," *Electrical Review* 91, no. 2 (1922): 347.

38. Function was thus the primary consideration in exhibiting the devices, and, as John Barnes affirms, "they were presented without any scenographic [*sic*] intrusion that could distract the eye and the mind from the object." Barnes, "Sur le pas de Will Day: La Collection de John et William Barnes," in Aubert et al., *Will Day Historical Collection*, 35.

39. For details on the collection of devices and their current display at the museum of the Cinémathèque Française, cf. Mannoni, "La Collection des Appareils de Will Day," 137–206.

40. "News and Views," *Nature* 125, no. 3153 (1930): 539–40.

41. Wilfred E. L. Day, *Illustrated Catalogue of the Will Day Historical Collection of Cinematograph and Moving Picture Equipment* (London: Harris and Gillow, 1930). Bottomore describes Day's and his sons' "fruitless labors" spanning across four decades to interest a succession of bureaucrats in a dozen different institutions. Bottomore, "De la bicyclette au cinéma," 24. For the reasons behind the collection's acquisition by the Cinémathèque Française, considered from the point of view of the nation and of cultural heritage, see Bottomore, "Quel dommage! La vente de la collection Will Day, 1929–1959," *Cinémathèque*, no. 8 (Autumn 1995): 106–11.

42. Bottomore, "De la bicyclette au cinéma," 23.

43. The British Film Institute also "declared themselves uninterested in what they called 'associated materials.'" Robinson, "Film Museums I Have Known," 239–40.

44. And the writer concludes, "It is difficult to see how it will be possible to assess the value of such a collection. Is it too much to hope that it will fall into the hands of a public-spirited purchaser, who will see to it that each country eventually has the opportunity of acquiring that portion in which it has a national interest." "News and Views," 540.

45. For more on early cinema collections as part of national cultural heritage, see Donata Pesenti Campagnoni, "Tra patrimonio filmico e patrimonio cinemato-grafico: Alcune tracce storiche sui musei del cinema e dintorni," *Notizario dell'Associazione Museo Nazionale del Cinema*, no. 49–50 (1997): 21–32.

46. Jonathan Auerbach, "Nationalizing Attractions," in *Early Cinema and the "National,"* ed. Richard Abel, Giorgio Bertellini, and Rob King, 17–21 (London: John Libbey, 2008). For a different perspective, see Tom Gunning's contribution to the same volume.

47. Thus the context of the collection as it is currently displayed is more narrowly cinematic and less about photography, science, and optics as it had

been in London. See Charlotte Garson, "Journal: Le Grand Accrochage," *Cahiers du Cinéma*, no. 601 (May 2005): 61–63.

48. Griffiths explicitly makes this comparison with present-day museums: "Thomas Smillie would have a hard time recognizing high-tech galleries and touch-screen interactives at the [Smithsonian] today, although we'd probably be surprised how quickly he would realize that despite the proliferation of flat screens and computer interactives exhibition methods as a whole have changed very little in the century since he worked at the Smithsonian." Griffiths, *Shivers Down Your Spine*, 230–31.

49. "Film Curatorship: A Definition," in *Film Curatorship: Archives, Museums, and the Digital Marketplace*, ed. Paolo Cherchi Usai, David Francis, Alexander Horwath, and Michael Loebenstein (Vienna: Austrian Film Museum, 2008), 231.

50. Film is largely present in the National Museum of American History in its narrative, Hollywood incarnation rather than its technological dimension. Most, if not all, of the devices collected by Smillie now reside in the museum's Archive Center rather than its exhibition galleries. Cf. Lintelman, "NMAH Photographic History Collection."