

OPERATIONAL DETECTION
ILKA BRASCH

Amsterdam University Press Film Serials and the American Cinema, 1910-1940

# Film Serials and the American Cinema, 1910-1940

Operational Detection

Ilka Brasch

Cover illustration: Pearl White shooting scenes for *The Perils of Pauline* in Fort Lee, 1914. Photo Courtesy of the Fort Lee Film Commission of Fort Lee, NJ USA.

Cover design: Kok Korpershoek, Amsterdam Lay-out: Crius Group, Hulshout

Amsterdam University Press English-language titles are distributed in the US and Canada by the University of Chicago Press.

ISBN 978 94 6298 652 7 e-ISBN 978 90 4853 780 8 DOI 10.5117/9789462986527 NUR 670

© I. Brasch / Amsterdam University Press B.V., Amsterdam 2018

All rights reserved. Without limiting the rights under copyright reserved above, no part of this book may be reproduced, stored in or introduced into a retrieval system, or transmitted, in any form or by any means (electronic, mechanical, photocopying, recording or otherwise) without the written permission of both the copyright owner and the author of the book.

Every effort has been made to obtain permission to use all copyrighted illustrations reproduced in this book. Nonetheless, whosoever believes to have rights to this material is advised to contact the publisher.

# **Table of Contents**

Acknowledgements				
1.	Introduction	9		
2.	The Operational Aesthetic	43		
3.	Film Serials Between 1910 and 1940	81		
4.	Detectives, Traces, and Repetition in The Exploits of Elaine	145		
5.	Repetition, Reiteration, and Reenactment: Operational Detection	183		
6.	Sound Serials: Media Contingency in the 1930s	235		
7.	Conclusion: Telefilm, Cross-Media Migration, and the Demise of the Film Serial	285		
Index of Names				
Index of Film Titles				
Index of Subjects				

# Acknowledgements

In writing this book, I have had the pleasure and the honor of benefiting from the input of many bright scholars, close friends, and simply brilliant human beings. The single most influential person in this project was Ruth Mayer, my adviser, who offered both encouragement and criticism throughout the years, and who, when the project felt most overwhelming and the chapters didn't seem to form a flowing argument, stepped in and told me what I needed to do to get this finished.

I am indebted to a group of people at and around the University of Hannover in Germany, who encouraged me to start the project, who shaped its very beginnings, and who continued to be influential over the years. These include everyone who read and commented on my chapters in the American Studies colloquium, especially Felix Brinker, Shane Denson, Svenja Fehlhaber, Florian Groß, Christina Meyer, Bettina Soller, and Kirsten Twelbeck. Felix deserves special credit for alerting me to the operational aesthetic of serial forms, and Svenja for being the best possible office buddy. Additionally, Sandra Dinter and Stefanie John proved to be invaluable friends. I thank them for being my library family and emotional support system. Some of the people just mentioned spent additional time reading and commenting upon individual chapters in the final stages of this project—thank you all, again. In Hannover I am also indebted to Kerstin Sjöstedt-Hellmuth, who never doubted my capacity to do this in the first place.

This book is one result of a shared project with Ruth Mayer on film serials and mass culture, which was part of the larger Berlin-based research unit on 'Popular Seriality – Aesthetics and Practice'. Particularly its speaker Frank Kelleter, who functioned as my second adviser, deserves credit for insisting on some necessary final alterations to the manuscript. I am indebted to all members and associates of the group but especially to Kathleen Loock, whose input is most notable in the chapter on *The Exploits of Elaine*, and to Maria Sulimma for all of her work within the research unit. I would also like to extend my thanks to my advisers in the research unit's workshop sessions and in the international mentoring program, particularly Scott Higgins, Rob King, Sean O'Sullivan, and William Uricchio. Scott's input on shared conference panels and in numerous moments of 'shop talk' was immensely valuable, as was his meticulous review of the final manuscript.

I would also like to acknowledge the help and input of some people who enabled my various research trips throughout the years. Thanks especially to John V. Richardson Jr. at UCLA and to Jeanne Roe Smith, who enabled my

stay in Los Angeles. I'm also grateful for the support of the staff at Margret Herrick Library, the UCLA Film and Television Archive, the Hugh M. Hefner Moving Image Archive at USC, the George Eastman House, and the New York Public Library for the Performing Arts. I would furthermore like to extend my thanks to the series editor Thomas Elsaesser and to everyone at Amsterdam University Press. At this point I am sure I have failed to mention some people who've been helpful along the way, so allow me to apologize in advance.

The final paragraph of my acknowledgments is reserved for the people who contributed to the whole enterprise in ways they may or may not realize. Gretchen Colon and the entire Colon and Innerst families taught me English and showed me the Midwest, sparking my interest in American Studies. My own family (the Brasch, Knaack, Thomas, and Windmüller branches) plus my friend Anne Pohl never questioned the value or feasibility of what I was doing and were supportive all along the way. My final and most important acknowledgment goes to Arne Knaack, who has shared his life with me for more than a decade and who experienced the ups and downs of the entire process with me. I couldn't have done it without you, and I wouldn't have wanted to.

# 1. Introduction

#### Abstract

The introductory chapter provides the book's theoretical framework by detailing an anecdotal approach to the study of film history, and it addresses the shifting definition and function of the anecdote in historiography. The chapter furthermore introduces concepts of seriality in the context of nineteenth and twentieth-century modernity and establishes that, rather than reflecting processes of production and dissemination, serial narratives themselves activate and propel the processes of serialization and industrialization that enable their existence. Viewers approached serials with an awareness of their industrial and commercial character, and repetition assured their continued popularity across more than four decades rather than threatening to subdue it.

Keywords: anecdotes, seriality, film serials, modernity

The age of the film serial was nestled between the advent of cinema and the preeminence of television. From 1912 until 1956, film serials were part and parcel of cinema programming, gaining particular prominence in two golden eras—the first reaching a peak in 1914 and continuing for the rest of that decade, and the second from the mid-1930s to mid-1940s. In the meantime, they never truly disappeared, as they were a constitutive part of American film outside of the studio era's glamorous picture palaces. They played predominantly in second-run neighborhood venues and in independent theaters across rural and suburban America. For two to four months, viewers returned to cinemas for their weekly dose of thrill and adventure. Just like the theaters in which they played, serials offered moviegoers an alternative kind of amusement to the blockbuster features, developing and consolidating not only their own strategies of distribution and exhibition but also their own storytelling devices and aesthetics. Their approach to storytelling is anecdotal, that is, serials compile and rearrange fixed elements, settings, props, stock characters, and story elements that can be considered short, recurring anecdotes. In the particular case of the film serial, the dialectic of repetition and variation that is pivotal to any form of serialized popular culture veers strongly towards repetition, and variation occurs mostly in the form of new combinations of known elements. The arrangement of anecdotes and the relationship of one element to the next offer their own appeal, effecting the serials' particularly operational aesthetic. This appeal has to do with an interest in mechanics, media, narration, and the way each of them function, which at times differed from the filmic and narrative norms of the contemporaneous film culture. Casting a light on the often-neglected form of the film serial thus allows for a reassessment of film and cinema history in the United States.

The first film serial craze was marked by what Ben Singer famously termed the 'serial-queen melodrama' (Singer 2001). These films share a focus on young heroines who are adventurous and daring but who also frequently need to be rescued by their prospective husbands. Their plots are driven both by the death of the heroine's father—often adoptive—and by the search for what Pearl White, the most famous serial queen of silent cinema, termed the 'weenie:' a lost item that is oftentimes a mythical object or a scientific formula, both of which promise a substantial monetary reward (cf. Singer 2001: 208). Despite striking similarities, these serials form a heterogeneous corpus. Edison's What Happened to Mary (1912), for example, which is often considered the first American film serial, portrays a working, self-reliant protagonist and lacks the male rescuer, the weenie, and the soon-common cliffhanger endings (cf. Enstad 1995). Subsequent serials establish and adhered to more stable narrative and cinematographic conventions and found their variations in theme, settings, or gestures towards specific filmic or literary genres instead. The Adventures of Kathlyn (Selig, 1913), for instance, relocates its protagonist's escapades to the jungle; The Exploits OF ELAINE (Pathe, 1915) draws on detective fiction; and Ruth Roland, Pathe studio's second prominent serial queen next to Pearl White, appears in Western serials like RUTH OF THE ROCKIES (1920) and THE TIMBER QUEEN (1922). This first decade of film-serial production has garnered the most attention so far, with studies analyzing their place in the development of cinematic viewing practices, their negotiations of shifting gender norms and stereotypes, the relation between film serials and their coexisting tie-ins in newspapers and magazines (Denson 2014b; Enstad 1995; Morris 2014; Singer 2001; Stamp 2000; Vela 2000), the emergence of the star system or the showcasing of particular stars (Bean 2001; Solomon 2010), and the transnational travels and appropriations of serials and their 'queens' (Canjels 2011; Canjels 2014; Dahlquist 2013a; Smith 2014).

The 1920s saw both the continuing appearance of serial queens, most notably Pearl White and Ruth Roland, and an increase in physically vigorous, gun-slinging, fist-fighting male protagonists. The adventure-seeking girls were now replaced by detectives, policemen, or civilians with a personal motivation for investigative activities. In a sense, the filmic adaptation of the short-story detective Craig Kennedy in The Exploits of Elaine (Pathe, 1915) is a forbearer of the later style. In the 1920s, serials introduced three types of companions: a female lead, a comic sidekick, and/or a recently orphaned child, all of whom come to the detective's aid in a variety of plot constellations. Serials of the 1920s that have so far been largely ignored in film studies, such as The Power God (Davis, 1925), Officer 444 (Goodwill, 1926), or The Chinatown Mystery (Carr, 1928), consolidated the serial formula, experimented with new ideas, and compiled a set of stock characters that would populate film serials until their eventual demise in the 1950s.

Film serials of the sound era capitalized on the concurrent craze for comic strips. They adapted characters from daily newspapers and Sunday supplements and based their plots loosely on their adventures, while retaining the weekly two-reel cliffhanger format. Whereas serials of the late 1930s portrayed private detectives and policemen in serials like DICK TRACY (Republic, 1937) and RADIO PATROL (Universal, 1937), serials of the 1940s adapted successful comic-strip superheroes including Batman (Columbia, 1943) and Superman (Columbia, 1948) for the screen. Sound-era serials have been compiled into a number of anthologies and affectionate histories (Backer 2010; Barbour 1979; Cline 1984, 1994; Davis 2007; Fernett 1968; Harmon & Glut 1973; Kohl 2000; Stedman 1971), and they are included in the histories of film studios (Hurst 2007; Tuska 1982). Additionally, analyses of individual sound serials appear in the context of the study of science fiction films (Miller 2009; Telotte 1995, 1999). More recent studies concern the audiences of these serials (Barefoot 2011; Smith 2014) and their formulaic nature in relation to a juvenile audience's incentive to adapt serial plots for play (Higgins 2014, 2016).

Generally, film serials are one of cinema's most formulaic products. In the silent era they contained up to twenty 'chapters', as the episodes were called, and usually between twelve and fifteen in the sound era. Especially from the 1920s onwards, the episodes increasingly adhered to consistent formal arrangements. The most prominent component of this grid was the weekly cliffhanger: each episode ends in a moment of heightened suspense that often suggests the death of a protagonist or of one of his companions. The ensuing episode would combine a highly condensed recap of previous storylines with a re-introduction of the most relevant characters of the serial, which blends into a repetition of the cliffhanger. The episode would then explain how the hero or

heroine survived what seemed like an inevitably deadly situation, oftentimes by inserting additional shots in the supposed repetition of last week's climax. This conspicuous formula is both a source of pleasure and an imprint of the industrialized film production process. Whereas less information is available for the silent era, what we do know is that the production of sound serials was a thoroughly industrialized endeavor. Serials were shot in four to six weeks, perfecting Hollywood's general custom of shooting out of continuity. Screenwriters prepared the scripts with a certain pragmatism, planning ahead to enable the use of stock footage and sets from previously produced films (Hurst 2007: 76). Post-production started immediately afterwards, and the first episodes were released when only about half of the serial was completed. The production budget of a full serial roughly equaled that of an average feature film, although serials consisted of three times as much footage (Higgins 2016: 7-9; Hurst 2007: 76-77). This efficient organization allowed the sound era's main serial producers Republic, Universal, and Columbia to release a combined average of ten serials each year in the late 1930s and early 1940s (Higgins 2016: 153). Film serials were thus the result of highly economized, compartmentalized, and efficient production processes that perfected Hollywood's appropriation of a Fordist division of labor. The repetitive formula that organized individual episodes was a consequence of such processes, but it made these processes visible at the same time.

The tendency to reflect industrialized production processes is an integral attribute not only of film serials but of popular seriality more generally, that is, of serialized mass media texts of the industrial era beginning in the mid-nineteenth century (cf. Kelleter 2012a: 18). However, serialized texts do not merely mirror the industrialized production process that enables their existence. Instead, as Ruth Mayer contends, popular serial narratives 'need to be seen as *integral elements* of the cycles of production and dissemination that inform the (late) capitalist ideologies of the modern industrial and media societies' (2014: 17). The film serials' use and foregrounding of formula and the concurrent evocation of economized cultural production itself activates and propels the processes of serialization and industrialization that enabled the production of film serials in the first place. In other words, economy, industry, media, narratives but importantly also recipients or 'consumers' are actors in intricate networks of cross-fertilization.¹ Accord-

<sup>1</sup> I consider film serials as parts of actor-networks in Bruno Latour's terms. Both human actors and objects interact in ways that effect (cultural) practices. In consequence, 'to study culture means to investigate specific (historical) processes of assembling, not just the results of certain assemblages' (Kelleter 2014: 4; Latour).

ingly, Frank Kelleter stresses that consumers approach popular serial texts as the commercial products that they are, that is, with an awareness of their industrial character (2012a: 15). This assessment counteracts the assumption that serial narratives hide their commercial nature and trick viewers into the sustained interest and (financial) investment in a product—an idea that, as Umberto Eco reminds us, fostered the earlier critical neglect of serialized cultural texts by proponents of innovative 'art' (1985: 162). Instead of following serial narratives despite—or in ignorance of—their economic efficiency, viewers, readers, or consumers in general are well aware that, as Kathleen Loock argues, 'as a storytelling format, seriality comes with a well-developed set of aesthetic practices and pleasures for audiences that help explain the continuing popularity of serial narratives' (2014a: 5). Film serials in particular make no attempt to hide their serial-industrial markers and formulaic grid, and their continued popularity for more than four decades suggests that audiences enjoyed film serials not despite their repetitious form but because of it.

The understanding of film serials as markedly industrial texts surfaces both in contemporaneous descriptions and in retrospective film-historical analyses, all of which describe serial plots in terms of engines or machines. In 1914, *Motography* described The Beloved Adventurer—a series of thematically connected, single-reel films that Lubin studio marketed as a serial—in opposition to the predominant formula of serials from other studios:

Instead of following the not unusual course of writing his stories around some big mechanical effects or twisting machine-made plots to embrace them, the author of 'The Beloved Adventurer' has made the sensational and spectacular scenes incident to and not the basis of the fifteen unit-plots contained within the one master-plot of the series. (*Motography* 1914)

This account stresses both the mechanical feel of the plotlines of film serials as well as their frequent showcasing of actual machines, that is, of stunt scenes involving cars, trains, motorbikes, and other mechanical means of locomotion, and of mechanisms that themselves constitute attractions, such as audio or visual surveillance mechanisms, medical apparatuses, or weaponry. Moreover, Lubin's studio-issued *Motography* article inadvertently points to the relationship between the machine-made character of serial plots and their tendency to arrange the plot around stunts, or, in abstraction, to arrange predetermined elements that combine into 'unit-plots'. A similar understanding of serial plots as machinic appears in retrospective studies.

Singer describes silent serials as having a 'two-stroke narrative engine' (1996: 75; 2001: 209), and J.P. Telotte insists that the formula of sound serial episodes works 'in a very machinelike way'. Throughout a serial, this formula ensures that the "sound", "efficient", and nearly mechanical extension and working out of a narrative line closely resembles an industrial process' (1995: 96-97). The recurrence of machine or engine metaphors is a result of both film serials' economized and regularized production and release schedules and their repetition of the formula, which circles around itself, arranging instances that often fail to help with the mystery's eventual solution. Despite arguments that serials needed to obscure their serial-industrial markers in order to sustain an audience's interest (cf. Telotte 1995: 97), I argue that serials categorically refused to hide their serialized and compartmentalized character. They foregrounded serialization in openly repeated sequences; re-used sets, footage, and story elements; and thereby directed attention towards their serial-industrial-commercial character to an extent that itself defies the 'commercial trick' argument. Instead, film serials share the more general tendency—or at least ability—of serial narratives to watch and reflect upon their own narration (cf. Kelleter 2014: 4). Thus, I propose that fans of serials did not view these films despite their repetitious character but that repetition itself is at the core of the pleasurable experience of watching a film serial. As I will show in the following, the machinic formula of film serials serves as a grid to arrange preexisting and recurring visual and narrative elements, which I will understand and conceptualize as individual anecdotes.

## Film Serials, Modernity, and Anecdotal Storytelling

It has by now become somewhat of a truism to insist on the dialectic of repetition and variation that Eco has postulated as the key to a successfully serialized narrative (Eco 1985; Kelleter 2012a). According to Kelleter, both story and form are subject to repetition and innovation: a series or serial retains prominent characters and established patterns of storytelling, but it cannot remain popular by telling the same story the same way. A serial's possibility and choice of ways to innovate hinges on its awareness of its own form and formula. Its range of options depends on the contextual horizons of both its own past installments and the historical mass-media contexts of its production and reception (Kelleter 2012a: 23, 28). The strikingly persistent formal grid of film serials mostly relegates variation to character and plot constellations, settings, props, and other constitutive parts that

I consider—and subsume under the category of—popular-cultural anecdotes.<sup>2</sup> Such anecdotes are short and entertaining; they appear in a specific context but they can also be understood without it, which means that they are in a way meaningless in and of themselves. Most of all, anecdotes are endlessly reusable, that is, they are pre-produced segments ready to be appropriated in various contexts. Sampling freely from newspaper and magazine novels, various co-existing media, the dime-novel culture of the time, and notably from preceding film serials, serials arrange and rearrange anecdotal elements: serial queens, large inheritances, mystic objects, jungle adventures, wild animals, dangerous vehicles, noted detectives, daring children, complex machines, and menacing contraptions populate the screens in ever-new combinations. In the sound era, comparable elements recur to an extent that enables Richard Hurst to abstract eight thematic trends in film serial narratives: mad scientists, the Western, aviation, jungle adventures, detectives, costumed (super)heroes, outer space science fiction, and straight adventure (2007: 70). Whereas Hurst regards these as genre categories—with cross-breeds such as Mascot's 1935 science-fiction, Western-musical THE PHANTOM EMPIRE constituting an exception to the rule—they can also be considered pools that supply anecdotes. After all, most serials combine numerous generic markers, and serials generally appear as popular-cultural montages, of which The Phantom Empire is an excessive example rather than an exception. In short, caped superheroes can land airplanes in American prairies.

A consideration of film serials as montages of anecdotes recognizes that seriality is not solely a chronological affair but that serial narratives work in loops and sprawls. Accordingly, 'seriality relies on iconicity, on emblematic constellations, and on recognizable images, figures, plots, phrases, and accessories that, once established, can be rearranged, reinterpreted, recombined, and invested with new significance and thus constitute major parts of the serial memory that upholds complex serial narratives and representational networks in the first place' (Mayer 2014: 10-11). Their continuous rearrangement of elements from the pop-cultural sourcebook of American mass media activates the serials' larger referential networks, drawing from and pointing to newspaper, magazine, radio, and comic strip/book narratives. By placing

<sup>2</sup> I use the term anecdote rather than, for instance, trope or convention specifically to avoid the limits these terms may imply. Whereas tropes are often considered recurring narrative strands or motifs, conventions seem to imply stylistic similarities; anecdotes, however, include both of these and more recurring, identifiable elements.

themselves firmly within these networks, serials have across the decades widened their scope in a manner that nevertheless circles around itself.

Variation thus takes place in the form of new combinations of anecdotes that are inserted into and swirled around in a comparatively stable formulaic grid. Each serial picks a range of anecdotes, and each episode arranges them differently within its formula. As a consequence, the variation between serials results from a different choice of anecdotes, whereas individual episodes often only differ in the order in which they revisit previously introduced spaces, plots, characters, and so forth. This continuous realignment of anecdotes accounts for the fact that, rather than exclusively describing innovation, variation or 'newness' is a self-ascribed element of seriality, which promises 'to constantly *renew* the ever *same* moment' (Kelleter 2012b: 22; see also Mayer 2014: 11). Instead of returning to previous instances in scenes that self-identify as repetition, serials reactivate previous moments. That is, instead of referring to the past, they relocate the past to the present. Film serials practice this 're-presencing' by arranging repeated anecdotal elements in the formula that plays out before us, in its perpetually chugging narrative machine.

This strategy of assembling and arranging or managing anecdotes is programmatic for the more general engagement with contingency in twentieth-century modernity. I consider film serials as a 'vernacular modernism' as defined by Miriam Hansen, that is, as one form and format of expression that 'both articulated and mediated the experience of modernity', and which co-exists with other vernacular modernisms, including photography, fashion, and 'classical Hollywood' (1999: 60). The latter will be a recurring point of reference throughout this study, in that it represents a filmic standard to which serials were compared, contributing time and again to their marginalization. In the silent era, this 'othering' surfaced both in the serial's increasing exclusion from the picture palaces of metropolitan centers and in the trade press' habit to relegate serials, together with other filmic products, to the 'shorts' sections. This phenomenon of being pushed to the margins became more prevalent in the sound era, when film serials largely vanished from the trade presses and were widely, though not always accurately, dismissed as children's fare.3 A similar neglect surfaces in film studies, which throughout the decades brought forth a significantly small number of studies on serials, in comparison to studies of feature films but also of other concise formats such as slapstick. This neglect can only partially

<sup>3</sup> For a more detailed consideration of film serials and their juvenile audiences, see Barefoot (2011) and Vela (2000).

be attributed to difficulties in accessing the material, as especially sound serials were widely available and screened on television in the 1960s and 1970s. The possible cultural bias against this 'low-brow' form, which was perhaps institutionally underlined, was forcefully eliminated by Singer's influential study Melodrama and Modernity (2001), in which he reads the 'serial-queen melodramas' of the 1910s as expressions of convoluted negotiations of gendered norms on the one hand, and as manifestations of the influence of nineteenth-century stage traditions on American film on the other. What was then called 10-20-30s melodrama—a spectacular, sensational stage tradition working with elaborate mechanized stage sets—relied heavily on 'product standardization, mass production, and efficient distribution', and Singer stresses the 'frank theatricality of stage melodrama's aesthetic of astonishment' (2001: 12, 13). Film serials perfected stage melodrama's combination of Fordist efficiency, mechanized stunts, and a blunt display of the impact of both on the aesthetics of film. Thus, whereas 'classical Hollywood cinema could be imagined as a cultural practice on a par with the experience of modernity, as an industrially-produced, massbased, vernacular modernism' (Hansen 1999: 65), film serials constituted another vernacular that not only shared but openly exhibited this industrial character through its relentless formula and serialized form.

When referring to the paradigms of classical Hollywood cinema, Hansen evokes the seminal study by David Bordwell, Kristin Staiger, and Janet Thompson. The authors identify classical Hollywood films made between 1917 and 1960 in terms of what they call a 'group style': individual films share a set of norms that defines the classical style, although individual films within that category at times transgress its norms (Bordwell et al. 1985: 4). These norms include not only conventions of film style and narration, such as a focus on narrative causality and linearity, but also the guidelines of continuity editing. However, rather than prescribing concrete rules for Hollywood filmmaking, the authors stress that classical Hollywood offers filmmakers a range of options and choices (1985: 5). Despite agreeing with many of the axioms outlined by Bordwell, Staiger, and Thompson, Henry Jenkins criticizes the all-embracing tendencies of the classical group style, which incorporates individual transgressions with reference to genre conventions (Bordwell et al. 1985: 70-77, Jenkins 1992: 19). Jenkins eventually probes the limits of the concept, asking 'how far can a given film push against the margins of dominant film practice and still be said to operate within the classical paradigm?' (1992: 19).

As part of the American filmmaking practice, film serials do adhere to many of the classical norms. Yet I argue that serials as a form exist outside the

margins of classicality. On the one hand, although serials were produced in the largest of Hollywood's non-major studios, the industry did continuously push them to the margins, especially in the sound era. Similarly, Bordwell, Staiger, and Thompson's corpus of films disregards serials, making the serials' exclusion from the classical paradigm a result of circumstance rather than analysis. On the other hand, it can be argued that the serialized exhibition of the stories as well as the frequent coincidences and the conventionalized disruption of temporal continuity in the cliffhanger sequences shatter the set of norms that make up the classical paradigm.

The vernacular of the film serial differs from the classical paradigm in the ways in which it manages contingency, that is, the ways it actualizes and organizes the vast amounts of recorded material that resulted from the inventions of cinema, photography, and related technologies. According to Mary Ann Doane, nineteenth and early twentieth-century modernity is informed by two related and reciprocal epistemological shifts: the rationalization of time, which in the Taylorist system becomes a means to measure efficiency, and the valorization of contingency, that is, of chance elements that are not neatly endowed with meaning. The latter surface most readily in film and photography, which register everything within the frame, and which as media and as technologies symbolize the possibility of recording anything and everything: 'The technological assurance of indexicality is the guarantee of a privileged relation to chance and the contingent, whose lure would be the escape from the grasp of rationalization and its system' (Doane 2002: 10). However, according to Doane, the visualization of contingency can also foster anxiety. Classical Hollywood, she argues, counteracts this danger of excess by taking recourse to rationalization itself, by structuring contingency according to rational, abstracted, industrialized time. As a consequence, instead of negating its ability of indexical registration, 'cinema comprises simultaneously the rationalization of time and an homage to contingency' (2002: 32). Feature films thus continuously negotiate contingency and rationalization in an attempt to structure the viewers' film experience. Serials similarly maneuver between contingency and rationalization, but their convoluted plots lay bare a contingency of events and chance occurrences vast enough to probe the limits of what is acceptable within the classical paradigm. Moreover, their self-reflexively foregrounded formulaic corset draws attention to the fact that in film serials, contingency—its chance encounters and random roadblocks—is partitioned and arranged in installments.

The serials' refusal to cloak their medium and technique of storytelling results in a narrative technique that is comparable to comics as they

developed alongside film. In Jared Gardner's account, both comics and early film, whose 'actualities' appear as records of time and the contingent (and ephemeral) in Doane's study, 'sought to break the experience of modernity into segments that would be repeatedly viewed and analyzed, even as the accidental and fragmentary nature of those films promised that the segment of the screen was always part of a continuous, irrecoverable, larger "whole" (Gardner 2012: 19; cf. Doane 2002: 22). Whereas film effaced contingency through continuity editing and some of its gaps and cuts by means of suture, comics lacked a similar technique, and therefore their 'gutters', the gaps between panels, continue to foreground the drawn medium and provide room for interpretation (Gardner 2012: xi). Comics thus retained a discontinuous, fragmented narrative structure, and they were increasingly degraded as children's fare by the 1920s, experiencing a disdain similar to the one assigned to film serials in the same and the following decades (p. 5; Vela 2000: 210-11). Film serials and comics shared aspects of an alternative modern vernacular and suffered from similar consequences. As Gardner summarizes with reference to the Hollywood film industry:

The industry trained audiences to privilege continuity, resolution, and closure and to reject as "bad film" the fragments, the gaps, the illogical connections of early film. [...] After 1910, with the exception of the newly emerging field of animation and the serial, American film moved increasingly from the logic of the comic strip serial in favor of the self-contained narrative, where fragments are, in Lyotard's terms, put to productive, "pro-creative work". (2012: 22)

Serials composed anecdotal segments and left gaps, and although they arranged the segments in relation to one another, their plots meander instead of pointing to an eventual resolution. Moreover, serials actualized broader networks of meaning by referring to para-texts extraneous to the film screen. Gardner refers to the novelization of what is considered the first film serial, What Happened to Mary (Edison 1912), in which the eponymous protagonist explains her ambitions in the urban metropolis: "I want to sample all kinds of different life, and I want the biggest samples cut." Such a promise for the predominantly working-class female audiences is what made the film a smash success: Sampling as adventure' (Gardner 2012: 34). Of the serials that followed in the wake of the 'serial craze' between 1914 and 1918, a majority sampled from modernity's vast array of options. Episodes amounted to a collage of adventures taken from the urban, technologized spheres of modern life. However, sampling also occurred on more practical

levels, as serials borrowed brazenly from American film genres and from their stock sets and characters. Anecdotes included both cultural ideas, such as story fragments or genre markers, and material fragments, including film strip, settings, and props.

Most pragmatically, film serials sampled from Hollywood's footage archives, borrowing stunts and action sequences from feature films or newsreels. Sound-era serials additionally rearranged and repeated shots and sequences from their own previous episodes, culminating in the practice of stitching together 'economy chapters' entirely from previously screened material (Higgins 2016: 55; see also Barefoot 2017: 72-97). In addition to screenwriting, the montage of anecdotes thus also took place in the tangible, material act of filmmaking, and particularly in editing. On all of these levels, the 'gutters'—that is, the spaces between the anecdotes but also between shots and frames—remained open, promising a visual experience that was much more 'modern' than the classical films traditionally endowed with that label. In a way, film serials practiced fragmentation and a display of contingency that was fathomed not only during modernism but across the decades. Ever since the inception of classicality, Gardner reminds us, theorists such as Kracauer, Barthes, Lyotard, and Deleuze have imagined and argued for an arrest of the image and a reinstatement of the 'gutter,' 'the sequential image liberated for contemplation, the interstices between the film's images opened up for perverse engagements' (Gardner 2012: 5).

Whereas film serials mostly did not arrest an image but moved quickly and continuously, they did interrupt their speed of motion only in the weeklong breaks between individual episodes. Especially cliffhanger sequences pointed to the opening between the frames and capitalized on the 'perverse' engagements they offered. One episode of SPY SMASHER (Republic, 1942) provides a distinctive example: the serial's eponymous caped superhero fights a group of soldiers and, before the abrupt ending of the second episode, collapses in machine-gun fire ('Human Target'). The ensuing episode repeats the sequence but inserts additional shots in which Spy Smasher knocks an opposing soldier unconscious, exchanges attire with him, and escapes. When the serial then repeats the shooting from the previous episode, viewers know that it is in fact the soldier wearing Spy Smasher's iconic costume who is killed by his own comrades (episode 3, 'Iron Coffin'). Although far from the experimental cinema that theorists from Kracauer onwards envisioned, the serial opened up and elaborated the interstices between images, allowing a split-second cut to expand into an intermediate narrative with the power to change the previously seen. This technique of inserting elements into the repetition of the cliffhanger of the preceding episode appeared early in the



1. Film still from A Woman in Grey (Serico, 1920). Ruth Hope stands near a trap door; the camera descends (episode 8, 'The Drop to Death').

silent era and was consolidated in sound serials. It allows a narrative opening of the 'meanwhile' off screen, by means of which each episode stresses that its precursor only provided a fragment of the story—one snippet of the vast accumulation of contingent options.

In addition to the temporal opening of the image flow, serials elaborated spatial 'meanwhiles,' that is, they unfolded contingent action not only between the frames but at their edges and beyond the surface of the film set. Serials time and again called attention to what is next to, under, or above the space being shown when they allowed their characters to open up trap doors, sliding walls, and secret doorways. Such instances remind viewers that the momentarily visible is only one fragment among a vast array—one indexed element among the possibly 'index-able'. A pointed example of this occurs in A Woman in Grey (Serico, 1920). At the end of the eighth episode ('The Drop to Death'), the mysterious protagonist Ruth Hope (Arline Pretty) threatens to step backwards into an opened trap door. In a vertical tracking shot descending through the floor boards, the camera moves downwards to reveal deadly steel spikes pointing upwards from the bottom of the basement beneath. The following episode further complicates this spatial set-up by introducing an intermediate level, a platform from which a ladder can be propped up sideways towards the trap door (episode 9, 'Burning Strands').



2. Film still from A Woman in Grey (Serico, 1920). Underneath the trap door, a halfway-extended, intermediate story becomes visible, with a ladder that connects to the trap door (episode 9, 'Burning Strands').

Such sequences indicate an understanding of films as enabling only a partial view. The frame captures a portion of the contingent, assembling what can be considered anecdotal evidence of an inferable larger space. By visualizing some of the elements that were previously neglected, the following episode acknowledges film's need to exclude elements from screen. The acknowledged partial indexing of the contingent—that is, the understanding that film compiles anecdotes—is what most readily differentiates the vernacular modernism of film serials from other filmic forms. In short, film serials employed an anecdotal approach to filmic

4 The significance of such stunts of narrative and mise-en-scène appears especially in comparison to King Vidor's The Crowd (MGM, 1928), a feature that is often considered emblematic of cinematic modernity in the United States. In a famous sequence early on in the film, the frame shows an upwards tracking movement alongside a New York high-rise towards a window behind which large numbers of accountants sit at geometrically aligned desks. The camera zooms in on one of them, a character by the name of John Sims, whose story will be the subject of the remainder of the film. The camera movement of this sequence suggests that the film tells an anecdote; however, the story about John Sims will remain the only anecdote told throughout the film. Whereas serials repeatedly emphasize their ability to only depict parts of the contingent,

storytelling in order to manage contingency. A similarly anecdotal approach, I argue, can be made useful in the study of film serials, as the following passages will outline.

## The Anecdotal Approach

Advocating the study of anecdotes and their use in higher education, Sean Cubitt argues that 'the core of the anecdote is not its typicality but its specificity' (2013: n.p.). The 'high resolution' of historical anecdotes and those from cultural texts such as literature or film allow for a depth of analysis that has the capacity to challenge generalized accounts and grand histories (ibid.). Such a focus on the study of anecdotes emerged prominently with the formation of new-historicist literary scholarship in the 1980s and afterwards. At the time, Joel Fineman proposed a study of the changing place and definition of anecdotes in the history of historiography. To an extent, Lionel Gossman conducts the research Fineman outlined, tracing how anecdotes were defined and re-defined throughout the history of the writing of history (Fineman 1989; Gossman 2003). This history includes a variety of changing and open considerations, but it locates a particular shift in the 1920s and 1930s, when anecdotes began to be conceptualized as something that may resist a seamless integration into large-scale tendencies and shifts. These anecdotes were 'different, however, from the classic, welldesigned anecdote, with its triadic structure of exposition, confrontation or encounter, and "pointe" or punch line: If an anecdote is to be truly disruptive and disorienting, it cannot have the structural coherence that the classic anecdote possesses in far higher degree than history itself' (Gossman 2003: 161-162). Consequently, Gossman describes anecdotes as 'naïve, unreflected' and as 'raw, unpolished' (p. 162). The emergence of the fragmented narratives of film serials thus roughly coincides with a new, more inclusive definition of the anecdote. Rather than directly informing each other, both the serials' assemblage of anecdotal elements and historiography's reconfiguration of

The Crowd suspends such an awareness, neglecting the existence of other options for the time being, after the film zooms in on its protagonist. In this particular case, the story of John Sims is not just one among many but, as the character's metonymic name suggests, his story is prototypical, that is, other accountants at other desks are implicitly assumed to have similar experiences. The film thus effectively reduces contingency by making one story stand in for all others. In that respect, the story of John Sims is specifically not an anecdote, that is, it is not singular and meaningless but representative of a larger occurrence. The film does not accentuate the contingent array of options because other anecdotes are presumed to be similar.

the anecdotal in terms of the fragmentary are embedded within the broader cultural and epistemological shifts of modernity. Modernity, that is, was marked by an experienced accumulation of fragmentary data, by attempts to index contingency, and by the increasing need to manage it, for instance through models of social engineering (cf. Mayer 2016; Doane 2002).

In historiography, anecdotes either serve to epitomize and attest to the validity of a larger history or worldview or, conversely, call into question an established history or worldview (Gossman 2003: 167-168; cf. Hediger 2006: 166). Both Fineman and Gossman consider the grand narratives of history—in which anecdotes become mere allegories of teleologically conceived historical strands—outdated and emblematic of an understanding of history as narrative, as 'the exigent unfolding of beginning, through middle, to end' (quoted in Fineman 1989: 57; Gossman 2003: 156, 164). According to Fineman, an anecdote opens up the teleological narrative as it 'produces the effect of the real, the occurrence of contingency, by establishing an event within and yet without the framing context of historical successivity' (1989: 61). Simultaneously, and paradoxically, the anecdote closes this opening because its own structure includes a beginning, middle, and end, just like teleological narration.5 However, I argue that if anecdotes are 'raw' and unrefined, that is, if they are not packaged in a smooth narrative structure, they reintroduce contingency to theoretical exploration and to historiography while avoiding a teleological fallacy.

This difference in the definition of the anecdote impacts the seriality of historiography. Grand narratives are, retrospectively constructed, serial narratives in which individual episodes move towards a final resolution or telos, but in which each episode also stands in for the series as a whole. In other words, history is written by means of a retrospective identification and attribution of serial relations that, because they follow a chronological order from beginning through the middle to an end, exclude historical occurrences that disrupt a particular chronology. A shifting concept and

<sup>5</sup> The 'anecdotal form' is a narrative form, which is why teleological histories likewise like to begin with an anecdote (Fineman 1989: 61). As Jane Gallop summarizes, 'The anecdote introduces an opening in teleological narration, but that very opening inspires a teleological narration which comes to close it up' (2002: 86). In her reading of this passage from Fineman's text, Gallop remarks that 'as narrative, anecdote may also tend to elicit an urge to embed the incident in a larger story. Such an urge would lead us away from contact with the singular moment into all-too-familiar directions—conventional narrative arcs, standard plots. This contradiction between capturing the singular moment and a drive to insert the moment within a familiar plot may be not just a problem for this particular story but a tension intrinsic to the anecdote' (p. 85).

definition of the anecdote allows for the reintroduction of anecdotes that have formerly been excluded, and it thereby necessitates an understanding of historiographical seriality aside from the retrospective attribution of causal or chronological relations.

Michel Foucault<sup>6</sup> describes a similar shift that took place during his time of writing in the late 1960s, when texts displayed a changing relation to the document and history began to be written in the form of multiple related, non-teleological series. Whereas previously, documents were probed concerning their authenticity and truthfulness and analyzed for what they could convey about the past, historiography 'now organizes the document, divides it up, distributes it, orders it, arranges it in levels, establishes series [...]; history is now trying to define within the documentary material itself unities, totalities, series, relations' (Foucault 2002: 7). The task of the historian is thus to acknowledge discontinuities, to delineate a particular series, and to describe series of series, that is, to identify relations among them. These series are individualized; they relate to each other or overlap, but they specifically cannot be integrated into a linear narrative or *grand récit* (pp. 10-11). Yet Foucault criticizes this approach for its lack of sufficient theorization and for its refusal to unearth discontinuities within the history of thought. To him, 'making historical analysis the discourse of the continuous and making human consciousness the original subject of all historical development and all action are the two sides of the same system of thought' (p. 13). His influential study *The Archaeology of Knowledge* can be considered a means to make up for this lack of reflection and theorization.

Recent developments in the 'field' of media archaeology rest upon Foucault's foundational work when they read recent media against the past instead of tracing relations chronologically, and particularly when they take into account forgotten media, inventions, and discourses that existed briefly if at all (Huhtamo & Parikka 2011: 3, 8-10). Instead of presupposing a continuity of thought, these studies trace non-linear and circulating

<sup>6</sup> Michel Foucault counts as a conceptual forefather for many new historicists (cf. Gallagher & Greenblatt 2000: 54, 66-74).

<sup>7</sup> Nevertheless, media archaeology is an extremely heterogeneous field, including both predominantly discursive analyses and studies of technologies themselves, differing to an extent that leads Vivian Sobchack to call it an 'undisciplined discipline', also acknowledging its lack of decidedly media archaeological institutes (2011: 328). Similarly, Petra Löffler points to the multiplicity of approaches within the media archaeological field, whose combination of a variety of theoretical approaches and diverse voices fosters its productivity (2012). Accordingly, Huhtamo and Parikka describe media archaeology as 'a bundle of closely related approaches' (2011: 2).

discourses of and within media across the centuries. According to Erkki Huhtamo,

the media archaeological approach has two main goals: first is the study of the cyclically recurring elements and motives underlying and guiding the development of media culture. Second is the "excavation" of the ways in which these discursive traditions and formulations have been "imprinted" on specific media machines and systems in different historical contexts, contributing to their identity in terms of socially and ideologically specific webs of signification. (1997: 223)

In other words, media-archaeological studies aim to trace historical recurrences in a non-linear fashion, and they study particular media artefacts or anecdotes. According to Huhtamo and Jussi Parikka, media archaeologists of the Anglo-American tradition in particular are adapting and updating the new-historicist project for a study of past and present media (Huhtamo & Parikka 2011: 9).

New-historicist literary scholarship practices 'thick description' and makes it resonate with a particular literary text or text passage (Gallagher & Greenblatt 2000: 31; cf. Geertz 1973). Nevertheless, judging particularly by Christine Gallagher and Stephen Greenblatt's retrospective reflections on new historicism's theoretical ideas and enthusiastic spirit in *Practicing New Historicism*, scholarly interest frequently oscillates between a particular anecdote and the ways in which it resonates with other anecdotes or series throughout history. Analysis begins with an 'urge to pick up a tangential fact and watch its circulation,' and this tracing enables a study of the 'social energies' that move between margin and center, between art and its various opposites, and that have the capacity to impact high culture through its low-cultural 'other' and vice versa (Gallagher & Greenblatt 2000: 4, 13). Rather than being clearly identifiable within a text, social energies become visible in the effects that a particular text has on (or the affects it arouses among) groups of viewers, readers, or listeners at a given point in time. And these energies circulate in the sense that they can be identified both in cultural texts that self-identify as art and in those that do not, and they travel back and forth between the two (Maza 2004: 256). In this process, the social energy shapeshifts according to its context of reception. It therefore should be distinguished from the idea that a text could have a constant, text-inherent essence (Greenblatt 1988: 5). Greenblatt outlines his approach particularly in contrast to such a search for an essence, arguing that

instead we can ask how collective beliefs and experiences were shaped, moved from one medium to another, concentrated in manageable aesthetic form, offered for consumption. We can examine how the boundaries were marked between cultural practices understood to be art forms and other, contiguous, forms of expression. We can attempt to determine how these specially demarcated zones were invested with the power to confer pleasure or excite interest or generate anxiety. The idea is not to strip away and discard the enchanted impression of aesthetic autonomy but to inquire into the objective conditions of this enchantment, to discover how the traces of social circulation are effaced. (p. 5)

In the broadest sense, this study begins by borrowing a new-historicist concept for a media-archaeological inquiry when it charts a social energy called the 'operational aesthetic'. The term was originally coined by Neil Harris in his study of P.T. Barnum's exhibitions and hoaxes in the 1840s, when the famous entertainer attracted an audience's attention and their dollars by displaying impossible objects or stories for discussion and verification: 'The American Museum, then, as well as Barnum's elaborate hoaxes, trained Americans to absorb knowledge. This was an aesthetic of the operational, a delight in observing process' (Harris 1973: 79). According to Harris, a similar enjoyment resulted from the analysis of stories, whether supposedly true or admittedly fiction, as well as from the study of emerging modernity's scientific and technological feats (pp. 62-67). Harris' study thus elaborates a broader historical context<sup>8</sup> of a time when large numbers of American citizens expressed a high interest in technological advancement. In the wake of this fascination, and of newspaper and magazine articles catering to it, novels and short stories adopted a mode of expression that paid tribute to the readers' interest in process and detailed descriptions (pp. 73-75). Taking Harris's study as a point of departure, chapter two traces the operational aesthetic after the mid-nineteenth century and into the twentieth. Assembling anecdotes from newspaper and magazine articles and from crime literature that detail technological mechanisms and processes, the chapter will track the operational aesthetic until the advent of film serials in the United States in the mid-1910s. Drawing on accounts of,

<sup>8</sup> When Neil Harris outlined the operational aesthetic based on accounts of P.T. Barnum's hoax exhibitions in the 1840s, he also abstracted from anecdotal evidence. To make matters more complex, Barnum's own approach was to spread anecdotes and then profit from the public's urge to determine their truth value. However, especially Harris' prominent anecdote of New Yorkers travelling to Hoboken to see a herd of Buffalo displayed by Barnum very much adheres to the structure of beginning, middle, and end that Fineman describes for both anecdotes and grand narratives (cf. Fineman 1989: 57; Harris 1973).

for instance, sewing machines, telephones, and nineteenth-century optical toys, the chapter will unearth an appreciation of process that applies to technological marvels as well as to written accounts and fictional narratives.

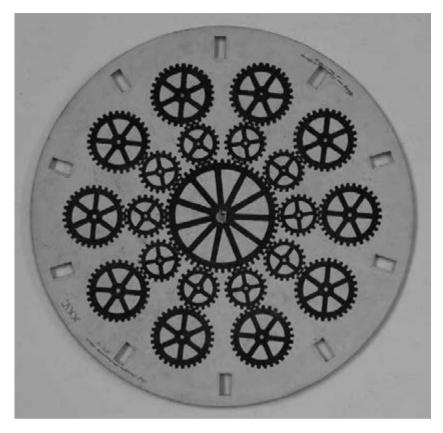
The choice of anecdotes is predicated upon a certain randomness. In line with Greenblatt and Gallagher's delineation of a new-historicist project, the assortment of anecdotes is justified through fruitful interpretation. More explicitly, this justification comes about through 'a sense of resonance for other texts, other readings' (Gallagher & Greenblatt 2000: 46-47). Accordingly, the choice of anecdotes for this study rests upon their resonance with each other on the one hand, and with film serials on the other. In this context, retrospective academic analyses also come to function at times as anecdotes. Harris' term entered film studies in texts on turn-of-the-century shorts, when both Tom Gunning and Charles Musser detected an operational aesthetic in, respectively, an exhibitionist cinema's demonstration of its own technological functioning, and a film exhibitor's technical explanations that made up for film's lack of appeal after an audience's familiarization with the new medium (Gunning 1995a: 88; Musser 2006: 169). In this context, the authors' autonomous application of Harris' term to the same object of study is taken as anecdotal evidence of aesthetic operationality, on a par with nineteenth-century magazine accounts.

The operational aesthetic thus results from a correlation of anecdotes, which, in Foucault's terms, enables 'the possibility of revealing series with widely spaced intervals formed by rare or repetitive events' (Foucault 2002: 8). Each anecdote is taken out of its narrative context in what Greenblatt and Gallagher describe as a Barthesian attempt to disrupt the effacement of signified and referent, that is, historical occurrence and its retrospective narration (Greenblatt & Gallagher 2000: 50). A newspaper article about Bell's telephone, for example, ceases to figure as part of a larger narrative history of the development of telephony and is instead made to resonate with an advertisement for Singer's sewing machines. What emerges is not a counterhistory that threatens to replace and thus itself become the previous *grand récit*, but something admittedly ahistorical, an aesthetic and a mode of engagement rather than a history (cf. Gallagher & Greenblatt 2000: 52; Maza 2004: 258-59). Gallagher and Greenblatt take a similar possibility into account:

Anecdotes consciously motivated by an attempt to pry the usual sequences apart from their referents, to use Barthes's terms, might also point toward phenomena that were lying outside the contemporary borders of the discipline of history and yet were not altogether beyond the possibility of knowledge per se. (2000: 51-52)

The operational aesthetic is ahistorical in the sense that it lies outside of the realms of history as a discipline, and it does not develop linearly or integrate into a chronological sequence of events. This ahistorical character, however, should not be taken to imply stability or permanence. Instead, the anecdotal approach allows us to reveal the discontinuities that were effaced in the grand narratives and to study the dissonances thus recovered (cf. Gallagher & Greenblatt 2000: 52). According to Foucault, 'the notion of discontinuity is a paradoxical one: because it is both an instrument and an object of research; because it divides up the field of which it is the effect' (Foucault 2002: 10). Correspondingly, each of the collected anecdotes features *an* operational aesthetic as opposed to representing or embodying *the* operational aesthetic, and the differences between the aesthetics of particular anecdotes are subject to inquiry.

Simultaneously, any description of the operational aesthetic apart from a particular cultural text is an abstraction that is based on the correspondences between multiple anecdotes. The difference is mainly one of abstraction and application, which is rooted in an understanding of aesthetics as practice (Kelleter 2012a: 17). In other words, the operational aesthetic exists at the nexus of the text and its reception, as a mixture of text-immanent elements that surface in close readings and in the resulting subject positions that a cultural text offers its recipients. Across the decades, this kind of reception seems to echo a context of industrialization, serialization, and the concurring mass marketing of popular culture that is rooted in the nineteenth century. The chosen anecdotes stress processes of cause and effect and invite a mode of reception that values repetition, just as later film serials do. In a way, a popular phenakistiscope disc of interlocking cogwheels both fosters such a mode of reception and is emblematic of the aesthetics associated with it (see figure 2). The phenakistiscope is an optical toy consisting of a disc that is mounted on a handle and spun, and then watched in front of a mirror through the slits in the disc. The result is the illusion of movement, in this case an image of interlocking, spinning cogwheels. Many of the phenakistiscope discs were prototypical machine-age products, depicting mechanic movement with gears and levers (Dulac & Gaudreault 2006: 232). Their moving images appear very pragmatically at the intersection of aesthetics and practice, because the illusion of movement only results from the viewer's motion of spinning the wheel. Rather than waiting for a narrative or evolutionary outcome, viewers experience the process by which the moving image comes into being. They appreciate the processual aesthetic of both the



3. Phenakistiscope Disc or 'Stroboscopische Scheibe' (Fell.-No. 25), developed by Prof. Simon Stampfer in the 1830s. Image Credit: P. Armand Kraml, Sternwarte Kremsmünster.

medium of the optical toy and of its form, that is, of the interlocking cogwheels.  $^9$ 

This visualization admittedly casts the operational aesthetic in a much more abstract light than Harris' more hands-on description. It does, however, embody some of the most important features of the operational aesthetic. The pleasurable reception experience lies in watching the gears at work, following a chain of cause and effect that is terminated eventually—in this instance, once the originally applied motive power runs out—but not in a moment of narrative closure. The ending, that is, is subordinate to the process itself. Film serials encourage an awareness of processes that can be visual, mechanical, and narrative, and most often it is all of these things

<sup>9</sup> The distinction of medium and form is taken from Niklas Luhmann and appears more prominently in chapter six of this volume.

at once. The pleasurable following of narrative causes and effects always retains a mechanic momentum, a serialized, industrialized feel that results from repetition. Vice versa, repetition also frequently lays bare the mechanic functioning of the media apparatus enabling the perception of moving images, in both nineteenth-century optical toys and in twentieth-century film. The result is an aesthetic experience in which form and content continuously mirror each other in extraordinarily forceful, open, and self-conscious fashion: an operational aesthetic.

The operational aesthetic circulates as one cultural series among others—it does not necessarily describe how a majority of Americans approached media, technologies, and narratives. Neither is this kind of engagement with mechanisms tied to any particular group definable along the lines of class, race, or gender. Instead of being universal or all-encompassing, the reception practice that is tied to the operational aesthetic is an optional subject position that surfaces anecdotally. Nevertheless, it does continuously circulate throughout the decades and it particularly informs the practical aesthetics of film serials. Therefore, the operational aesthetic is by no means a fringe phenomenon—it is one pivotal aspect of the experience of modernity that can be traced in anecdotal fashion, that is, in an approach that itself pays tribute to the vast contingency of modernity at large.

Chapter three turns to the study of film serials. Based on a number of anecdotal elements taken from a variety of film serials but also from trade press articles, advertisements, and pressbooks, the chapter illustrates that film serials cater to an audience that is interested in process and that values the appeals of both technical and narrative cause and effect. As the chapter will show, contemporaneous criticism bears witness to an awareness that the serials' portrayed machines and mechanic death contraptions were related to the 'machinic', continuously propelling narratives. Moreover, serials from the 1910s to the 1940s share the characteristics of particularly presentist and presentational storytelling. Both of these qualities depend as much on narrative and cinematographic elements as on a serial's embeddedness in a context of transmedia storytelling and both local and national advertising. What I call the serials' 'presentist' storytelling results, on the one hand, from a serial structure that establishes each week's plot as taking place in the present by means of references to previous and upcoming developments. In the 1910s, magazine tie-ins with corresponding writing contexts insisted that future episodes were not yet written and spelled out and encouraged fans to submit suggestions for upcoming narrative developments. These magazine and newspaper tie-ins, which elaborated on a given week's episode, expanded the screen narrative into a multi-layered text that unfolded from week to week around the fans in multiple media. A comparable strategy to ensure a serials' presence in viewers' lives outside of the film theater and apart from the weekly schedule can be observed in the sound era. Comic strip adaptations ensured that the serials showcased characters that patrons encountered at home, in daily newspapers, and in radio serials, and the marketing suggestions in pressbooks aimed to unfold a serial's world in a given small town's theater lobby, storefronts, and streets.

At the same time, the serials correlated anecdotally in chapter three employ a presentational mode of storytelling. As I will show, serials rehearsed and exemplified filmic narration, and they self-consciously highlighted their own assembly and correlation of anecdotes. Episodes accumulated spectacular stunts and attractions, they repeated or used library footage, and they made use of stock plots and recycled sets. Instead of suturing these elements into a seamless whole, serials often stressed the cuts. Particularly in climactic cliffhanger endings, serials exposed the montage character of filmic narration by on the one hand relying on the viewers to correlate the numerous steps of complicated death contraptions and to deduct their supposedly mortal effect, and on the other hand, by exhibiting the interstices between scenes and shots by inserting action in between the shots, typically of a hero's escape from what seemed like an inevitable death a week earlier. While engaging viewers in thrilling adventure stories, serials also exhibited and explored the narrative and cinematographic possibilities of the filmic medium.

Zooming in on film serials between the 1910s and the early 1940s, chapter three continues the broad, cross-historical focus of the preceding chapter. In pinpointing the machinic qualities of film serials and their characteristics of presentism and presentationalism, the chapter traces how the operational aesthetic impacted film serial storytelling. In the meantime, the chapter demonstrates the particular aptitude of the operational aesthetic for narration in serialized forms. Chapter three as well as the following chapters correlate anecdotal elements from a variety of film serials in order to unearth their shared appeal. And although the chapters are mostly organized according to the chronology of the release dates of individual serials, they 'emphasize[s] cyclical rather than chronological development and recurrence rather than unique innovation' (Huhtamo 1997: 223). However, a tracing of recurring elements in an anecdotal approach cannot take place without the excavation of the media that bear the traces of these recurring elements. In other words, the study of both media-historical anecdotes and film serials as anecdotal always takes place with an awareness of the medium in which the anecdotes appear, that is, in newspapers, magazines, or on the film

screen. This cognizance of the materiality of media is similarly pivotal to media archaeology, which insists on studies of media culture in both its discursive and material dimensions (Huhtamo & Parikka 2011: 3).

As indicated earlier, the correlation of anecdotes takes place on two different levels, as serials themselves combine anecdotal elements into meaningful episodes and I apply a similarly anecdotal approach to my study of these serials. The anecdotal method is of practical advantage when working with material that is always, to an extent, chosen at random. Of the more than 500 silent and sound serials produced between 1912 and 1956 in the United States (cf. Barefoot 2011; Canjels 2011; Hurst 2007), the vast majority has been lost or remains unarchived in family basements and attics. Of many of the silent-era serials, only individual episodes or scenes are available today. The episodes of some serials are divided among multiple archives, with different and often restricted options for access and copying. To this day, not all of the material that is available in archives is being restored or digitized. At the same time, more serials are available than ever before. Researchers and enthusiasts are locating 'new' old films across the globe, and they are advancing restoration and access options. As a consequence, the selection of studied material is based on both a researcher's decision and practical conditions. The anecdotal approach allows one to draw conclusions and to chart trends from this material, while acknowledging that these conclusions do not necessarily apply to all serials. Thus, just like the choice of newspaper and magazine anecdotes for chapter two, the serials and scenes discussed in the remaining chapters are part of this study because they resonate with other serials, anecdotes, and the operational aesthetic.

The anecdotal approach enables me to navigate the 'Big Data' of both modernity and the twenty-first century. The recent and ongoing digital revolution not only makes available vast amounts of contemporary information; it also revitalizes the 'Big Data' of the first data revolution in the mid- to late nineteenth century. At the time, an increase in the publishing of books, magazines, and newspapers sparked the development of organizational systems such as the Dewey Decimal System for library classification (1876) and management strategies and mechanical systems for archives, and it furthered the use of graphs, bars, and pie charts. The accumulation and dissemination of overwhelming amounts of content thus coincided with approaches to process and analyze data by means of statistics (Doane 2002: 16; Robertson & Travaglia 2015). Contingency was thus organized and, in a way, reduced through generalization. In the twenty-first century, the increasing digitization of historical magazines and newspapers disseminates the same data anew. Online archives such as hathitrust.org, the

Library of Congress' chroniclingamerica.loc.gov, and especially the Media History Digital Library (MHDL) expand the availability and usability of a seemingly endless amount of research material. The concurring possibility of automated word searches updates the statistical approaches for the digital era. Particularly the MHDL with its added tool arclight, which taps into the digital library's search engine and transforms keyword searches into graphs, enables the management of large amounts of data but also threatens to reduce highly individualized anecdotes to more streamlined data sets. 10 Whereas projects to scan historic newspapers and magazines foster new cultural histories and liberate the field, they also show that some of our means to cope with 'Big Data' remain similar. This insight is reflected in recent critical reflections of the methods, promises, and affordances of digital databases in media history and the digital humanities, for instance in The Arclight Guidebook to Media History and the Digital Humanities. In their introduction to the volume, Eric Hoyt, Kit Hughes, and Charles R. Acland stress that 'it is not enough to develop technical processes and user interfaces to explore media history's data. What is equally important, if not more so, is to develop interpretive frameworks for analyzing the results' (2016: 19). Both developers of online database systems and researchers alike aim to find analytical tools and methods that allow for meaningful and accurate analyses while taking into account the practical and legislative preconditions that impact a database's search tools and underlying corpus (ibid.).<sup>11</sup>

My study benefits substantially (although not exclusively) from the film magazines and trade papers in the Media History Digital Library and from its search engine Lantern. However, in making use of the anecdotal approach, which has its roots in analog research practices, the study circumvents questions posed by digital analytical tools and instead exemplifies how more traditional notions from literary and cultural studies integrate into newly digitized research environments. Additionally, the approach enables a study of both digitally available anecdotes and ones that have been archived in print or on microfilm, opening up the large corpus of digitalized documents to the larger corpus of material that is still organized in library card catalogues and accessible in on-site viewings. Whereas keyword searches unearth material that would have been lost in vast traditional archives and

<sup>10</sup> Available at search.projectarclight.org.

<sup>11</sup> Richard Abel addresses similar problems with digital archives. He notes that the principles underlying the choice of material that is digitally available differ in nature and are often difficult to track. Consequently, research on the basis of digital archives raises such questions as to what extent the material allows for generalizations or how it can be made productive for a coherent argument (Abel 2013: 6).

libraries, texts found in such archives often help to generate the vocabulary for relevant keyword searches. Moreover, just because statistically verifiable grand narratives were impossible among the shelves and boxes of analog archives, we do not necessarily have to strive to make overarching claims when using digital archives simply because we can. At times, the correlation of anecdotes—that is, the in-depth analysis of a limited amount of research material—allows one to sketch trends or modes of engagement that previously went unnoticed because they do not use a shared vocabulary.

Whereas chapters two and three draw on anecdotes to trace an operational aesthetic and determine its appearance in and influence upon film serials, the remaining chapters correlate elements from individual film serials and episodes. Chapter four zooms in on a single serial, Pathe's THE EXPLOITS OF ELAINE, which started its release in the final week of 1914. Although it is often considered an example of the genre of the serial-queen melodrama, mostly because of its alliterated title and the fact that it starred Pearl White, The Exploits of Elaine takes its narrative cues from a series of Cosmopolitan short stories. The serial's protagonist is detective Craig Kennedy (Arnold Daly), an investigating university professor who uses technology and science to solve crimes. The Exploits of Elaine is really a crime serial in which a genius investigator pursues a ruthless cloaked master villain. Although Elaine in many ways resembles other serial queens, The Exploits of Elaine features numerous elements that are considered generic to film serials in later years, such as the detective, the scientific gadgets, the masked master villain, action, gun slinging, and murder. If we take seriously Ellis Oberholtzer's 1915 accusation that these are 'crime serials' (quoted in Singer 2001: 200), and if we take The Exploits of Elaine as our starting point instead of, for instance, The Perils of Pauline, then the 1910s in American film serials reverberate much more with those of later decades. In consequence, this critical revision diffuses the so far quite stable division of scholarship into studies of the silent era and of sound-era adventure serials.

When Harris coined the term 'the operational aesthetic' in his study of P.T. Barnum's mid-nineteenth-century hoaxes, he was already placing it in the context of detective fiction, particularly in relation to the stories by Edgar Allan Poe (1973: 83). Meanwhile, the serial craze of the 1910s coincided with the popularity of Sherlock Holmes and countless authors aiming to piggyback on Conan Doyle's success, including Elaine author Arthur B. Reeve. Both Poe and Conan Doyle match complex mysteries with adequately capable genius detectives, resulting in carefully crafted stories that can be admired in their own right. At the same time, especially Conan Doyle's

stories share a fairly stable narrative organization, the repetition of which attracts the readers' attention. Therefore, as Eco stresses, the engagement with detective stories 'presumes the enjoyment of a scheme' (1985: 162). While they employ a similarly if not more stable narrative formula, film serials lack the narrative voice that unravels the mystery for the viewer. Instead, they present tangentially connected anecdotal elements and rely on the viewers to draw the connections. Therefore, the chapter argues that the viewers themselves become detectives when viewing film serials: they draw connections and identify the mechanics of both the mystery and the narrative, engaging in what I call operational detection. Drawing on Walter Benjamin's observations on the culture of nineteenth-century Paris as collected in the Arcades Project, the chapter describes how The EXPLOITS OF ELAINE updates the understanding of interior spaces and the capacity of objects to bear traces to match its twentieth century context. In the world of the film serial, objects fail to bear traces that a detective could analyze retrospectively. Instead, technological marvels allow the detective to monitor and record spaces and to pursue the criminal while he carries out his dubious plans. Simultaneously, the serial presents the findings to the viewers, turning former Benjaminian *flâneurs* into detectives.

Chapter five will detail this task of operational detection with a focus on viewers' efforts to correlate anecdotes across multiple episodes of a film serial. A number of serials encourage viewers to compare and contrast instances by featuring reenactments of scenes that occurred in an earlier episode in a similar way. The chapter takes a closer look at three serials from the 1920s: The Hope Diamond Mystery (Kosmik, 1921), The Power God (Davis, 1925), and Officer 444 (Goodwill, 1926). Additionally, it describes a similar significance of reenactments in the sound serial RADIO PATROL (Universal, 1937). In all of these serials, repetition, reiteration, and especially reenactment self-consciously foreground formulaic narrative structures, the recurrence of stock plots, and the serials' reliance on generic story elements. In addition to thus feeding into the presentational character of film serials, reenacted scenes also help viewers identify a serial's theme and its central concerns or detect its crime. All four of the serials that chapter five takes as examples feature scenes that are so similar that they urge viewers to correlate them, and the correlation in each case offers an entryway into an engagement with the serial's theme or enigma. Therefore, repetition, reiteration, and reenactment both foster and reward operational detection. Drawing on multiple forms of narrative and visual reprise and encouraging operational detection, serials offer their viewers a subject position that is located at the nexus of immersion, self-reflexivity, and embodiment. This mode of

film reception can be traced back to the transitional-era context in which film serials emerged in the mid-1910s. However, it is not a transitional-era phenomenon that disappears in later filmmaking traditions; rather it informs film serials throughout the sound era and until their demise in the 1950s.

Whereas chapters three to five chart the storytelling paradigms and mode of reception or viewer address in film serials, chapter six relates the film serials' shapeshifting mode of address in the sound era to its embracing of radio and television. The second craze for film serials in the mid-1930s and early 1940s coincides with the heyday of radio in the United States as well as with the consolidation of the discursive construction of what kind of medium television would be. That is, in the mid-1930s, well before the large-scale dissemination of television sets, TV began to be imagined in terms of radio's broadcast model in a discursive reduction that ruled out other possible uses of the technology, for instance for direct communication or surveillance. Film serials embrace the forms of radio and television and demonstrate the possibilities of these media, particularly the technically possible functions that were already ruled out at the time. In showcasing these options, serials not only reinstate full contingency at the historical moment of its curtailing, they also extend their own array of options of storytelling. Like the other anecdotal elements that film serials assemble, these use options or forms appear repeatedly within individual serials and across numerous serials. As the chapter details, the repeated inclusion of comparable anecdotes enhances their status as anecdotes, that is, it counteracts their suturing into the narrative. As a result, serials manage a variety of anecdotes and adopted forms from radio and television in a cultural montage that exhibits and juxtaposes multiple modes of address.

The final chapter's consideration of film serials in relation to the forms of radio and television already indicates that film serials need to be understood not only as an intricate part of American cinema but more generally of US popular culture. In addition to enabling a new, more nuanced look at silent-era and studio-era film practices, the study of film serials lays bare the connections between strategies of cinematic storytelling and the appeals of contemporaneous media like radio and TV. Accordingly, the conclusion argues for an analysis of the reverberations between film serials and television, pointing to their comparable modes of address. It further stresses the adaptability of the film-serial form to varying exhibition and distribution contexts, which helps to explain their continuous reappearance in the multiple 'new media' in the second half of the twentieth century and in the digital culture of the twenty-first century.

## **Bibliography**

- Abel, Richard. 2013. "The Pleasures and Perils of Big Data in Digitized Newspapers." Film History 25 (1-2): 1-10.
- Acland, Charles R., Eric Hoyt, and Kit Hughes. 2016. "A Guide to the Arclight Guidebook." In *The Arclight Guidebook to Media History and the Digital Humanities*, edited by Charles R. Acland and Eric Hoyt, pp. 1-29. Sussex: Reframe.
- A Woman in Grey. Dir. James Vincent. Perf. Fred C. Jones, Arline Pretty, Henry G. Sell. Serico, 1920. Backer, Ron. 2010. Gripping Chapters: The Sound Movie Serial. Albany, GA: BearManor.
- Barbour, Alan G. 1979. Cliffhanger: A Pictorial History of the Motion Picture Serial. New York: Citadel.
- Barefoot, Guy. 2011. "Who Watched That Masked Man? Hollywood's Serial Audiences in the 1930s." *Historical Journal of Film, Radio and Television* 31 (2):167-90.
- Barefoot, Guy. 2017. The Lost Jungle: Cliffhanger Action and Hollywood Serials of the 1930s and 1940s. Exeter: University of Exeter Press.
- Batman. Dir. Lambert Hillyer. Perf. Douglas Croft, J. Carrol Naish, Lewis Wilson. Columbia, 1943.Bean, Jennifer M. 2001. "Technologies of Early Stardom and the Extraordinary Body." Camera Obscura 16 (3): 9-58.
- Bordwell, David, Janet Staiger, and Kristin Thompson. 1985. *The Classical Hollywood Cinema: Film Style and Mode of Production to 1960*. London: Routledge.
- Canjels, Rudmer. 2011. Distributing Silent Film Serials: Local Practices, Changing Forms, Cultural Transformation. Routledge Advances in Film Studies 7. New York: Routledge.
- —. 2014. "Sensational Programs without Head and Tail: Transforming and Distributing American Silent Film Serials in the Netherlands." Literatur in Wissenschaft Und Unterricht 47 (1/2): 25-38.
- $Cline, William\ C.\ 1984. \ In\ the\ Nick\ of\ Time: Motion\ Picture\ Sound\ Serials.\ Jefferson,\ NC:McFarland.$
- —. 1994. Serials-Ly Speaking: Essays on Cliffhangers. Jefferson, NC: McFarland.
- Cubitt, Sean. 2013. "Anecdotal Evidence." Necsus 2 (1). http://www.necsus-ejms.org/anecdotal-evidence/.
- Dahlquist, Marina. 2013. Exporting Perilous Pauline: Pearl White and the Serial Film Craze. Chicago: University of Illinois Press.
- Davis, Hank. 2007. Classic Cliffhangers, Volume 1-3. Baltimore, MD: Midnight Marquee Press.
- Denson, Shane. 2014. "The Logic of the Line Segment: Continuity and Discontinuity in the Serial-Queen Melodrama." In *Serialization in Popular Culture*, edited by Robert Allen and Thijs van den Berg, pp. 65-79. New York: Routledge.
- Dick Tracy. Dir. Alan James and Ray Taylor. Perf. Smiley Burnette, Ralph Byrd, Kay Hughes. Republic, 1937.
- $\label{lem:policy:modernity:modernity} Do ane, Mary Ann.\ 2002. \textit{The Emergence of Cinematic Time: Modernity, Contingency, the Archive.} \\ Cambridge, MA: Harvard University Press.$
- Dulac, Nicolas, and André Gaudreault. 2006. "Circularity and Repetition at the Heart of the Attraction: Optical Toys and the Emergence of a New Cultural Series." In *The Cinema of Attractions Reloaded*, edited by Wanda Strauven, pp. 227-44. Amsterdam: Amsterdam University Press.
- Eco, Umberto. 1985. "Innovation and Repetition: Between Modern and Post-Modern Aesthetics." Daedalus 114 (4): 161-84.
- Enstad, Nan. 1995. "Dressed for Adventure: Working Women and Silent Movie Serials in the 1910s." *Feminist Studies* 21 (1): 67-90.
- Fernett, Gene. 1968. Next Time Drive Off The Cliff! Cocoa, Fl.: Cinememories.

Fineman, Joel. 1989. "The History of the Anecdote: Fiction and Fiction." In *The New Historicism*, edited by H. Aram Veeser, pp. 49-76. New York: Routledge.

- Foucault, Michel. 2002. The Archaeology of Knowledge (1969). Translated by A.M. Sheridan Smith. London and New York: Routledge.
- Gallagher, Catherine, and Stephen Greenblatt. 2000. *Practicing New Historicism*. Chicago and London: University of Chicago Press.
- Gallop, Jane. 2002. Anecdotal Theory. Durham and London: Duke University Press.
- Gardner, Jared. 2012. *Projections: Comics and the History of Twenty-First-Century Storytelling*. Stanford: Stanford University Press.
- Geertz, Clifford. 1973. The Interpretation of Cultures. New York: Basic Books.
- Gossman, Lionel. 2003. "Anecdote and History." History and Theory 42 (2):143-68.
- Greenblatt, Stephen. 1988. Shakespearean Negotiations: The Circulation of Social Energy in Renaissance England. Oxford: Oxford University Press.
- Gunning, Tom. 1995. "Crazy Machines in the Garden of Forking Paths: Mischief Gags and the Origins of American Film Comedy." In *Classical Hollywood Comedy*, edited by Kristine Brunovska Karnick and Henry Jenkins, pp. 87-105. New York: Routledge.
- Hansen, Miriam. 1999. "The Mass Production of the Senses: Classical Cinema as Vernacular Modernism." *Modernism/Modernity* 6 (2): 59-77.
- Harmon, Jim, and Donald F. Glut. 1973. *The Great Movie Serials: Their Sound and Fury*. New York: Routledge.
- Harris, Neil. 1973. Humbug: The Art of P. T. Barnum. 1st ed. Boston: Little, Brown, and Co.
- Hediger, Vinzenz. 2006. "Das Prinzip Der Pferdewette. Muybridge Als Anekdote Der Mediengeschichte." In *Apparaturen Bewegter Bilder*, edited by Daniel Gethmann, pp. 162-78. Münster: LIT.
- Higgins, Scott. 2014. "Seriality's Ludic Promise: Film Serials and the Pre-History of Digital Gaming." *Eludamos*. 8 (1): 101-13.
- —. 2016. *Matinee Melodrama: Play and the Art of Formula in the Sound Serial*. New Brunswick: Rutgers University Press.
- Huhtamo, Erkki. 1997. "From Kaleidoscomaniac to Cybernerd: Notes toward an Archaeology of the Media." Leonardo 30 (3): 221-24.
- Huhtamo, Erkki, and Jussi Parikka. 2011. "Introduction." In *Media Archaeology: Approaches, Applications and Implications*, edited by Erkki Huhtamo and Jussi Parikka, pp. 1-24. Berkeley and Los Angeles: University of California Press.
- Hurst, Richard M. 2007. Republic Studios: Between Poverty Row and the Majors. Lanham, MD: Scarecrow Press.
- Jenkins, Henry. 1992. What Made Pistachio Nuts? Early Sound Comedy and the Vaudeville Aesthetic. New York: Columbia University Press.
- Kelleter, Frank. 2012a. "Populäre Serialität: Eine Einführung." In *Populäre Serialität: Narration* Evolution Distinktion: Zum Seriellen Erzählen Seit Dem 19. Jahrhundert, edited by Frank Kelleter, pp. 11-46. Bielefeld: Transcript.
- —. 2012b. "'Toto, I Think We're in Oz Again' (and Again and Again): Remakes and Popular Seritality." In Film Remakes, Adaptations and Fan Productions, edited by Kathleen Loock and Constantine Verevis, pp. 19-44. Basingstoke, Hampshire: Palgrave Macmillan.
- —. 2014. Serial Agencies: The Wire and Its Readers. Winchester, UK: Zero Books.
- $Kohl, Leonard\ J.\ 2000.\ Sinister\ Serials\ of\ Boris\ Karloff, Bela\ Lugosi\ and\ Lon\ Chaney, Jr.\ Baltimore, MD:\ Midnight\ Marquee\ Press.$
- Latour, Bruno. 2005. Reassembling the Social: An Introduction to Actor-Network-Theory. Oxford: Oxford University Press.

- Löffler, Petra. 2012. "Towards a New Media Archaeology? A Report on Some Books and Tendencies." Necsus 1 (1): 174-80.
- Loock, Kathleen. 2014. "Introduction: Serial Narratives." *Literatur in Wissenschaft Und Unterricht* 47 (1/2): 5-9.
- Luhmann, Niklas. 1997. Die Gesellschaft Der Gesellschaft. Frankfurt am Main: Suhrkamp.
- Mayer, Ruth. 2014. Serial Fu Manchu: The Chinese Supervillain and the Spread of Yellow Peril Ideology. Philadelphia: Temple University Press.
- —. 2016. "Never Twice the Same': Fantômas' Early Seriality." Modernism/Modernity 23 (2): 341-64.
- Maza, Sarah. 2004. "Stephen Greenblatt, New Historicism, and Cultural History, Or, What We Talk About When We Talk About Interdisciplinarity." *Modern Intellectual History* 1 (2): 249-65.
- Miller, Cynthia J. 2009. "Defending the Heartland: Technology and the Future in The Phantom Empire (1935)." In *Heroes of Film, Comics and American Culture: Essays of Real and Fictional Defenders of Home*, edited by Lisa M. DeTora, pp. 61-76. Jefferson, NC: McFarland.
- Morris, Justin J. 2014. "Extratextuality and the Silent Film Serial." Cineaction 94: 45-50.
- Motography. 1914. "Thrills in New Lubin Series," September 26. Margaret Herrick Library.
- Musser, Charles. 2006. "A Cinema of Contemplation, A Cinema of Discernment: Spectatorship, Intertextuality and Attractions in the 1890s." In *The Cinema of Attractions Reloaded*, edited by Wanda Strauven, pp. 159-79. Amsterdam: Amsterdam University Press.
- Officer 444. Dir. Francis Ford. Perf. Al Ferguson, Neva Gerber, Ben Wilson. Ben Wilson/Goodwill, 1926.
- The Perils of Pauline. Dir. Louis J. Gasnier and Donald MacKenzie. Perf. Paul Panzer, Pearl White, Crane Wilbur. Eclectic/Pathe, 1914.
- Radio Patrol. Dir. Ford Beebe and Cliff Smith. Perf. Catherine Hughes, Mickey Rentschler, Grant Withers. Universal, 1937.
- Robertson, Hamish, and Joanne Travaglia. "Big Data Problems We Face Today Can Be Traced to the Social Ordering Practices of the 19th Century." Blog. *The Impact Blog The London School of Economics and Political Science* (blog). Accessed 13 October 2015. <a href="http://blogs.lse.ac.uk/impactofsocialsciences/2015/10/13/ideological-inheritances-in-the-data-revolution/">http://blogs.lse.ac.uk/impactofsocialsciences/2015/10/13/ideological-inheritances-in-the-data-revolution/</a>>.
- Ruth of the Rockies. Dir. George Marshall. Perf. Herbert Heyes, Thomas G. Lingham, Ruth Roland. Ruth Roland/Pathe, 1920.
- Singer, Ben. 1996. "Serial Melodrama and Narrative 'Gesellschaft." The Velvet Light Trap 37 (1): 72-80.
- —. 2001. Melodrama and Modernity: Early Sensational Cinema and Its Contexts. New York: Columbia University Press.
- Smith, Phyll. 2014. "'Poisoning Their Daydreams': American Serial Cinema, Moral Panic and the British Children's Cinema Movement." *Literatur in Wissenschaft Und Unterricht* 47 (1/2): 39-54.
- Sobchack, Vivian. 2011. "Afterword: Media Archaeology and Re-Presencing the Past." In *Media Archaeology: Approaches, Applications and Implications*, edited by Erkki Huhtamo and Jussi Parikka, pp. 323-34. Berkeley and Los Angeles: University of California Press.
- Solomon, Matthew. 2010. Disappearing Tricks: Silent Film, Houdini, and the New Magic of the Twentieth Century. Urbana and Chicago: University of Illinois Press.
- Spy Smasher. Dir. William Witney. Perf. Marguerite Chapman, Sam Flint, Kane Richmond. Republic, 1942.
- Stamp, Shelley. 2000. Movie-Struck Girls: Women and Motion Picture Culture after the Nickelodeon. Princeton, N.J. Princeton University Press.
- Stedman, Raymond William. 1971. *The Serials: Suspense and Drama by Instalment*. Norman: University of Oklahoma Press.

Superman. Dir. Spencer Gordon Bennett and Thomas Carr. Perf. Kirk Alyn, Noel Neill, Herbert Rawlinson. Columbia, 1948.

- Telotte, J. P. 1995. Replications: A Robotic History of the Science Fiction Film. Urbana and Chicago: University of Illinois Press.
- —. 1999. A Distant Technology: Science Ficiton Film and the Machine Age. Hanover, NH: Wesleyan University Press.
- The Adventures of Kathlyn. Dir. Francis J. Grandon. Perf. Charles Clary, Lafe McKee, Kathlyn Williams. Selig, 1913.
- The Beloved Adventurer. Dir. Arthur V. Johnson. Perf. Lottie Briscoe, Florence Hackett, Arthur V. Johnson. Lubin, 1914.
- The Chinatown Mystery. Dir. J. P. McGowan. Perf. Joe Bonomo, Francis Ford, Ruth Hiatt. Syndicate, 1928.
- The Crowd. Dir. King Vidor. Perf. Eleanor Boardman, James Murray, Bert Roach. MGM, 1928.
- The Exploits of Elaine. Dir. Louis J. Gasnier, George B. Seitz, Leopold Wharton, and Theodore Wharton. Perf. Arnold Daly, Creighton Hale, Pearl White. Pathe, 1914-1915.
- The Hope Diamond Mystery. Dir. Stuart Paton. Perf. George Chesebro, Grace Darmond, Boris Karloff. Kosmik, 1920.
- The Phantom Empire. Dir. Otto Brower and Breezy Eason. Perf. Gene Autry, Frankie Darro, Betsy King Ross. Mascot, 1935.
- The Power God. Dir. Francis Ford. Perf. Al Ernest Garcia, Neva Gerber, Ben Wilson. Ben Wilson/Goodwill, 1925.
- The Timber Queen. Dir. Fred Jackman. Perf. Bruce Gordon, Val Paul, Ruth Roland. Ruth Roland. Serials/Pathe, 1922.
- Tuska, Jon. 1982. The Vanishing Legion: A History of Mascot Pictures 1927-1935. Jefferson, NC: McFarland
- Vela, Rafael. 2000. "With the Parents' Consent: Film Serials, Consumerism and the Creation of the Youth Audience, 1913-1938." Madison: University of Wisconsin-Madison (PhD dissertation).
- What Happened to Mary. Dir. Charles Brabin and Ashley Miller. Perf. Mary Fuller, Marc McDermott, Charles Ogle. Edison, 1912.