



**FILM
CULTURE**

IN TRANSITION

**FILM SERIALS and the
AMERICAN CINEMA
1910-1940**

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

Amsterdam University Press

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	7
1. Introduction	9
2. The Operational Aesthetic	43
3. Film Serials Between 1910 and 1940	81
4. Detectives, Traces, and Repetition in <i>THE EXPLOITS OF ELAINE</i>	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	303
Index of Film Titles	307
Index of Subjects	309

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 forerunner 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; Fernet 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-

1 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.² 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

2 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

3 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, mass-based, 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 week-long 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.⁴ 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, well-designed 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

5 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 Foucault⁶ 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'⁷ 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

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

7 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 context⁸ 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,

8 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.

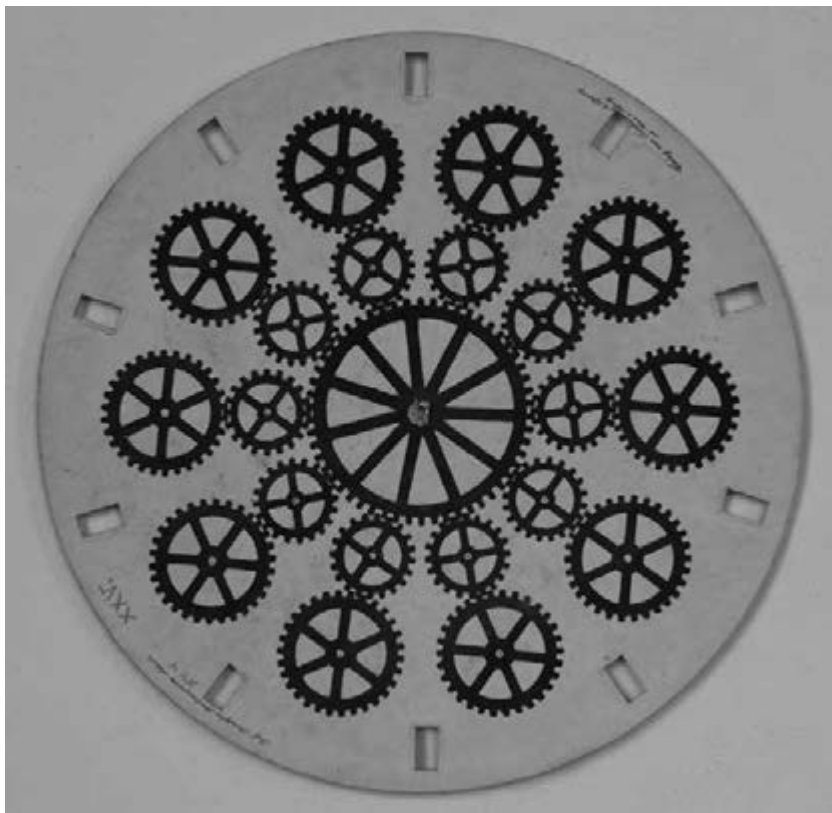
The choice of anecdotes is predicated upon a certain randomness. In line with Greenblatt and Gallagher's delineation of a new-historicist project, the assortment of anecdotes is justified through fruitful interpretation. More explicitly, this justification comes about through 'a sense of resonance for 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: 16g). In this context, the authors' autonomous application of Harris' term to the same object of study is taken as anecdotal evidence of aesthetic operability, 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

9 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.*).¹¹

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

10 Available at search.projectarclight.org.

11 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.
- Doane, Mary Ann. 2002. *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 Veesser, 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 Mediensgeschichte." 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." *Necrus* 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/Pathé, 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. <<http://blogs.lse.ac.uk/impactofsocialsciences/2015/10/13/ideological-inheritances-in-the-data-revolution/>>.
- Ruth of the Rockies*. Dir. George Marshall. Perf. Herbert Heyes, Thomas G. Lingham, Ruth Roland. Ruth Roland/Pathé, 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, NJ: 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 Fiction 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.

2. The Operational Aesthetic

Abstract

The chapter introduces the concept of the operational aesthetic and situates it in the context of the nineteenth century, establishing it as a cyclically recurring aesthetic and mode of engagement with technology, media, and narratives. The chapter correlates newspaper and magazine articles of, for instance, sewing machines, telephones, and nineteenth-century optical toys to unearth an appreciation of process that applies to technological marvels as well as to written accounts and fictional narratives, for instance in crime fiction. By attesting to the serials' generic relationships to crime fiction, the chapter documents a cultural prehistory of the form beyond the filmic medium while also taking into account how serials relate to the processual character of early film.

Keywords: operational aesthetic, crime fiction, history of technology, tangibility, early film

The mental features discoursed of as the analytical, are, in themselves, but little susceptible of analysis. We appreciate them only in their effects. We know of them, among other things, that they are always to their possessor, when inordinately possessed, a source of the liveliest enjoyment. (Poe 1841a: 404)

Although the narrator of the first of Poe's 'tales of ratiocination' most likely refers to the story's ingenious protagonist detective, the mid-nineteenth century also saw a more general rise in the enjoyment of analytical endeavors, not only in literary texts. In a study of P.T. Barnum, Poe's contemporary, who monetized public hoaxes and exhibited similarly examinable curious objects in his American Museum, Neil Harris terms such an enjoyment of analysis the 'operational aesthetic'. Audiences gathered to witness Barnum's elaborate hoaxes, and they took pleasure in evaluating whether his curious exhibition pieces were real (1973: 62-67). According to Harris, '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 and examining for literal truth.' (p. 79). Harris locates this engagement with Barnum's hoaxes and exhibition pieces in a broader public discourse, which considered the analysis of stories—whether supposedly true or admittedly fiction—as well as the study of modernity's scientific and technological feats an enjoyable pastime (pp. 73-74). Visitors to his museum thus engaged in efforts of analysis as a form of entertainment, similar to the analytical affordances described in Poe's detective stories. The era was marked by a similar interest in, and an appreciation of, the technological advancements of the modern world, which could be analyzed correspondingly. This fascination influenced not only the content but also the style of writing published at the time:

Machinery was beginning to accustom the public not merely to a belief in the continual appearance of new marvels but to a jargon that concentrated on methods of operation, on aspects of mechanical organization and construction, on horsepower, gears, pulleys, and safety valves. The language of technical explanation and scientific description itself had become a form of recreational literature by the 1840s and 1850s. Newspapers, magazines, even novels and short stories catered to this passion for detail. (p. 75)

The general fascination with and interest in operability thus fueled Barnum's success, and the operational aesthetic emerged as a mode of trans-generic writing in both journalism and fictional texts. For Harris, the connection to Poe arises from the latter's own concoction and debunking of hoaxes. Poe devised a newspaper hoax in writing a detailed account of a supposedly factual crossing of the Atlantic Ocean in a hot air balloon, and he uncovered the trick behind a supposedly automated chess player (p. 83). For Harris, the connection between detective fiction and Barnum's hoaxes emerges solely through Poe as an author of both detective fiction and of texts that create or uncover hoaxes. Yet he agrees that in devising C. Auguste Dupin, the protagonist of his detective stories, 'Poe created one of the archetypes of detective fiction, the detached, powerful, analytic intellect who solved crimes of the greatest mystery by logical method and intensive empathizing' (p. 85).¹ This logical reasoning, as described in the quote from

1 Although Harris concedes that Poe's readership enjoyed joining the anonymous narrator in solving the riddle, he stresses that these detective stories are not directly related to the operational aesthetic (1973: 86). I nevertheless argue that Poe's detective tales similarly feature an aesthetic of the operational.

'The Mystery of the Rue Morgue,' appears in a text that itself accentuates an aesthetic of the operational. As I will show, this aesthetic applies as much to technical mechanisms as it does to fictional or nonfictional narratives, to detailed descriptions of machines, and to plots that interlink and maneuver in machinic ways.

The following pages will trace the operational aesthetic across the decades and across multiple media. I will thus outline a mode of engaging with technologies and narratives that particularly informs the aesthetics and the related reception practices of film serials, which will be detailed in chapter three. For now, I will first describe how detective fiction acknowledges and caters to an interest in process in ways that foreground its operational aesthetic, from Poe to Arthur Conan Doyle to Dashiell Hammett. Afterwards I will show that the prospering of affordable newspapers and magazines in the United States generated media platforms for a public and publicized engagement with scientific and technological cause and effect. Drawing on these publications as sources of anecdotal evidence for the engagement with novel mechanisms, I will thirdly provide an archaeology of the operational aesthetic as it relates to the culture of a public display of technology in the second half of the nineteenth century. A fourth passage will highlight that although the engagement with mechanisms takes place through media, the operational aesthetic remains related to the tangible and to crafts, even when it appears in the filmic medium. I will thus show, on the one hand, how the interlocking plot elements of crime and detective fiction cater to an audience that cares about process and traceable chains of cause and effect, and on the other hand, how film as it emerges at the end of the nineteenth century accommodates both the mechanical and the narrative aspects of the operational aesthetic, because it enables the narration of process in a medium that can itself be studied as a mechanism and as a technology. The final passage in this chapter will therefore take a meta-perspective and outline how film studies has employed the concept of the operational aesthetic in analyses of films between the mid-1890s and the rise of the film serial in the mid-1910s.

Operationality and Detective Fiction

Although the readers of Poe's short stories are invited to share Detective Dupin's enjoyment of analytic endeavors, their reading experience does not mirror Dupin's investigative approach. Readers take a meta-perspective: instead of collecting clues themselves, they analyze those provided by

the text and follow the detective's explanation of how exactly the puzzle pieces fit together. Therefore, the pleasurable reading experience does not necessarily depend on the readers' own, often futile attempts to guess the solution to the case. Instead, an attentive following of Dupin's assessment of the case can suffice to make the reading experience worthwhile. The narrator of 'The Murders in the Rue Morgue' elaborates these capacities of observation before the eventual unraveling of the stories' featured case when he defines a successful chess player:

The *attention* is here called powerfully into play. If it flag for an instant, an oversight is committed resulting in injury or defeat. The possible moves being not only manifold but involute, the chances of such oversights are multiplied; and in nine cases out of ten it is the more concentrative rather than the more acute player who conquers. (Poe 1841a: 405)

In such sequences, the narrator not only describes the approach and investigative qualities of the story's genius detective but simultaneously outlines a preferred mode of reading. The text constructs an implied reader who appreciates an aesthetic of the operational, and it demands a corresponding, attentive mode of reception. The difference between the story's detective and its readers results from contingency: within the narrative world of the story, the detective faces the full array of possible metaphoric chess moves, that is, of clues and hints, which he has to register attentively to avoid missing the aspects pertaining to his case. The readers, by contrast, only register the choice of options that are mediated by the text. Again, attention is vital, as now almost the full amount of clues or aspects of information become puzzle pieces of larger chains of events. The enjoyment now lies in the ways in which the clues interlink.

The delineation of clues in such operational stories at times include technical or quasi-scientific descriptions of a given mechanism. Attempting to unravel the locked room mystery at the center of 'The Murders in the Rue Morgue', Detective Dupin focuses his attention on a window in the room that constitutes the crime scene. After he learns that a hidden spring served to fasten the sashes from the inside after the murderer's escape, the detective still needs to explain how the escapist left despite a nail being hammered into the window frame from the inside (Poe 1841a: 427). Thus follows a careful analysis of the nail, in Dupin's words:

"There must be something wrong," I said, "about the nail." I touched it; and the head, with about a quarter of an inch of the shank, came off in my fingers. The rest of the shank was in the gimlet-hole where it had broken

off. The fracture was an old one (for its edges were incrustated with rust), and had apparently been accomplished by the blow of a hammer, which had partially imbedded, in the top of the bottom sash, the head portion of the nail. (p. 427)

This instance not only describes Dupin's identification of the murderer's means of escape, it also presents a close analysis of the window that is cloaked in mechanical jargon, naming shanks, sashes, and gimlet-holes. The length of the passage itself signals the prominence of operability in Poe's story. On the one hand, such sequences cater to the likes of a readership that cares about observing process. On the other hand, the text passage appeals to the ideal or implied reader that the story created in its earlier remarks on analysis and chess games. Poe's story thus not only caters to an interest in technical or mechanical operations but also trains its readers to appreciate an operational aesthetic. Moreover, with such a detailed description in direct speech, the text allows its readers to share Detective Dupin's perspective for an instant and to arrive at the conclusion with him. The technical language, which resembles the descriptions of mechanisms given in publications such as the *Scientific American*, provides a full account of the individual objects that make the mechanism work, in a sense aligning the readers' analytic efforts with the detective's. Such and similar descriptions of mechanic constructions and operations are indicative of both the detective's approach to analytic reasoning and deduction and the overall logic of the narrative. For a short moment, readers take part in detection whereas they watch cause and effect come together on the larger scale of the overall narrative.

The result is a paradox. On the one hand, the narrative employs a language of technical explanation that suggests a scientifically objective description. On the other hand, the description itself—that is, the fact that the narrative is mediated in textual form, which never provides a full index but always presents a choice of information—defies holistic description. Towards the end of the nineteenth century, Arthur Conan Doyle has Sherlock Holmes address this paradox with respect to literary realism when Holmes, in 'A Case of Identity', first tells Dr. Watson that 'a certain selection and discretion must be used in producing a realistic effect', and then adds that police reports tend to omit 'the details, which to an observer contain the vital essence of the whole matter' (Doyle 1892: 56). A similar duality surfaces in Ed Wiltse's reading of the Sherlock Holmes stories and their self-reflexive nods towards Holmes' approach at deduction. Doyle's stories describe the detective as a 'perfect reasoning and observing machine', whose scientifically immaculate

approach includes a rule not to theorize before accumulating sufficient data (p. 3, 7; quoted in Wiltse 1998: 116). Yet, as 'Sherlockians', that is, organized and devout students of the Sherlock Holmes stories, point out, Holmes himself often breaks his own code of conduct (Wiltse 1998: 116). This early theorizing is necessary because the readers' interest, as well as the diegetic detective's, lies in watching the narrative cogwheels fall into place rather than in listing and weeding out endless surplus information and countless red herrings. That is, readers appreciate the operational aesthetic at work rather than watching its plotting. Similarly, the Sherlockian organizations grew out of fans' and critics' awareness of inconsistencies in the Holmes stories (pp. 108-9)—an awareness that itself only emerges in relation to the readers' aim to harmonize all information about the detective, which resonates with the stories' operational aesthetic and with its own analytic agenda.

This agenda curiously surfaces in an instance in which Holmes imagines flying with Dr. Watson over London and removing the roofs, looking at 'the strange coincidences, the plannings, the cross-purposes, the wonderful chains of events' (Doyle 1892: 55; quoted in Wiltse 1998: 118). Wiltse argues that this passage indicates that the interlinkage of events results from the search for connections; that, in his words, 'to look for it is to produce it' (Wiltse 1998: 118). The idea is that narrators, detectives, and readers alike search for correlations and draw connections. They appreciate when cause and effect match up, and if they fail to do so they pursue further inquiry, which explains the persistent activities of Sherlockians. It is this kind of appreciation that these so-called 'classic' detective stories have in common with their supposed antithesis of the American 'hard-boiled' variety. However, the successful hard-boiled detective novels of the 1920s and 1930s replace the former retrospective tracing of cause and effect with a presentist operability that they share with film serials, as chapter three will show.

Writing about Dashiell Hammett's epitomic 1929 novel *The Maltese Falcon*, Dennis Porter ascertains that whereas the act of detection as such has an air of strictly target-oriented intent, its interruptions and narrative diversions constitute much of the novel's potential for entertainment. In short, 'the art of literary detection depends largely on the manner in which we are diverted while we wait for the inevitable denouement' (Porter 1981: 54-55). While classic detective stories include some diversions to illustrate the complexity of the case at hand, hard-boiled novels almost endlessly accumulate new angles to a case as the story proceeds. If Poe or Doyle's stories can be described with metaphors of the machine, the hard-boiled tradition is their Rube-Goldberg variant: they still proceed towards the

eventual resolution of a case, but they add numerous intermediate and diverting steps. Eventually, the story accumulates so many metaphorical narrative cogwheels that a working theory of how all the aspects interlock suffices to solve a case, with no need for physical evidence. Nick Charles, the protagonist detective of Hammett's *The Thin Man*, summarizes this approach to detection when his wife urges him to distinguish fact from theory and he replies: 'Sure we know. It doesn't click any other way.' (Hammett 1934: 425). Interestingly, the 'click' itself purports a notion of the mechanic.

These diversions in the process of detection emerge particularly from the synchronicity of the crime and its detection in the hard-boiled novel, as opposed to the retrospective analysis and storytelling of the 'classic' detective story. As Peter Hühn observes, the detective's efforts to 'read' the story of the original crime—to make it 'click', in Nick Charles' terms—itself creates offenses, as the detective's pursuit prompts the criminal to commit follow-up crimes (Hühn 1987: 461). Hard-boiled novels thus literalize the suggestion from the Sherlock Holmes stories that chains of events only exist because someone looks for them, as Wiltse claims. That such chains of events can be more interesting than their suspended resolution is also evidenced by Gertrude Stein's commendation of Hammett's fiction. In *Everybody's Autobiography*, she admits: 'I do like detective stories. I never try to guess who has done the crime... but I like somebody being dead and how it moves along' (quoted in Raczkowski 2003: 631). In a further analysis of detection in Stein's works, Brooks Landon suggests that 'the process itself, the idea of detection, seemed a consistent pleasure for her, with detective stories both involving her in and emblemizing that process' (1981: 488). Rather than being unique to Stein's perspective or to the general fascination of American literary modernists with machines, detective stories generally engage their readers in entertaining processes, and they reflect these processes in the self-reflexive remarks of their protagonists and through detailed descriptions of short processes.² Detective stories thus simultaneously immerse their readers in narrative processes and explicate the narration of these same

2 In *The Maltese Falcon*, a detailed description that resembles that of the window in Poe's story occurs when Sam Spade rolls a cigarette (Hammett 1929: 13). Dennis Porter considers this passage in the novel as one instance in which Spade is placed particularly in contrast to an industrial society and the mass production of consumer items such as cigarettes. Porter further highlights that the passage is pleasurable to read 'simply because it evokes a manual dexterity satisfying to observe', that the description takes place in an ongoing present, and that the enjoyment of the passage is in a self-reflexive manner also the enjoyment of language itself (1981: 56). Although it defies or actively counters the mechanical or machinic element, this passage nevertheless foregrounds operationality.

processes. This integration of immersion and analytics is at the heart of the operational aesthetic with its duality of narrative and mechanism, which continuously invites readers, viewers, or audiences to follow through processual chains while showcasing their own narrative operations, integrating the 'what' and the 'how' of storytelling.

Detective stories, with their particular operational aesthetic, emerged alongside the rise of popular, serialized narratives in general. Whereas classic detective stories appeared episodically, as self-enclosed short stories with serially returning protagonists, *The Maltese Falcon* was originally published chapter by chapter in the pulp magazine *Black Mask*. Not coincidentally, serialized fiction as such emerged in the broader context of industrialization during the nineteenth and twentieth centuries, simultaneous to the growing interest in technology, mechanics, and processes of cause and effect. Through its constant reiteration of narrative elements and its reiterative plot formulas, serial fiction in general, and highly formulaic detective fiction in particular, foregrounds the organization or set-up of its narrative. The interest in the process of detection coincides with the mesmerizing effect of a highly repetitive plot aesthetic. This aesthetic is operational in the sense that it focuses on serially ongoing processes rather than on outcomes, on the possibility and assurance of continuation rather than on the solution to the crime. Wiltse sees such a foregrounding of seriality at work on multiple levels in the Sherlock Holmes stories, as the succession of criminal cases is interrupted by the detective's similarly serial drug addiction. Wiltse similarly connects this sequencing of events to industrialization, as 'the governing discourse of the machine, in the nineteenth century as today, is one of seriality. This discourse points at once to addiction (...) and to production—but, [...] to production emptied of agency' (Wiltse 1998: 116). The endless, 'machinic' seriality therefore applies to detection as much as to addiction and, as Wiltse adds, to the 'machine-like production', the 'cranking out', of detective narratives. The operational aesthetic as an enjoyment of chains of cause and effect and its serial reiteration thus emerged from a historical and experiential nexus of detection and seriality, both of which were rooted in a nineteenth-century fascination with mechanics, science, and technology. It furthermore depended, both for its creation and dissemination, on the rise of an affordable print culture that was similarly enabled by technological progress and industrialization. That print culture itself disseminated accounts of the public exhibition of new technologies. In other words, the operational aesthetic of detective fiction tapped into a contemporaneous interest in process that surfaced in—but that was also popularized through—descriptions of novel mechanisms in newspapers

and magazines. Therefore, before explaining how nineteenth-century print culture fostered its readers' interest in and aesthetic appreciation of technology and cause and effect, I will take a short detour to elaborate on the modernization of print culture during the second half of the nineteenth century and its focus on technological modernization, while simultaneously addressing some terminological questions concerning 'technology', 'mechanism', and 'machine'.

Science, Technology, and Nineteenth-Century Print Media

According to Calder M. Pickett, it was in the 1840s and 1850s that detailed descriptions of novel technologies began to be published (1960: 399-400).³ Even earlier, in the 1830s, the *New York Sun* both covered technological innovation and was 'itself a creature of technology', as it employed advanced print techniques. The paper adopted a plain language describing mechanical particularities of new inventions, such as rollers in printing presses or weather-proof telegraph cables (p. 401). Technological innovation, especially the steam-driven printing press, enabled the increasingly faster and cheaper production and publication of print media and fostered the penny press. Newspapers and magazines, which previously had been reserved for comparatively wealthy readerships, were now accessible to a majority of especially the urban population in the United States. The result was the full incorporation of newspapers into North American communities (Spencer 2007: 25). Generally, the nineteenth-century newspaper and magazine culture not only reflected the technological progress of its time, it was also pragmatically dependent on the new technologies. The ongoing expansion of the railroad enabled national markets for newspapers and magazines, and especially with the installation of the transatlantic cable in the 1870s, telegraphy enabled the worldwide sharing of news. Additionally, the invention of celluloid proved important for illustrated journalism (pp. xiv-xv). The introduction of novel technologies in the nineteenth century thus took place in the form of a network structure, in which simultaneously adopted technologies influenced each other's development, description,

3 Earlier newspapers covered technological innovations differently. *The Evening Post*, for instance, which was founded in 1801 and preceded the penny press by roughly three decades, hailed the new technologies but did so in romantic metaphoric language, with a disregard for mechanical qualities and detail. The paper neglected to take a close view at new technologies, which went hand in hand with their slowness in efforts to install steam-driven presses and profit from telegraphy (Pickett 1960: 399-400).

and use. Like the *Sun*, other print media were symptoms of technological progress, mediating innovation by introducing novel technologies in their articles and editorials. The *Tribune*, for instance, which first appeared in 1841, praised mechanization in lofty terms, and from 1851 onwards, *The New York Times* stressed the ways in which purely mechanical inventions served to educate audiences, broaden their horizons, and, according to its founder, 'improved the character of the great masses of the human race' (Pickett 1960: 398-405).

Such an understanding of the power and impact of mechanical inventions and their description was not unique to newspapers. Among the most prominent publishing venues for the detailed description of technological and scientific progress was the *Scientific American*. Its mission statement particularly highlights the magazine's educational objective, stressing that the working class will benefit from taking part in progress and sharing the excitement it entails:

We shall endeavor to encourage and excite a spirit of enterprise and emulation in artists, manufactures and mechanics, while we present such instruction and useful intelligence in arts and trades, practical science and new discoveries, inventions and improvements, as will add to the facilities of enterprise, and conduce to the prosperity and independence of the working class in particular. (*Scientific American*, 1846a)

In the same column, the editors highlighted the weekly's status as a family publication. The *Scientific American* thus pursued a democratic vision of scientific and mechanical education that had the capacity to increase the prosperity of the working classes. Throughout the nineteenth century and well into the twentieth, each issue began with an article explaining a new invention, which featured a drawing of the respective mechanism that assigned letters to its pivotal parts, to which the article referred. The magazine thereby enabled detailed, matter-of-fact examinations of mechanisms, and it offered drawings that themselves suggested a modern aesthetic.⁴ Nevertheless, and similar to the *New-York Daily Tribune*, the *Scientific American* also published sensational accounts of instances that (supposedly) occurred throughout the United States. It frequently mixed explanations of machines or how-to processes with short anecdotes or jokes, and it questioned whether seemingly scientific things were based on 'superstitious faith' or 'real science' (*Scientific American*, 1846b). These kinds

4 See for example "The Voil Seraphine" (*Scientific American*, 1846c).

of sensational interludes demonstrate that the magazine targeted a general readership that approached inventions in ways that resembled the critical analysis of Barnum's curiosities. Both cases heavily drew on an aesthetic of the operational, which, as the mission statement of the *Scientific American* shows, exists at the nexus of art and science—a distinction that was far less rigid in the mid-nineteenth century.

The explanation of scientific and technological advancement to a broad readership was not restricted to the *Scientific American*—rather, the magazine's approach corresponds to the more widely held contemporaneous belief that progress should be conveyed to the general public. Nina Baym explains that especially before the Civil War, scientists engaged in open educational conversations, disseminating knowledge at a time when science could be understood without prior knowledge of higher mathematics (2002: 3). The founding of the *Scientific American*, the numerous editions of books by prestigious European scientists, and the well-attended scientific lectures all attest to mid-nineteenth-century Americans' interest in modern science. These publications not only conveyed scientific knowledge itself, they also spread an 'aura of scientific advance' (pp. 8-9). For readers and audiences, an interest in technology and science was thus not exclusively pragmatic but meant taking part in a shared, democratic advancement. In this context, individual inventions were, as Baym explains with reference to John Kasson, 'theorized as the concretization of scientific knowledge' (p. 2). It was only in the second half of the nineteenth century that scientific knowledge became increasingly limited to a professional audience (pp. 2-3). However, the broader public interest in it remained, as the print culture of the era proves. Contemporaneous audiences thus understood individual mechanisms as anecdotal evidence of more general societal and scientific advancement. This anecdotal concept of technology corresponds to a tendency to define technology—as historian of technology Thomas J. Misa observes—to this day by means of providing examples of specific technologies (e.g. trains), which are themselves situated within broader technological systems such as electricity or transportation (Misa 2013: 8).

Nevertheless, technology as a term at times also describes a discourse in magazines and newspapers. In the first half of the nineteenth century, 'technology' referred to both the practical application of science in novel inventions as well as to published descriptions of technical mechanisms (Misa 2013: 9; Marx 2008: 24). A similar ambiguity is still evident today, as we use the term to describe both knowledge and objects, such as when both cell phones and the knowledge behind their digital set-up is at times interchangeably termed 'technology'. Richard Li-Hua argues that technology

in fact entails four components: the product, the knowledge, and additionally the technique (that is, machinery, tools, materials, and labor) and the organization of the production (2013: 19-20). These four elements constitute what technology is, even when they are at times individually referred to as technologies themselves. Li-Hua further argues that 'technology must be applied, testified and maintained' (p. 19). This connection of application and maintenance includes a sense of being constantly updated, negotiated, and always in becoming. In this sense, technology exists both as an idea and as an object, and it is always subject to change. In the present context, technology will serve to describe the ideas, techniques, and artifacts that are actualized in the life-world (like a train) and that can be experienced (for example, in the form of a train ride). The operational aesthetic then describes the appreciation of a technological aesthetic, which can surface both in the physical working of an object and through its close description in publications such as the *Scientific American*, in museum or fairground exhibitions, in possibly 'hoaxing' journalism, and in Poe's detective fiction.

Such a view of technology resonates with some definitions of the machine and the mechanic, both of which inevitably inform a study that concerns an aesthetic of the operational. According to Félix Guattari, common usage of the term often implies that the machine is a 'subset of technology'. His concept of machines, by contrast, reverses this dependency so that 'the machine would become a prerequisite for technology rather than its expression' (1995: 33). Guattari's understanding of the machine then subsumes the 'material apparatus', but it also highlights that even this most basic denotation of the machine is not thinkable without 'the functional ensemble which associates it with man' (p. 34). The entire complex of machinism then includes much more, namely its 'technological, social, semiotic, and axiological avatars' (ibid.). The notion of a mechanism, by contrast, is much more concrete: Deleuze and Guattari explain that 'from machines, mechanism abstracts a structural unity in terms of which it explains the functioning of the organism' (Deleuze & Guattari: 284). Or, as Brian Massumi explains, 'mechanical refers to a structural interrelating of discrete parts working harmoniously together to perform work' (quoted in Mayer 2014: 7). Mechanisms are thus smoothly functioning structures of cause and effect that work in unison to perform a certain outcome. As a rather simplified statement, it can be said for now that the operational aesthetic is manifest as the phenomenological experience of mechanisms, which can be technological or narrative. Considering the operational aesthetic as the phenomenological experience of mechanisms, we have to remind ourselves that the emergence of a novel technology not only influences its users' lives

practically, it also changes their perception of the life-world. In other words, the emergence of new technology not only changes our habits because we use it, but it simultaneously shapes how we think about technology, about ourselves, and about the world around us. The increasing dissemination of newspapers and magazines thus fostered a discursive engagement with, and a similarly discursive construction of, technology through a popular medium that served to both educate and entertain its audiences. In addition to all educational appeals, this dissemination provoked an experience and appreciation of technology—both as objects and in textual forms—as aesthetic. This operational aesthetic, as the following passages will show, surfaces from the correlation of newspaper and magazine accounts that describe and introduce particular novelties.

An Anecdotal Archaeology of the Operational Aesthetic

In 1846, the *New-York Daily Tribune* featured a short piece titled ‘New Motive Power’ that introduced Perry’s Gas Engine, which was on display in New York at the time. The article first summarizes the engine’s commercial value in contrast to regular steam engines. Afterwards, a detailed description of the machine’s mechanical design follows the author’s acknowledgment of his or her own and the readerships’ probable inability to understand the technical details:

The following account of it [the engine] is necessarily in good part but a transcript of the inventor’s explanation, but we understand that several eminent authorities on the subject have concurred in expressing a high opinion of the value of the Gas Engine. In this engine the creation of power is effected by the combustion within a cylinder of a mixture of inflammable vapor or gas and atmospheric air—the expansive action of which in the state of inflammation is made to bear directly and alternately upon opposite sides of the piston in the same manner as steam in the Reciprocating Steam Engine. (*New-York Daily Tribune*, 1846)

Additionally, the *Tribune* explains the engine’s advantages in terms of its size, weight, cost, operability, and safety, and it informs the readers that the engine will be shown to ‘any one interested in the progress of the Arts, or desirous of seeing it’ (*New-York Daily Tribune*, 1846). The *Tribune* thus provides a rather detailed explanation of an engine, which the article’s author has difficulties understanding, difficulties that the author assumed the readers share. However, this acknowledgment of the readers’ various levels of proficiency

did not seem to diminish the interest in seeing the engine at work. In other words, even though the newspaper assumed its readers would have trouble understanding the detailed description of the gas engine, it nevertheless provided these details. Similarly, the incomplete understanding might not lessen their interest in seeing the engine. In short, full comprehension is no direct prerequisite for the appreciation of both the written description and the physical exhibition of the gas engine. This appreciation in a sense corresponds to the *Tribune's* reference to scientific progress as 'the Arts'—a term that itself hints at the aesthetic dimension of technology.

In contrast, another *Tribune* article in 1870 conveys an apprehension regarding the competence of its readers: the newspaper's account of a new electric engine leaves out information in order to prevent product piracy. The detailed description focuses not only on the mechanics of the engine but also on the technical and chemical process used to create the strong magnet upon which the technology is based. The article thus both praises and protects this secret formula:

It [the engine] varied but little in general principles from the ordinary electric engine, the novelty being in the magnet, which is first formed by taking an even-grained piece of horse-shoe wire and turning it down to the required proportions—the one shown being three inches in diameter and about 18 inches in length. The ends of the magnet or the poles are turned out so as to leave a face of five inches in diameter. The iron is not hammered but turned in a lathe, and afterward bent in the shape of an 'U'. The iron then passes into the hands of the inventor, who treats it to a series of bakings in various temperatures, the process being a secret. (*New-York Daily Tribune*, 1870)

Again, the newspaper engaged readers with a detailed description of a mechanism that they know will not suffice to fully understand its set-up or build their own prototype—this time thwarted by the patent holders' interest rather than the readers' capacity to understand. This conflict between the appraisal and secrecy of a new technology surfaces almost half a decade later when the Keystone film company both advertised its intricate stunt mechanisms and aimed to keep them a secret (cf. King 2009). In both cases, the readers' or viewers' interest faced limits, which nonetheless did not lessen their interest in the mechanism itself. On the contrary: the existence of a secret formula added a certain sensational element to the technology, augmenting their interest and fascination. As the *Tribune's* explained, burglars had entered the house of Monsieur Emile

Prevost, the French inventor of the new engine, and stole only the strong magnet, 'although articles of greater intrinsic value were scattered around the room', leaving Prevost to assume that this was a case of product piracy (*New-York Daily Tribune*, 1870). This story not only highlights the importance and lucrateness of technological innovation in the nineteenth century, it adds a narrative element to the description of technological marvel. It first provided a detailed description of a mechanism and then added an account of a crime, both of which work with an operational aesthetic. In a way, the crime story fills the hole left by the otherwise detailed description: the burglar needs the magnet because the description of the engine lacks the formula for its manufacture. The secret formula, which drove many film serials of the silent and sound eras, is itself the enigma of both the technological description of the engine and of the crime story. In either case, the formula is the missing puzzle piece that completes the chain of cause and effect, and its absence provokes interest.

The interest in mechanics at the time not only fostered a public understanding of technology, it also fed back into readers' and viewers' perceptions of themselves, particularly their physical bodies. Thus, in 1849 the *Jeffersonian Republican* printed a vitamin pill advertisement that compared the living organism to a steam engine: 'Both require attention to keep them in good condition; each have governors, condensers, escapements, valves, &c' (*Jeffersonian Republican*, 1849). The advertisement is a prime example of how vital structures of cause and effect were framed in a language of the steam engine. It utilizes the readers' awareness of the fragility of the steam engine and its need to be maintained. Simultaneously, it caters to the idea that readers may want their bodies to function as dependently as a steam engine. Most directly, however, the advertisement demonstrates that the public interest in the processes of the steam engine was great enough for advertisers to employ and channel it for their own purposes, rerouting an engagement with the body via the engagement with a technical mechanism.

A similar understanding of the body as mechanism surfaces in studies of the impact of railroad travel on a passenger's physique. In 1862, the English medical journal *The Lancet* published a pamphlet entitled 'The Influence of Railway Travelling on Public Health', which describes the railroad journey as a 'series of small and rapid concussions' (quoted in Schivelbusch 1977: 116-117). According to the pamphlet, the muscles of railroad passengers have to absorb the shocks caused by the rigid train mechanism. Human muscles thus work throughout the journey and eventually become tired. Additionally, the rapidly passing landscapes and the continuous noise of the train was thought to exhaust a passenger's eyes and ears, cause fatigue and

sleep, and, if it affected the railroad employees, could even cause accidents (pp. 109-117). Describing the effects in materialistic terms, the pamphlet essentially extends the concept of material fatigue—which emerged in the second half of the nineteenth century and referred to the decay of trains and railroad tracks—to a train's passengers.

Generally, the pamphlet equates the physical body and the technological mechanism in ways that are similar to the vegetable pill advertisement in the *Jeffersonian Republican*. Additionally, it bears evidence of a skepticism towards railroad travel, which resulted from the individual, physical experience of the train ride as strenuous and from a projection of that experience onto the mechanism of the train. The idea of material fatigue, as it results from this projection, then becomes a metaphor for the explanation of the passenger's own tiredness during or after the journey. Both human and material fatigue thus relate in a circular argument that reads the mechanism through the body and the body through the mechanism. However, this argument considers the body as a part of a larger machine, that is, of a chain of cause and effect that impacts the train as much as it impacts its passenger. As the train ride transposes the engagement with the technology from a purely analytic to an experiential level, the body enters into a relationship with the train that combines both of them into a single machine, which the passenger then studies from within rather than from without.

However, such a coalescence of body and mechanism is not necessarily to the disadvantage of either. Humans are always related to and often part of a mechanism, especially when they operate it. When I.M. Singer & Company, the manufacturer of sewing machines, advertised their products to Victorian women, Singer addressed them not as purchasers of a commodity but as operators of a sewing machine. Grace Rogers Cooper references an engraving from the 25 June 1853 issue of the *Illustrated News*, which states:

The sewing machine has, within the last two years acquired a wide celebrity, and established its character as one of the most efficient labor saving instruments ever introduced to public notice.... We must not forget to call attention to the fact that this instrument is peculiarly calculated for female operatives. They should never allow its use to be monopolized by men. (Rogers Cooper 1968: 31, fig. 29)

First and foremost, Singer's advertisement highlights the industrial efficiency that the sewing machine offered for domestic chores. In its insistence that sewing machines should be operated exclusively by women, the ad implies that men might be interested in operating it in the first place. The

advertisement may thus be symptomatic of a contrast between sewing as a chore traditionally done by women and the presumption that machine operators were typically male. The reassurance of sewing as a woman's task then impacts the notions of the machine and of the operator, both of which move from the public and work spheres into the private sphere of the Victorian home. Whereas technological mechanisms were established in farm work or in industrial facilities, both times performing functions that in one form or another translate into monetary value for its operator, sewing machines provide their home-based operators with surplus time instead of money.

Additionally, the presence of the sewing machine in the home impacted how individuals engaged with complex mechanisms. Men and women now encountered mechanisms outside of the hours of the day that were reserved for paid labor. The sewing machine, however much it was still a mechanism for household chores, enabled an unsupervised engagement with modernity's marvels. The moment technology moves away from the museum, the fairground, or the factory, and undergoes a certain normalization as part of the home—that is when an aesthetic of the operational emerges. New technologies and technical mechanisms first enter the households as novelties. They attract the attention of the family members, who may be interested in how a mechanism works. The normalization process takes away this initial awe, but it also fosters the family's engagement with the mechanism, for example during cleaning or repair.

Nevertheless, the place and placement of the sewing machine in the home was far from uncontested. Diane M. Douglas describes the cultural implications of sewing machines by considering the change of their designs (1982: 20). In the 1850s, design options varied between an ornamental style and machines that resembled furniture. Eventually, the furniture type became the norm, as the alternative was meant to symbolize an upper class taste even though wealthy Americans often employed servants for sewing. The furniture-like design, by contrast, served to hide the machine and consequently lessened its symbolic implications of an invasion of industrialization into Victorian homes. The design 'depoliticized' and 'domesticated' the sewing machine and allowed for its placement in the living room, dining room, bedroom, or in a sewing room (pp. 25-27). Douglas thus describes the normalization of the sewing machine as a process in which its mechanical nature needed to be hidden. The consequence is a chain reaction: the public's ambivalence resulted in the concealment of the sewing machine, and the machine's concealing design fostered its normalization. Such a design thus hid the machine's operational aesthetic, yet also enabled the placement of the mechanism close

to its users, who marveled its mechanics during use. The sewing machine as one of the first complex mechanical systems to enter the living room represents a leap in terms of the normalization of technological mechanisms that fostered an appreciation of their operational aesthetic, yet it also shows that the operational aesthetic is not free of ideological implications.

Technology was thus increasingly incorporated into middle-class lives outside of the work sphere: in housework, in the evening newspaper, and in the form of public exhibitions. Additionally, the new media emerging in the second half of the nineteenth century offered new ways to experience and to appreciate technology. Telephony, for instance, emerged as a technology that not only depended on an operator but also served to establish a mechanical relationship between two human agents. On 3 March 1877, the *Scientific American* published an article that pinpoints the interconnection of various communications technologies at the time. Appearing a month after the magazine had first introduced its readers to Bell's telephone, the article narrates how a journalist had for the first time used a telephone to transmit his news dispatch to his employer, the Boston *Daily Globe*. Quite self-referentially, the journalist reported from Bell's lecture on telephony in Salem, Massachusetts. In his lecture, Bell demonstrated the use of the telephone by calling his assistant in Boston. The assistant first sent Morse code that he played on an organ, secondly he played 'Auld Lang Syne', and thirdly he addressed the lecture audience in a short speech (*Scientific American*, 1877).⁵ The article thus describes how Bell's assistant exemplified the use options of the telephone by reference to other established media: telegraphy and phonography. The display and demonstration of the telephone was a didactic effort, and the lecture therefore first demonstrated the similarities between telephone and telegraph before presenting its more rigorously novel aspects. In short, the lecture aimed to slowly acquaint its audience with the new technology. Nevertheless, the article purports a rather paradox view on telegraphy. On the one hand, the use of the telephone to contact the *Daily Globe* suggests that the telephone could replace the telegraph, as telegraphs were the dominant means for newspapers to obtain their news. On the other hand, the assistant's transmittance of Morse code frames the telephone as merely a more advanced form of the telegraph, that is, as a new hardware to transmit the 'software' with which Morse had made telegraphy efficient (cf. Winston 1998: 25).

5 A similar connection of the telephone and a newspaper appears, for example, in the *New-York Tribune* on 31 March 1877, when a comparison of Bell's and Gray's mechanisms is followed by an account of how Bell's telephone was presented to a number of professors in Philadelphia, who tested it by means of reading from the *Tribune* through the apparatus (*New-York Daily Tribune*, 1877).

This curious clinging to the use of Morse code may additionally be understood as a refusal to dismiss the human translator. Telegraph operators interrupt a continuous flow of electrical current in tap motions, which can be translated into written messages (DeMarinis 2011: 219-20).⁶ Telegraphic communication thus necessitates a human operator's proficiency in the code, and the tangible engagement with the telegraph apparatus was reserved for telegraph operators. The general public experienced the telegraph only in a mediated form—through the written sentences they received from the operators—or in its effects, such as a safer railroad system or the availability of newspaper coverage of the latest overseas events. Paul DeMarinis highlights the competence of telegraph operators at the time, who learned to listen to the Morse alphabet as words and sentences without relying on a complicated translation process. They were trained for the machine and by the machine. This training takes place as the direct, physical engagement with the apparatus, that is, the telegraph operator experiences the apparatus as a tangible mechanism: 'The entry of touch, via tapping, into long-distance text transmission reaffirms the unifying role of that physiological sense in the formulation of knowledge within the physical medium of transmission', DeMarinis explains (p. 218). Human agents are trained to become operatives, just like they were when using a sewing machine. As a consequence, the successful transmission of a message relies on the communication between the machine and its operator, which becomes intuitive over time. As DeMarinis ascertains, 'the acts of encoding, storage, retrieval, and interpretation exist as stages, acts that are at the whim of unspoken conventions and habits and forms of attention, both human and systemic' (p. 214). Following partially unarticulated guidelines, operator and mechanism work in concert and become one machine, whereas eighteenth-century proposals had originally envisioned a self-sufficient technology (p. 219). The introduction of the telephone to an extent fulfills this promise of fully electronic communication, and in this context the transmittance of Morse code via telephone appears rather ironic, almost as if mocking the telegraph and its code before exemplifying telephony's ability to convey spoken language. At the same time, however, the reference to telegraphy

6 One important innovation in Morse's telegraph was that the signals were transmitted by means of disrupting an electrical current that flowed continuously. This continuity allowed for a constant testing of the wires, which at the time were frequently broken or cut (DeMarinis 2011: 219-220). As the telegraph is continuously on standby, operator and apparatus enter into a democratic relationship in which the operator does not rule over the telegraph in terms of starting and stopping it. In a metaphorical sense, the telegraph is both a live agent and a medium that transmits information live, at all times.

establishes multiple technologies as related in a networked structure, in which new technologies are envisioned to exist in a chain of cause and effect, where they emerge from earlier ones. As a consequence, although the telephone could be used by an unskilled operator with no need for an intermediate agent, the telephone also stands in a line of developments that disconnected operators from the mechanical apparatuses. The use of Morse code over the telephone can therefore also be understood as a clinging to the human translator, to the human agent within the machinic ensemble.

With earlier inventions such as the sewing machine, the chains of cause and effect were visible and explainable, and the entire mechanism stayed in a single place and time—even when in motion, the steam engine remains one single object. The telegraph, however, made an observance of the structure of the mechanism at one time in one place impossible. The telephone furthered this alienation of the observer from the mechanism by excluding the human agent from the process. An article from the *New-York Daily Tribune* in March 1877 highlights this exclusion of the human agent in an explanation of Gray's telephone:

The fingers of the hand holding the telegraph wire are to be pressed against the rotating metallic plate; then the faster the plate revolves, the louder is the produced sound. It can be easily heard throughout a large hall. There is evidently a limit to the loudness of the sound, as with high speed the operator's fingers will be too hard rubbed. Why must the human hand intervene? [...] But when Mr. Gray took his contrivance with him to England and got Prof. Tyndall's aid in experimenting upon it, another discovery was made which wholly changed the aspect. It was shown that neither the human hand, nor living nerve, nor vitality itself was needful as a medium of communication. Prof. Tyndall reproduced the musical sound when he substituted a piece of salt pork for the human hand! (*New-York Daily Tribune*, 1877)

The article thus expresses astonishment about the fact that communication can work without the intervention of a person who adds some form of 'live vibe'. This implies a general belief that communication must relate to 'live-ness', not in the sense of simultaneity but in a very literal, carnal sense of adding something alive to the mechanism. The account of the *Tribune*, by contrast, addresses the fact that human operators in this case even harm the telephone, as the human fingers will limit the volume of the sound to be heard. The loss of the human element is thus astonishing but not unwelcome.

This physical dissociation of user and apparatus depersonalizes the engagement in ways that will become even more pronounced with the introduction of projected visual media. The apparatus assumes a life of its own, working without human aid and supposedly unharmed by human intervention. Nevertheless, the telephone introduces a non-tactile but audible means to begin a self-reflexive study of the sound transmittance process. In other words, the operational aesthetic of the telephone apparatus surfaces through its indexical character, through the noises and background sounds it produces. Such an engagement with telephony also appears in the *Scientific American's* coverage of Bell's demonstration of his telephone when it mentions that 'the receivers of the message also heard the applause of the audience which attended the lecture' (*Scientific American*, 1877). Whereas the telegraph produces a noise that is hearable only to the operator, the telephone transmits a broad sound spectrum in addition to its intended message, including applause but also a machinic rattle or hiss. These extra sounds provide a starting point for a listener's engagement with the mechanism and its recording capacity, granting them an ability that was previously reserved for a select group of telegraph operators. The telephonic mechanism can thus be analyzed both in the physical presence of the apparatus and through the audible forms that it produces. These two means of a self-reflexive engagement with media become added layers of an operational aesthetic: cause and effect can be foregrounded in the explanation of a technology, for instance in a spoken lecture or written description, through additional elements in that lecture such as the sounds of applause or a machinic hiss, and through the physical presence of the mechanism. These numerous angles to or layers of the operational aesthetic similarly inform late-nineteenth-century visual media before eventually influencing an operational engagement with film.

On 19 October 1878, the *Scientific American* published Eadweard Muybridge's famous series of photographs depicting a horse in motion. At the time, the magazine's front-page illustration of Muybridge's findings was accompanied by a short but detailed description of the process that was used to capture the individual images. Before pointing to the possible impact of the new insights on the fine arts and on studies of physiology, the article explains the process of taking pictures with the 'automatic electro-photographic apparatus' (*Scientific American*, 1878). The *Scientific American* details the velocity of the horse, the exposure time for each image, and the distance between the horizontal and vertical lines behind the horse. These lines enable a detailed study of the horse in motion, which the article exemplifies by deducting the length of the horse's stride at a particular speed from the

images. At the end of the description, the magazine advises its readers to cut the images from the magazine and to reanimate them in a zoetrope:

We would suggest that for popular use the photographs should also be mounted on strips for use in the zoetrope. By such means it would be possible to see not only the successive positions of a trotting or running horse, but also the actual motions of the body and legs in passing through the different phases of the stride. (*Scientific American*, 1878)

This suggestion resembles Muybridge's own praxis of showing his series of photographs by means of his Zoopraxiscope when he travelled Europe (Newhall 1944: 43), the difference being that the much smaller zoetrope was devised for home use. It was part of a whole series of nineteenth-century optical devices like thaumatropes, phenakisticopes, and praxinoscopes, which were all designed for individual use in private spaces (Strauven 2011: 149). When readers animate Muybridge's photo series in such a mechanism at home, they have full control and can operate, touch, and study the apparatus. They are likely to interrupt the spinning movement of the zoetrope's drum and thereby to disrupt and restart the optical illusion of movement. In other words, spectators who mount the photo series from the *Scientific American* into their zoetropes now have a moving image that they can operate. They thus re-create the original study in the sense that Muybridge, too, saw a horse in motion, arrested its movement by means of capturing individual photographs, and re-created the movement by means of the Zoopraxiscope.

Both Muybridge and the readership's activities recall what Vinzenz Hediger describes as a three-step process. First, movement and time are divided into individual units, each unit being represented in one picture of the horse. Second, the individual time-units or quite literally 'motion-pictures' are arranged in a series, which entails a multiplication of the depicted object, that is, of the horse. Third, the images are combined in a succession that is quick enough to create the optical illusion of movement (Hediger 2006: 162). Users of nineteenth-century optical toys as well as later film viewers were most likely well aware of the fact that movement was an optical illusion resulting from the rapid succession of individual images. The *Scientific American* helped foster this awareness by drawing attention to the three-step process, inviting its readers to practically and tangibly cut the series of images into individual elements and recreate the illusion of movement. Readers thereby engage with the operations of the zoetrope, with the corporal operations of a horse's limbs, and with the creation of an optical illusion. Watching the drum of the zoetrope and the

limbs of the horse in motion thus presents two layers of operability, both of which invite further study because of their relentless repetition, which directs attention away from the image to the fact of its creation or 'created-ness'.

The appreciation of this process resonates with Nicolas Dulac and André Gaudreault's more general description of the engagement with optical toys, which rely on 'rotation, repetition, and brevity' and render the experience of time mechanical, as a moving image of very short duration runs repetitively without beginning or end, similar to the endless working of machines (Dulac & Gaudreault 2006: 228). However, whereas the authors claim that such repetitive short clips are 'resolutely a-narrative' (p. 229), the article from *Scientific American* provides the zoetrope with a history and a narrative—as long as the optical toy shows Muybridge's horse in motion. Instead of showing just a horse, the zoetrope shows 'Occident', the racehorse owned by railroad tycoon Leland Stanford in California (Hediger 2006: 167). Additionally, the zoetrope does not just show any image but the still from the *Scientific American* that 'I' cut and glued and mounted into the zoetrope and with which 'I' can become a scientist, a witness, and a judge finding out about the motion of horses and the truth or falsity of the claims from the magazine. *Scientific American's* presentation of Muybridge's findings to an interested amateur audience thus relies on both the layered mechanical and narrative dimensions of an aesthetic of the operational, as well as on the related questioning of a truth claim.

Tangibility and Crafts

The anecdote of the publication of Muybridge's findings in the *Scientific American* encourages a specifically manual engagement with science, photography, and optics. Instead of inviting readers to see photographs as art, the magazine places Muybridge's series of images in the realm of crafts. Self-proclaimed art photographer Peter Henry Emerson therefore inadvertently states the obvious when he argues that 'nothing is more inartistic than some positions of a galloping horse, as are never seen by the eye but yet exist in reality, and have been recorded by Mr. Muybridge' (Emerson 1890: 161; also quoted in Newhall 1944: 44). According to Emerson, the aim to arrest motion can never produce artistic photographs: 'The artist, he knows what to record and what to pass over, while the craftsman, full of *himself* and *his* dexterity, tries to take a train going at sixty miles an hour' (Emerson 1890: 161). While such a strict distinction of arts and crafts will

not be a premise of the present analysis, the placement of studies such as Muybridge's on the 'crafts' side of the fence resonates with the fact that the operational aesthetic most often appears outside of the realms of what is considered art or 'high culture'. Umberto Eco considers this distinction a staple of 'modern theories of art', which dissociate innovative art from crafts—the latter encompassing industrial production and the manufacture of items that resemble a predetermined model. The neglect of crafts then led to a disavowal of cultural products with uniform traits, such as Westerns, comic strips, and detective novels, all of which rely on repetition and series production (Eco 1985: 161-62). As a consequence, the relation of the operational aesthetic to repetition, seriality, brevity, the mechanical, and crime fiction establishes it quite firmly as a mass culture phenomenon in the 'crafts' category. Not incidentally, crafts as a term connotes a tactile engagement with a tangible object.

Wanda Strauven similarly considers nineteenth-century optical toys a breeding ground for the tactile perception of visual media, and she traces how the impact of such a reception practice is detectable in projected visual media of an emerging film culture. First, she highlights the human, manual agency that is needed to set in motion the visual illusion provided by an optical toy:

Instead of passively absorbing images, the nineteenth-century observer actively grasped them. The verb to grasp should be understood here in both its figural and its literal meanings, that is, of mental (cerebral) comprehension and manual (corporeal) grip. In the modernist vein, (historical) studies tend to focus on the fragmentation of the human body and to ignore the human presence in the wide range of nineteenth-century media devices, ranging from optical toys and other entertainment applications (such as the phonograph) to telecommunication technologies (such as the telegraph and the telephone). (Strauven 2011: 150)

Mechanisms of what Dulac and Gaudreault call 'the cultural series of animated pictures', such as the phenakisticope, the zoetrope, or the praxinoscope, rely on the observer's ability to 'manipulate' the toy rather than being confined to a remote position of spectating (Dulac & Gaudreault 2006: 228; Strauven 2011: 152). In general, the engagement with optical toys includes an awareness of the toy as mechanism as well as the observation of the image illusion, with its capacity to speed up and slow down according to the operator's wishes. As the example of Muybridge's pictures illustrates, the manual operation of optical toys also entails the adding or cutting of

images, the arrest of movement, and therefore a deconstruction of the illusion, down to a literal dismantling of the mechanism.

On a diegetic level, the series of images that, once set in motion, create the optical illusion of movement may itself depict a mechanical process. A number of nineteenth-century phenakistiscope discs show gears and levers in motion. Such a depiction is symptomatic of modernity's fascination with 'eternal and unbreakable machines', in Dulac and Gaudreault's terms (2006: 232). The machine-themed phenakistiscope disc thus caters to a fascination with the complex interdependencies of mechanical parts, which it captures in reduction, repeating the split-second depiction of the endless motion of interlocking gears. The resulting image owes much of its brevity and repetitiveness to the phenakistiscope as a medium, which is marked by 'the absence of any temporal configuration (that is, the impossibility of identifying the beginning or the end of the action), the brevity of the series of images and its ad nauseam repetition, its purely monstrative value' (p. 229). The machine-themed phenakistiscope disc therefore bears two layers of an operational aesthetic, as it is an aesthetic object in itself and simultaneously points to the mechanical nature of its apparatus. The disc thus combines two monstrative values. It furthermore foregrounds the mechanical, almost compulsive repetition that is inherent in machinic movement, which is a shared characteristic of the factory and of the optical toy. As a reference to the factory, the disc has the capacity to address a viewer's subversive aim to stop the machine. The optical toy, after all, is subject to the control of an operator who may otherwise work at an endlessly moving assembly line. On the one hand, the phenakistiscope disc is thus symptomatic of an urge that Charlie Chaplin's *MODERN TIMES* addressed in 1936, when the Tramp eventually causes the assembly line to rewind (*MODERN TIMES*, 1936). On the other hand, the need to stop the machine may also be a prerequisite to studying its motions, just like nineteenth-century newspaper articles provided decelerated, detailed descriptions of technical mechanisms.

Although the ways to engage with moving images changed from the operation of hand-held devices to the perception of remotely placed, projected images with the inauguration of the optical theater, the spectators' reception experiences were nevertheless informed by the tangibility included in the earlier reception practice. Strauven stresses that optical toys continued to be popular as viewers saw optical theater projections and later frequented nickelodeons and film theaters. Instead of replacing each other, these multiple media existed simultaneously for decades (Strauven 2011: 155). Strauven argues that as perception moves from the 'player mode of attraction' to a refined space of observance, 'the perception of optical illusions is not

taking place outside the body, even when the observer is kept at a distance' (pp. 153-154). 'The nineteenth-century observer', she highlights,

had become familiarized with some basic optical principles thanks to the conversion of science tools into optical toys. I believe that in the case of the optical theater this "knowledge" was not suddenly erased; on the contrary, it enriched the viewing experience and turned the player more consciously into a perception maker. (p. 154)

In turn-of-the-century cinema, this continuous impact of the tangible surfaced in the form of nostalgia, which Strauven detects in Edwin S. Porter's 1902 film *UNCLE JOSH AT THE MOVING PICTURE SHOW*. In the film, Uncle Josh, a so-called 'country rube', loses his nerves in a film theater after having watched a number of shorts. Eventually, he jumps on the stage and tears down the rear-projected screen. In addition to showcasing the famous newbie to motion pictures, *UNCLE JOSH AT THE MOVING PICTURE SHOW* also includes a reference back to the days of touch-able screens (Strauven 2011: 157). In the film, Uncle Josh not only touches the screen but tears it down and exposes the exhibitor behind it. Porter's film thus references a spectator's urge to stop the projection and lay bare the mechanism that enabled its coming into being. Even though Uncle Josh's ecstatic frenzy counteracts a detailed analysis in terms of an operational aesthetic, the fact that the country rube stops the screening and reveals the projector that created it resembles the interruption of phenakistiscope or zoetrope illusions and may thus evince a longing for the analytic possibilities offered by these optical toys. The film therefore gestures towards the existence of an operational aesthetic without necessarily bearing such an aesthetic itself.

This ideal of the touchable, tactile operation of mechanical constructions surfaces pointedly in another popular medium of the era: the so-called 10-20-30 melodrama, the most popular stage tradition in the 1890s and 1900s (Singer 2001: 150). At the time, sensationalist rush-to-the-rescue stage plays increasingly featured elaborate stunts by employing 'new technologies of mechanical-electrical stagecraft' (p. 149). These productions familiarized audiences with telegraphs and telephones, automobiles, air-ships, and other technologies. At the same time, they featured elaborate hand-operated, electrical, or steam-driven mechanisms that enabled elaborate sensational stunts (ibid.). They combined an exhibition of technology with a clever incorporation of technological and mechanical feats, enabling the use of cars, trains, planes, windmills, fires, and collapsing bridges in plays that 'challenged the physical and spatiotemporal boundaries of the indoor stage'

(p. 157). According to Ben Singer, especially the elaborate mechanical and technological stage designs constituted the appeal of 10-20-30 melodrama to contemporaneous audiences, although the construction of these elements often appeared somewhat unsophisticated (p. 177). Whereas this crudity may have been the result of budget constraints or the lack of proficiency of individual set designers, the audience's unimpaired appreciation of such mechanisms may in fact result from their crude constructions, that is, from the ability to understand the set-up of the mechanisms and from the feeling that they could similarly be constructed in local barns and backyards. The difference in comparison to manually operated optical toys, however, is not only the remote situated-ness of the stage action but also the fact that the mechanisms were embedded in a narrative context. As a result, the engagement with mechanical stagecraft took place alongside the immersion in the story. Singer highlights this coexistence of reflection and immersion, which manifests itself in the form of 'an apperceptive aesthetic of medium-awareness, a fascination with what technique and artifice can do, [which] operated alongside an aesthetic of absorptive realism' (p. 178).

10-20-30 melodrama thus catered to a combined interest in sensationalist stories and technology's marvels. Moreover, mechanical marvels were both directly displayed on stage—for instance, telephones, telegraphs, or cars—and became visible in their effects as part of elaborate stage mechanics, for example when rain showers poured down on actors, water currents flowed on stage, or bridges collapsed under speeding cars or trains. Turn-of-the-century stage melodrama explored the multi-faceted spectrum of the operational aesthetic, with its combination of an awareness of the medium as mechanism and mechanisms showcased within the medium and the narrative. From its earliest days onwards, film adopted a similar aesthetic and added the narrative operability that surfaced for instance in detective fiction. Such a fascination with mechanisms and cause and effect in film has been noticed and described, and it surfaces especially in the repeated adoption of the term 'operational aesthetic' in film studies, from the identification of early film as the 'cinema of attractions' to complex television series of the twenty-first century.

Both Sides of the Attraction Equation: The Operational Aesthetic in Film Studies

Film as a mechanical object and a storytelling medium embodies the duality that informs the operational aesthetic. This duality materializes in immersive

reception experiences, when film engages its viewers in coherent narratives and/or provides diegetic portrayals of physical mechanisms on screen. Additionally, film has the capacity to simultaneously invite a self-reflexive awareness of the cinematic apparatus itself. The late-nineteenth-century 'new medium' thus facilitated a complexly layered reception experience that can appropriate an aesthetic of the operational in multiple ways, all of which take place on a scale between the transparency and the opacity of the film screen. These multiple layers of an operational aesthetic appear pointedly in arguments about an audience's engagement with films from the 1890s and 1900s. Both Tom Gunning, in his description of the 'cinema of attractions', and Charles Musser's counterargument employ the term 'operational aesthetic' with reference to Harris' original study of P.T. Barnum. Both authors thereby exemplify how the term can denote a focus on narrativity or on mediality—or, as I argue, how it can integrate both.

Gunning mentions the operational aesthetic particularly as an appreciation of cinema in terms of a marveling of its apparatus. This use of the term corresponds to his epochal classification of films made between 1895 and 1907 as an 'exhibitionist' cinema that demonstrated its ability to show rather than aiming to display particular visual content (1986: 64). Early films predominantly served to illustrate the functioning of the cinematograph, which was displayed to contemporary audiences at exhibitions resembling the public displays of telephones two decades earlier. These exhibitions attracted audiences who enjoyed seeing new marvels and were eager to learn. Film's operational aesthetic thus partially results from its emergence in the context of public displays of novel inventions during the nineteenth century, in which audiences paid to see the cinematograph in action rather than any particular turn-of-the-century film. As Gunning points out,

these early demonstrations of the filmic apparatus [...] came out of a tradition that has nearly been forgotten, the display of new technologies as entertainment. Cinema simply joined a long list of new inventions that had been presented to a paying public. During the latter part of the nineteenth century, audiences had gathered to listen to concerts given over the phonograph and the telephone, and to watch demonstrations of such new scientific marvels as X rays or incubators. [...] Likewise, *L'ARROSEUR ARROSÉ* may have provoked laughter from its first spectators, but it was the Cinematograph rather than the film which received praise. This show-biz strategy, called the "operational aesthetic" by Neil Harris, reflected a fascination with the way things worked, particularly innovative or unbelievable technologies. (1995a: 88)

Nevertheless, the filmic apparatus relied on individual films for its exemplification, and Gunning mentions the operational aesthetic in relation to a particular film, namely the Lumière brothers' 1896 *L'ARROSEUR ARROSÉ*. The film shows a short gag sequence in which a gardener is prevented from watering his plants by a boy who steps on the hose. When the gardener inspects the nozzle, the boy steps off the hose, causing the water to spout in the gardener's face. The viewers' interest in film as a mechanism is thus doubled within the film, which itself showcases the hose as a mechanism. Nevertheless, even when mechanisms are part of a short narrative, the audience's interest, according to Gunning, is focused on the way the mechanisms work (1995a: 91; see also Trahair 2004). He links his understanding of the operational aesthetic to Rube Goldberg's comics of elaborate funny machines: 'These devices [...] also make a direct appeal to the tinkerer and bricoleur, and the operational aesthetic. Like such magazines as *Popular Mechanics*, they come from a time when technology was still primarily a matter of the hand and the tool, and within reach of most folks.' (1995a: 101).

In a critical reading of Gunning's text, Lisa Trahair points out that the hose as a diegetic mechanism in *L'ARROSEUR ARROSÉ* facilitates a narrative thread:

A basic narrative structure is formed by the construction of the gag, a gag that is itself constructed on the basis of the deployment and redeployment of an apparatus. [...] The narrative emerges from the apparatus mediating between the two characters and inscribing action with temporal development in the operation of the device. The gag, Gunning quite rightly suggests, emerges from the deployment of an apparatus which creates a detour of character action through an inanimate object, and of course from the man, initially oblivious to the boy's intervention, being caught unawares. (2004: n.p.)

The hose thus serves as a prop that organizes the boy and the gardener in a relationship of cause and effect, and by delaying the effect, it provokes a short narrative thread. A similar chain reaction marks the film itself, as the demonstration of the filmic apparatus effects the portrayal of the diegetic apparatus, which in turn instantiates a short narrative sequence—either of which has the capacity to amaze the viewer. In this sense, both the film and its narrative become attractions. Such demonstrative narratives almost always co-occur with the showcasing of a mechanism, because the latter, not functioning fully independently, has to be started by a character and works to provide a certain outcome. The operator thus remains an important

agent for an operational aesthetic and its narrative connotation. In this context, even the public display of the cinematograph would be part of a live narrative for nineteenth-century audiences—as a machine that is set in motion by a film exhibitor and then operates to achieve an outcome, that is, the screening of a film. In this manner, the general fascination with technology brings about a film experience that always combines multiple layers of mechanical and narrative operability.

Gunning extends his argument to 1920s classic Hollywood comedy, taking Buster Keaton's *OUR HOSPITALITY* (1923) as an example. The protagonist's romantic relationship with inventions of the past, such as trains and steamboats, allows Gunning to trace the presence of the operational aesthetic from turn-of-the-century short films to comedy of the 1920s. As a consequence, he concludes that the 'fascination with the way things come together, visualizing cause and effect through the image of the machine, bridges the end of the nineteenth century and the beginning of the twentieth, shaping many aspects of popular culture' (1995a: 100). The appreciation of an aesthetics of mechanic operations is therefore not exclusively tied to film's novelty status but continuously impacts the film experience even in the institutionalized, consolidated context of studio-era film production.

Gunning's approach primarily locates the operational aesthetic in an engagement with film as a mechanism and with mechanisms on screen, whereas the narrative connotation remains a side-effect. Interestingly, Charles Musser, whose research at times challenges Gunning's focus on film as an attraction, employs the same terminology when describing the emergence of narrative film. Musser finds an aesthetic of the operational apparent in *THE GREAT TRAIN ROBBERY* (Porter, 1903), which is one of the first longer narrative films and a film that concerns a story of crime and pursuit. According to Musser,

THE GREAT TRAIN ROBBERY is a remarkable film not simply because it was commercially successful or incorporated American myths into the repertoire of screen entertainment, but because it incorporates many trends, genres, and strategies fundamental to cinematic practice at that time. Porter's film meticulously documents a process, applying what Neil Harris calls "an operational aesthetic" to the depiction of a crime. With unusual detail, it traces the exact steps of a train robbery and the means by which the bandits were tracked down and killed. (2004: 90)

Musser aims to trace the historical shift from the cinema of attractions to film as a storytelling medium. But that shift, which can be said to have

happened anywhere between *THE GREAT TRAIN ROBBERY* and 1920, always entails a change from *looking at* to *following through*, that is, from marveling the novelty of the medium to focusing on a particular film's story content. This general shift can also be grasped as a movement from the cinema of attractions to an audience's immersion in the film experience. When considered in terms of an aesthetic of the operational, however, this binary opposition is far less rigid. After all, the close examination of an 'attractive' machine entails a *following through*, as spectators do not simply gawk but try to understand the causes and effects that enable a particular machine to work. Vice versa, a particular storyline can itself appear as an attraction when spectators admire a narrative construction that works in terms of a similar chain reaction.

Thus, despite referencing opposite extremes of an operational aesthetic, with Musser looking at the development of cinematic narrative and Gunning examining the mechanisms employed in gag films of the attractions type, both authors prove the entanglement of narrative and mechanism as two intricate aspects of the operational aesthetic. Paul Young focuses on this connection in a study of the frequent depictions of telegraphs in films that register a transition towards longer, increasingly complex narratives in the 1900s and 1910s. Just as the *Scientific American* explained Muybridge's photographs with reference to the zoetrope and Bell's public lecture demonstrated the telephone by transmitting Morse code, films employ diegetic telegraphs and telephones to help audiences understand the relation between different cinematic settings and the technique of crosscutting. Films such as *THE LONEDALE OPERATOR* (Griffith, 1911) employed telegraphy as a 'technological model for imagining the capabilities' of cinema (Young 2003: 229), exploiting it 'as if it were a novel medium' (p. 231). Reference to well-known media thus served to train an audience in the perception of the comparatively recent form of narrative film. Diegetic telegraphs or telephones called for audiences to understand the actions in different settings during crosscutting not only as taking place simultaneously but as existing in a cause and effect relationship that spectators must decipher. By reference to these working technologies, cinema furthermore encouraged an allegorical understanding of the new medium as a mechanism that never broke down, that maintained a 'public mode of address', and that belonged to 'instantaneous' media such as the telegraph or the telephone (p. 231).

Young uses the term operational aesthetic exclusively with reference to the nineteenth-century culture of presenting new and supposedly genuine technologies to a general public (p. 232). He describes visitors of such exhibitions as having an 'antiauthoritarian' appropriation of technology, which

combined the display of novel inventions with entertainment. He uses the example of the display of a 'comic telegraph'—which consisted of a puppet head moving endlessly via electrical remote control and which was on display at the 1851 Great Exhibition in London—to illustrate 'a tradition of antiauthoritarian humor in media display that operated around, and in tandem with, the operational aesthetic' (p. 234). He then compares the comic telegraph to cinema, which achieved 'a synergy between communication and amusement comparable to that suggested by the comic telegraph. For one thing, the cinema not only demonstrated the globe-encircling powers of new media; it showed them at work.' (p. 235). In other words, cinema achieved a unification of communication and amusement that is similar to the 'comic telegraph' as well as to nineteenth-century displays of technology more generally. Cinema thus enables a contemplation of the structure of the new medium that is itself mediated by and organized according to the new medium. A return to an 'old' medium such as telegraphy therefore seems to make that new structure more graspable—it enabled audiences to sort cinema into a metaphorical box. The engagement with cinema in terms of an operational aesthetic thus allows for entertainment as well as for an understanding of the mechanism's structure. This view also confirms Young's decision to place the operational aesthetic in direct opposition to the occult and mystifying discourses that circulated at the time. He states that 'the operational aesthetic debunked the metaphysical aura floating about each medium' (p. 236).

The occurrence of telegraphs in films such as *THE GREAT TRAIN ROBBERY* or *THE LIFE OF AN AMERICAN FIREMAN* (Porter, 1902-03) does not solely function to structure the films in terms of cause and effect, it also highlights the process of 'media transmission' by framing the link between cause and effect through the telegraph as an interesting narrative in itself. 'But this time', Young concludes, 'the kinetograph is the medium whose power demands the most attention' (2003: 246). The films thus play up their enabling mechanism, the ability to project moving images, and particularly film's capacity to tell stories as well as a broad spectrum of the possibilities of editing and cinematography. In a sense, transitional-era film shifted from demonstrating film to demonstrating narrative technique. Therefore, as Young holds, 'the pleasures of classicality were founded not simply on the transparency of storytelling, as is sometimes argued, but equally and specifically on the pleasures of watching the cinema *work*, communicating information and arranging that information into a meaningful story.' (p. 232).

Rob King charts a related mode of film reception in his study of comedies produced by the Keystone film company between 1915 and 1917. At the

time, Keystone experimented with complicated stunt mechanisms. The resulting films catered to an operational aesthetic that is based on the depiction of modern technology and complex mechanisms in combination with trick filming and elaborate physical stunts (King 2009: 184). The films thereby tapped into a more general trend of a time when ‘the spectacle of modern technology [...] formed a crystallizing point for a new mass culture that engaged the interests and experiences of an overwhelming majority of the population’ (p. 190). As late as the mid-1910s, a pleasurable film experience resulted from the viewers’ awe of the seemingly endless possibilities of filmmaking as exemplified in Keystone’s comedies, as viewers enjoyed ‘being “taken in” by skillful trickery’ (p. 186). Audiences thus recognized filmic scenes as creations of skilled trick photography and advanced mechanical set contraptions, and they were interested in the constructions and the know-how behind the films. As it had in earlier newspaper descriptions of electric and gas engines, the audience’s interest clashed with the producer’s aim to conceal company secrets as well as with their own limited technological education: ‘Like Houdini’s impossible escapes, Keystone’s operational aesthetic addressed the amateur’s desire to understand technical process at a time when technological advancement far outstripped the average individual’s understanding or control’ (p. 188). King here points to the limits of an operational aesthetic, which are highlighted when the audience’s interest in a particular mechanism is stymied either by a company’s unwillingness to reveal its tricks or by its claim that details of technical process went beyond the audience’s capacity to understand—however accurate or inadequate that claim might be. A filmic instance that embraces an audience’s interest in how things work simultaneously has the capacity to lay bare its limitations. Whereas the 1870 *Tribune* article relieved the tension created by its concealment of the secret formula for the production of the electric engine by turning that concealment into the enigma of a crime story, Keystone cloaked its refusal to reveal company secrets by taking recourse to slapstick comedy. The studio’s comedies continuously fostered the audience’s technological interest only to respond with a refusal to unveil its tricks, and this lack of technological explanation often coincides with a loss of narrative logic. In Keystone’s films, ‘technology thus became a model for comic action in which narrative logic was replaced by the haywire circuitry of modern technology’ (p. 189). In this manner, Keystone’s comedies in fact rely on the mass-cultural interest in modern technologies to then employ these for a comic effect.

Although the following chapters will describe the operational aesthetic as it featured in film serials from the mid-1910s to pre-World-War-II sound

serials, the term has also been used in analyses of television drama series produced during and after the 1990s. Jason Mittell detects an aesthetic of the operational in moments when audiences pay respect to the narrative construction of what he calls 'complex television' (2006: 29). Mittell explains that narratively complex television series

offer another mode of attractions: the narrative special effect. These moments push the operational aesthetic to the foreground, calling attention to the constructed nature of the narration and asking us to marvel at how the writers pulled it off; often these instances forgo realism in exchange for a formally aware baroque quality in which we watch the process of narration as a machine rather than engaging in its diegesis. (p. 35)

Series can foreground narration by including complexly interwoven storylines, reboots of a story, or violations of storytelling conventions. In this sense, the operational aesthetic describes an audience's admiration for the mechanics of narrativity rather than picturesque spectacle. It is thus not the display of a visible mechanism that constitutes the televisual operational aesthetic in Mittell's account but a machinic quality of narration that spins networks of cause and effect like tiny cogwheels of clockworks. Moreover, this self-reflexive admiration for narratively complex moments does not work against the audience's immersive engagement with the story. Instead, Mittell aims to consolidate immersion and self-reflexivity in the operational aesthetic—a consolidation that resembles the appreciation of narrative construction that informs the reading experience of stories by writers such as Poe or Conan Doyle. As Mittell maintains, 'operational reflexivity invites us to care about the storyworld while simultaneously appreciating its construction' (p. 35). The operational aesthetic therefore does not necessarily entail a step back from emotional engagement with a film, but it can be understood as a spectator's response to the construction of a given scene without provoking Brechtian alienation.

If we take Harris' study of P.T. Barnum as a starting point, it offered two argumentative directions for a study of the operational aesthetic: one as based on the exhibition of technology, curious objects, and visual hoaxes, and the other as it emerges in hoax narratives such as Poe's article of a supposed balloon crossing of the Atlantic or, by extension, in detective fiction—the latter being the route that Mittell's study takes. These two argumentative strands effect a duality of visual and narrative mechanics, of media technologies and technologies as displayed in media on the one hand and the mechanics of narratives—that is, the causes and effects

within storytelling—on the other. What these strands share is a similar activity performed by appreciative spectators. From a reception-oriented perspective, the operational aesthetic in its full complexity urges readers, viewers, or audiences to appreciate the construction of chains of cause and effect in both narrative and/or technological mechanisms. Instead of asking *what* (as in: what is the protagonist going to do? What is going to happen in the ending?), spectators question the *how* (as in: how does this machine work? How does this narrative fit into the framing story? How is the series going to resolve this incoherence?). Consequently, any use of the term takes place on a scale that moves between attraction and immersion, cool detachedness and emotional engagement, mechanical and narrative cause and effect. On this scale, the reception experience never takes place on either end but always combines aspects of both.

It is important to emphasize that the appreciation of connectivity that the operational aesthetic describes often takes place on a micro-scale and is located quite radically in the present tense. That is, readers or viewers value technical or narrative mechanisms in their moment of becoming, as with both the metaphorical and at times literal beauty of smoothly interlocking gears. This appreciation focuses on the fact that something works momentarily, regardless of whether it will achieve an outcome in the future, and regardless of whether the present mechanism will be necessary for that outcome. Again metaphorically and literally, it is important that the machine works, regardless of what it produces (which, in a way, crops up again in Chaplin's *MODERN TIMES*, as the film never explains what the factory it showcases is meant to produce). It was for this reason that Barnum's visitors had a pleasurable experience when he invited them to witness a Buffalo hunt in Hoboken. The visitors to New Jersey returned to Manhattan satisfied, although the hoax itself was easily identifiable as such. Barnum's story aroused their interest and, feeling sufficiently hoaxed, they paid tribute to the hoaxer (Harris 1973: 61–62). Similarly, when television audiences gathered online to discuss the resolution of *LOST* in 2010, the engagement with the series as it progressed and the contributing discussions and blog entries sufficed to make up for the lack of a full resolution in the series' last episode. Even though fans called the resolution disappointing, they discussed the series' outcome on online platforms, which suggests that they nevertheless considered the earlier experience of watching the series worthwhile (Mittell 2012: n.p.). In summary, the operational aesthetic describes a spectator's or reader's engagement with a mechanism, whether technical or narrative, and the appreciation of the working connections even if she arrives at a negative evaluation of the overall outcome. For this reason,

the phenakistiscope disc with its image of interlocking gears is, in a way, symbolic of an aesthetic of the operational, as its depiction always takes place in the present, it demonstrates its own workings, and it foregrounds process as entertainment. Moreover, as was to become especially significant with film serials, the repetitious movement of the disc and its endless seriality spotlight the *how* of its workings, as any viewing after the initial one already presupposes a knowledge of *what* is going on. Seriality and repetition foster an awareness of a given cultural product's operational aesthetic and a consumer's adoption of a corresponding mode of reception. Thus it is not incidental that the presence of an operational aesthetic in American popular culture coincided with increasing industrialization and the rise of serialized popular culture in the mid-nineteenth century. By the time film serials appeared on American cinema screens, the operational aesthetic was firmly established as an attribute of technological objects and of popular-cultural texts.

Bibliography

- L'Arroseur Arrosé*. Dir. Louis Lumière. Perf. François Clerc, Benoît Duval. Lumière, 1895.
- Baym, Nina. 2002. *American Women of Letters and the Nineteenth-Century Sciences: Styles of Affiliation*. New Brunswick: Rutgers University Press.
- Deleuze, Gilles, and Félix Guattari. 1983. *Anti-Oedipus: Capitalism and Schizophrenia*. Minneapolis: University of Minnesota Press.
- DeMarinis, Paul. 2011. "Erased Dots and Rotten Dashes, or How to Wire Your Head for a Preservation." In *Media Archeology: Approaches, Applications, and Implications*, edited by Erkki Huhtamo and Jussi Parikka, pp. 211-38. Los Angeles: University of California Press.
- Douglas, Diane M. 1982. "The Machine in the Parlor: A Dialectical Analysis of the Sewing Machine." *The Journal of American Culture* 5 (1): 20-29.
- Doyle, Arthur Conan. 1994. *The Adventures of Sherlock Holmes (1892)*. London: Penguin Books.
- 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.
- Emerson, Peter Henry. 1890. *Naturalistic Photography for Students of the Art*. London: Sampson Low, Marston, Searle & Rivington. <https://archive.org/stream/naturalisticphotoemerrich#page/n11/mode/2up>.
- Guattari, Félix. 1995. *Chaosmosis: An Ethico-Aesthetic Paradigm*. Translated by Paul Bains and Julian Pefanis. Bloomington & Indianapolis: Indiana University Press.
- Gunning, Tom. 1986. "The Cinema of Attraction: Early Film, Its Spectator and the Avant-Garde." *Wide Angle* 8 (3-4): 63-70.
- . 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.

- Hammett, Dashiell. 1929. *The Maltese Falcon*. New York: Alfred A. Knopf.
- . 1934. *The Thin Man*. New York: Alfred A. Knopf.
- 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 Mediegeschichte." In *Apparaturen Bewegter Bilder*, edited by Daniel Gethmann, pp. 162-78. Münster: LIT.
- Hühn, Peter. 1987. "The Detective as Reader: Narrativity and Reading Concepts in Detective Fiction." *Modern Fiction Studies* 33 (3): 451-66.
- Jeffersonian Republican*. 1849. "Advertisement for Clickener's Sugar Coated Vegetable Pills," June 14.
- King, Rob. 2009. *The Fun Factory: The Keystone Film Company and the Emergence of Mass Culture*. Berkeley: University of California Press.
- Landon, Brooks. 1981. "'Not Solve It But Be In It': Gertrude Stein's Detective Stories and the Mystery of Creativity." *American Literature* 53 (3): 487-98.
- Li-Hua, Richard. 2013. "Definitions of Technology." In *A Companion to the Philosophy of Technology*, edited by Jan Kyrre Berg Olsen, Stig Andur Pedersen, and Vincent F. Hendricks, pp. 18-22. West Sussex, UK: Blackwell Publishing.
- Marx, Leo. 2008. "Technology: The Emergence of a Hazardous Concept." In *Conceptualizing Technology*, edited by Rayvon Fouché, pp. 24-39. Technology Studies, vol. 1. London: SAGE.
- Mayer, Ruth. 2014. *Serial Fu Manchu: The Chinese Supervillain and the Spread of Yellow Peril Ideology*. Philadelphia: Temple University Press.
- Misa, Thomas J. 2013. "History of Technology." In *A Companion to the Philosophy of Technology*, edited by Jan Kyrre Berg Olsen, Stig Andur Pedersen, and Vincent F. Hendricks, pp. 7-17. West Sussex, UK: Blackwell Publishing.
- Mittell, Jason. 2006. "Narrative Complexity in Contemporary American Television." *The Velvet Light Trap* 58 (3): 29-40.
- . 2012. "Lost's Lingering Questions." *Just TV* (blog). May 26.
- Modern Times*. Dir. Charlie Chaplin. Perf. Charlie Chaplin, Paulette Goddard, Tiny Sandford. United Artists, 1936.
- Musser, Charles. 2004. "Moving Towards Fictional Narratives: Story Films Become the Dominant Product, 1903-1904." In *The Silent Cinema Reader*, edited by Lee Grieveson and Peter Krämer, pp. 87-102. London: Routledge.
- Newhall, Beaumont. 1944. "Photography and the Development of Kinetic Visualization." *Journal of the Warburg and Courtauld Institutes* 7: 40-45.
- New-York Daily Tribune*. 1846. "New Motive Power," July 27.
- . 1870. "Electricity as a Motive Power," February 7.
- . 1877. "The Telephone," March 31.
- Our Hospitality*. Dir. Buster Keaton, John G. Blystone. Perf. Buster Keaton, Joe Roberts, Natalie Talmadge. MGM, 1923.
- Pickett, Calder M. 1960. "Technology and the New York Press in the 19th Century." *Journalism and Mass Communication Quarterly* 37: 398-407.
- Poe, Edgar Allan. 1841. "The Murders in the Rue Morgue." In *The Works of Edgar Allan Poe, Vol. 1*, edited by John H. Ingram, pp. 404-41. London: A&C Black.
- Porter, Dennis. 1981. *The Pursuit of Crime: Art and Ideology in Detective Fiction*. New Haven: Yale University Press.
- Raczkowski, Christopher T. 2003. "From Modernity's Detection to Modernist Detectives: Narrative Vision in the Work of Allan Pinkerton Dashiell Hammett." *Modern Fiction Studies* 49 (4): 629-59.

- Rogers Cooper, Grace. 1968. *The Invention of the Sewing Machine*. Washington, D.C.: Smithsonian Institution. <http://www.gutenberg.org/files/32677/32677-h/32677-h.htm>.
- Schivelbusch, Wolfgang. 1977. *Geschichte Der Eisenbahnreise: Zur Industrialisierung von Raum Und Zeit Im 19. Jahrhundert*. München: Hanser.
- Scientific American*. 1846a. "Introduction to Volume II," September 26.
- . 1846b. "It May Be So," September 26.
- . 1846c. "The Voil Seraphine," September 29.
- . 1877. "More Telephone Triumphs," March 3.
- . 1878. "A Horse's Motion Scientifically Determined," October 19.
- Singer, Ben. 2001. *Melodrama and Modernity: Early Sensational Cinema and Its Contexts*. New York: Columbia University Press.
- Spencer, David R. 2007. *The Yellow Journalism: The Press and America's Emergence as a World Power*. Evanston: Northwestern University Press.
- Strauven, Wanda. 2011. "The Observer's Dilemma: To Touch or Not to Touch." In *Media Archaeology: Approaches, Applications and Implications*, edited by Erkki Huhtamo and Jussi Parikka, pp. 148-63. Los Angeles: University of California Press.
- The Great Train Robbery*. Dir. Edwin S. Porter. Perf. Alfred C. Abadie, Broncho Billy Anderson, Justus D. Barnes. Edison, 1903.
- The Life of an American Fireman*. Dir. Edwin S. Porter. Perf. Arthur White, Vivian Vaughan. Edison, 1903.
- The Lonedale Operator*. Dir. D. W. Griffith. Perf. Verner Clarges, Guy Hedlund, Jeanie Macpherson. Griffith/Biograph, 1911.
- Trahair, Lisa. 2004. "The Narrative-Machine: Buster Keaton's Cinematic Comedy, Deleuze's Recursion Function and the Operational Aesthetic." *Senses of Cinema*, no. 33. http://sensesofcinema.com/2004/33/keaton_deleuze/#8.
- Uncle Josh at the Moving Picture Show*. Dir. Edwin S. Porter. Perf. Charles Manley. Edison, 1902.
- Wiltse, Ed. 1998. "'So Constant an Expectation:' Sherlock Holmes and Seriality." *Narrative* 6 (2): 105-22.
- Winston, Brian. 1998. *Media Technology and Society. A History: From the Telegraph to the Internet*. London: Routledge.
- Young, Paul. 2003. "Media on Display: A Telegraphic History of Early American Cinema." In *New Media 1740-1915*, edited by Lisa Gitelman and Geoffrey B. Pingree, pp. 229-64. Cambridge, MA: MIT Press.

3. Film Serials Between 1910 and 1940

Abstract

The third chapter charts the history and development of film serials between the 1910s and the early 1940s. The chapter traces how the operational aesthetic impacted film serial storytelling, as contemporaneous criticism related the serials' portrayed machines and mechanic death contraptions to their 'machinic', that is, continuously propelling narratives. These narratives are presentist, as serials establish their episodes as coterminous with the viewer's own perception of time by reference to previous and upcoming narrative events, and as their narratives expand into multiple spaces as serials connect to newspaper and radio serials and seek to extend their narrative worlds to theater lobbies, local storefronts, and streets. The chapter also delineates the serials' presentational mode of storytelling. Instead of suturing anecdotes into a seamless whole, serials stress the interstices, self-consciously highlighting their montage character and exploring and exhibiting divergent narrative and cinematographic possibilities of the filmic medium.

Keywords: presentism, presentationalism, pressbooks, transmedia storytelling, film exhibition, film serials

The operational aesthetic manifests itself visually in specific scenes in individual filmic texts and in corresponding reception experiences: for example, viewers express an interest in process through their reviews or comments, or studios presuppose a similar fascination in their advertising. Such responses surfaced anecdotally—one prominent anecdote appeared, for instance, in the trade-press coverage of a contest issued in relation to one of the most successful early serials. On 13 March 1915, *Motion Picture News* announced the winner of Thanhouser studio's scriptwriting contest. The studio had promised to award \$10,000 for the best plot suggestions for their ongoing serial *THE MILLION DOLLAR MYSTERY*. The lucky winner was Ida Damon, a twenty-four-year-old stenographer from St. Louis. The paper

describes her as 'a very plucky and self-reliant young lady who has been earning her own living since she was sixteen' (*Motion Picture News*, 1915b). Another trade journal, *The Moving Picture World*, reveals somewhat more melodramatically that Damon had been forced to leave school at the age of thirteen due to sickness in the family. She studied at night school and graduated in stenography and shorthand before working as a stenographer. Thus, as the article highlights, 'Ida Damon is a splendid example of the self-reliant and self-educated American girl' (Giebler 1915). Moreover, Mutual's house organ *Reel Life*¹ stressed that the 'mayor [...] presented Miss Damon with the certified check, which will make her independent for life' (*Reel Life*, 1915).

The story of Ida Damon's award-winning success as conveyed in these publications epitomizes many traits that film serials themselves stressed in their female characters. At the time, young, plucky, self-reliant, and educated 'serial queens' crowded American cinema screens (cf. Singer 2001).² Many of them held jobs similar to Damon's: Mary in *WHAT HAPPENED TO MARY* (Edison, 1912), for example, is a clerical worker (Enstad 1995: 74), and Helen, from *THE HAZARDS OF HELEN* (Kalem, 1914-17), is a telegraph operator for the railroad (Stamp 2000: 139). Other serial queens, such as Pauline in *THE PERILS OF PAULINE* (Pathe, 1914), inherit a large amount of money that equally enables their independence—despite their tendency to marry in the end. In fact, Ida Damon appears to be the combined mirror image of the various serial queens that were successful at the time. She is the ideal respondent to answer—and win—Thanhouser's contest.

The contest had more specifically asked viewers of *THE MILLION DOLLAR MYSTERY* to send in suggestions for the serial's denouement. Ida Damon's submission includes the identification of the heroine's lost father, who then points her to the place where the eponymous million dollars were hidden. The father opens the secret compartment by pushing a button on a picture frame containing his portrait (*Motion Picture News*, 1915b). By including such a mechanical contraption in her script, Damon resorts to an

1 Although it was Mutual's house organ, *Reel Life* also covered and advertised films by Mutual's producers Reliance, Keystone, and Thanhouser, according to a note by Eric Hoyt, which accompanies the *Reel Life* scans on lantern.mediahist.org. Accessed 23 December 2014.

2 Other than by gender, age, and monetary assets, Ida Damon does not resemble the serial queens described by Ben Singer. In Singer's account, protagonists such as Pauline in *THE PERILS OF PAULINE* are young adults who pursue daring adventures but usually have to be rescued by their devoted future husbands. Singer's study has influenced the film-historical understanding of film serials to an extent that at times obscures the fact that he is identifying the serial-queen melodrama as one genre within film serials at the time rather than describing silent-era film serials as a whole (cf. Singer 2001).

established formula in film serial scenarios. In fact, machines, technology, and mechanical contraptions were a standard feature of large numbers of serials produced at the time. An advertisement for the film serial ZUDORA, renamed THE TWENTY MILLION DOLLAR MYSTERY (Thanhouser, 1914/15), for instance, promises ‘a revelation of Hindu mysticism and science. It will portray mechanical effects never before seen at the movies.’ (*Motion Picture News*, 1914b).³ Ben Singer describes an episode of the serial in which an unknown character hides a wired instrument under a pillow—a dictagraph, as readers learn in the tie-in (2001: 285). Moreover, the final episode of LUCILLE LOVE, GIRL OF MYSTERY (Universal, 1914) depicts Lucille ‘amusing herself as well as the audience, by pressing a series of stops and watching different panels slide back, floors sink down, etc.’, as a review explains (Milne 1914). THE PERILS OF PAULINE, while not staging technology as overtly, frequently shows Pauline trapped in machines gone haywire, for example in cars, on planes, or in a hot air balloon (cf. Stamp 2000: 134). One of the most prominent examples, as the following chapter will show, is THE EXPLOITS OF ELAINE (Pathe, 1915), which features at least one scientific or technological novelty each episode and based part of its promotion activities on this fact (cf. Stamp 2000: 135; *Motion Picture News*, 1915a).

The frequency with which serials depicted novel mechanisms and technologies at the time was pervasive enough for Lubin studio to criticize it. An advertisement for THE BELOVED ADVENTURER (1914) condemns the incorporation of mechanical attractions and effects: ‘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 [...]’ (*Motography*, 1914). The advertisement thus frames THE BELOVED ADVENTURER as an alternative to established narrative and attractive formulae. Somewhat inevitably, the advertisement describes that formula at the same time. It underscores that the depiction of technology and mechanisms in film serials was prevalent and that it was recognized as such. Moreover, the condemnation of the serials’ ‘twisting machine-made plots’ reveals an interesting ambiguity: at first glance, the advertisement employs a metaphor of the machine to point to the recurrent showcasing of technology in film serials. However, it also points to the fact that the

3 In order to capitalize on their previous success by creating a sequel, Thanhouser simply renamed ZUDORA, a serial already in production, THE TWENTY MILLION DOLLAR MYSTERY. The sequel met limited success and Thanhouser refrained from producing subsequent film serials. Soon afterwards, in 1917, the studio closed its doors entirely. For information on the studio’s history, see www.thanhouser.org.

plots are organized around and according to the machine showcased in the serial, and that the plots themselves work and 'twist' like a machine. When writing the final episode for *THE MILLION DOLLAR MYSTERY*, Ida Damon thus includes aspects that are common in film serials during the decade. Her analysis of the screened installments and of the written texts forming the serial's tie-in allowed her to compose a final episode that corresponded to the narrative paradigms established in the written and filmic texts of *THE MILLION DOLLAR MYSTERY*. This assessment resonates with the newspaper's description of the stenographer as 'a very keen observer, much given to looking at things from a critical and analytical standpoint' (*Motion Picture New*, 1915b). Her analytical reading caused her to include a detail that was typical to the serial and to serials more generally, such as the mechanism operating the hidden compartment. Thanhouseer did not award the most creative or ingenious plot suggestion but rather the one best matching the formula and style of storytelling that had been established so far. And mechanical contraptions were very much part of that formula and style.

Such an analytic reading of the serial emerges also from William J. Burns' articles on *THE MILLION DOLLAR MYSTERY*. Burns was a renowned detective and scriptwriter at the time.⁴ For the *Movie Pictorial*, a weekly magazine for film fans, he wrote a series of articles titled 'Helps to the Solution of The Million Dollar Mystery', in which he applied his expertise in deduction to help viewers find the solution to its mystery and win Thanhouseer's 10,000-dollar award. Each week's review provided a detailed analysis of an episode as well as guidelines for the viewer's own study of it, which combined into a how-to guide for attentive film viewing. 'Instead of reading the story and watching the films for the sake of entertainment', Burns advises his readers, 'look into every act, analyze every statement'. Attentive followers of the story are thus supposed to

have every fact, in its order, clearly in mind. Then from time to time, you will be aware of the connection between events or conversations in earlier episodes with those in later episodes. Simply being able to recite the events

4 Burns was a Secret Service agent and founder of the William J. Burns International Detective Agency. He published his exploits as 'true' crime stories in detective magazines and appeared in newspaper columns, and he maintained close ties with the film business. From 1921 to 1924, he was the director of the Bureau of Investigation, a forerunner of the FBI ('William J. Burns' 2018). In 1914, an article announcing the release of *THE EXPLOITS OF ELAINE* (Pathe, 1915) reports that Burns favored the Detective Kennedy short stories, from which the film serial's protagonist detective was adapted, and claims that Burns ordered 100 detectaphones for his offices because they had been described in the stories (*The Moving Picture World*).

of the story will not be sufficient. You must ask yourself questions, you must watch causes and effects, and trace effects BACK to causes. (Burns 1914a: 6; capitalization in the original)

What emerges from Burns' advice and encouragement is a reception experience in which viewers pay attention to detail, to minute events and individual utterances, to elements in the background of the image, to details of *mise-en-scène*, and keep a notebook of their observations. This viewing experience is based on the assumption that the story is a perfect ensemble, a functioning narrative mechanism that only provides viewers with individual parts, with distinct clues that make a whole when viewers 'find the broken bits of evidence and piece them together. But all these stray things must FIT. They must make something perfect—form a pattern that is unmistakable.' (p. 6). Such an understanding considers the story itself a riddle, it equates the serial's narrative with its diegetic mystery. The serial both tells the story of and itself is *THE MILLION DOLLAR MYSTERY*. This faith in a neat organization of the story reframes possible glitches in the narrative continuity of the serial as clues that may help solve the riddle. Accordingly, Burns explains in his second help column that 'we must see what new rays we cast on the dark places. If these further happenings do not fit in perfectly with past events, then the flaw may give us a clue' (1914b: 12). Rather than expressing a naïve faith in perfect storytelling, the assumption that individual clues do combine in meaningful ways is the basis for a deductive engagement with the story. The spectator must believe that there is something to discern in order to become a detective—a subject position that will be elaborated further in the following chapter. For now, it is important that Ida Damon's approach and Burns' advice point to two characteristics that, in diverse ways, inform large numbers of film serials in the silent as well as in the sound eras, which this chapter will outline across the decades.

The first characteristic is that storytelling in film serials is always thought to take place in the present, that is, each week's episode points to former and future developments, but during the act of watching the action on screen is always experienced as taking place now. Burns reminds viewers of this fact early in his first article: "'The Million Dollar Mystery,' keep in mind, is not something that has already happened. IT IS happening right along, from week to week' (1914a: 5). Second, the narratives of film serials are presentational. They engage their viewers in a film viewing experience that takes place outside of the realms of immersion and favors the presentation of narratives over a more realistic representation. Film serials continuously foreground their narrative and cinematic devices, they

showcase storytelling, and they add visual attractions. Burns notes that the obstacles to detection include not only added information or red herrings but also the lure of action sequences, as he specifically and repeatedly points out. In his first column, he tells his readers that 'what you get is what has been considered necessary to BAFFLE you. Remember that.' (p. 6). The following week's remarks then remind readers that 'the way to discern clues is not to be carried away by action, but to associate that action with whatever relates to it' (1914b: 12). The analytical engagement with the narrative is thus not thwarted by melodramatic attachments alone but particularly by instances of attraction, that is, by filmic moments that also take place at a distance from the viewer. Analytic engagement and the appreciation of visual, narrative, or technological stunts place the viewer in a remote viewing position, in which the story is presented to its viewers rather than exclusively drawing them in.

Burns' description of the deductive approach to film viewing in a sense mirrors the film serials' own combination of convoluted narratives and the showcasing of mechanical contraptions. His *Movie Pictorial* help column repeatedly explains his deductive approach via a recourse to metaphors of technological advancement and a language of mechanics. He compares the film viewers' failed attempts at discernment to the number of failures Thomas Edison experienced before devising his great inventions; the number of possible clues to be sorted is analogized to a switchboard with one hundred switches; and, in the following week's column, assumption-making is explained by reference to a locomotive that needs an operator to run (Burns 1914a, 1914b). This interrelation of a depiction of technological or mechanical process and prolonged 'twisted' narratives, which surfaces in film serials as well as in Burns' description of *THE MILLION DOLLAR MYSTERY*, is at the heart of the operational aesthetic.

With their presentist and presentational narratives, film serials stress two characteristics that, although they belong to Hollywood film culture more generally, inform film serials in an intensity that results in a rather unique mode of address. In what follows, I will outline these two hallmark attributes from the early days of the serial queens to World-War-II era action serials, thus simultaneously formulating a historical overview of film serials and their place in the institutional environment of early and studio-era film in the United States. I will trace this history twice, first with a focus on the serials' presentist narration and then in a more detailed account of their presentational mode of storytelling. By highlighting the continuities in the serials' mode of address while also acknowledging the striking differences that occur over time, I will show that the unique aesthetic and mode of

address of film serials is by no means a transitional form of an era before the consolidation of the feature-length film.⁵ Instead, it is particularly the intensity of the presentism and presentationalism of the serials' mode of address that helps to establish serials as an alternative cinematic form and practice across the decades.

Serials are 'Presentist': The Heterogeneous Textuality of Film Serials

Many aspects of the anecdote of Ida Damon's contribution to *THE MILLION DOLLAR MYSTERY* similarly inform the release of the first American film serial.⁶ Edison's *WHAT HAPPENED TO MARY*, which premiered in July 1912 and attracted approximately two million viewers, also appeared in synchronization with a magazine tie-in, this one in the *Ladies' World*,⁷ and it focused on a young, female, working protagonist. Its audiences were, like Ida Damon, encouraged to contribute to the creation of the serial by sending in plot suggestions to the magazine. The serial recounts the adventures of country girl Mary in New York City, and the *Ladies' World*—which, like the serial, appeared once a month—printed novelizations of the chapters alongside film stills that were photographed on the film set (Singer 2001: 213, 276; Enstad 1995: 67, 72). With each publication, the *Ladies' World* issued a

5 Rudmer Canjels stresses, in accordance with Ben Singer and Shelley Stamp, that despite earlier claims that film serials were a transitional-era form, they were in fact a unique form that was neither short-lived nor featured an ephemeral aesthetic (2011: 3).

6 Canjels shows that before the consolidation of the film serial as a form, longer features like those by D.W. Griffith were at times serialized. Singer similarly points to the existence of serialized forms in cinemas before 1912, for instance with the Nick Cater series (Éclair, 1908). Studies such as Canjels', Singer's, and Stamp's differentiate between series with self-enclosed episodes and serials with ongoing narratives and cliffhangers, but they work with a somewhat discursively concurring corpus that includes episodic serials of the early years that catered to the same audience as 'proper' serials, such as *WHAT HAPPENED TO MARY* and *THE HAZARDS OF HELEN*, but excludes film series of earlier or later periods. *WHAT HAPPENED TO MARY* is thus, despite its episodic structure, the oldest American film serial according to these studies (Canjels 2011: xix-xx, 5; Singer 2001: 210; Stamp 2000: 111).

7 *The Ladies' World* was a mail-order journal, of which many existed at the turn of the century. They secured their financing through advertisements for mail-order items rather than through subscriptions, and they published serial fiction to secure a steady readership. Enstad stresses that mail-order journals served as a low-cost means to disseminate written fiction to working-class audiences and readerships with limited education (1995: 72-73; cf. Mott 1957: 360, 364-365). Roger Hagedorn's claim that *The Ladies' World* was a supplement to one of Hearst's newspapers is incorrect (1988: 9).

contest that awarded 100 dollars for the best proposal for Mary's following exploits. Singer argues that the tie-in primarily served to recruit a film audience from the magazine's substantial readership at a time when film serials needed to maximize their publicity via tie-ins, because their target audience was already saturated with serial fiction in newspapers, magazines, and dime novels (2001: 213, 269; Jess-Cooke 2009: 30). By contrast, Nan Enstad claims that *WHAT HAPPENED TO MARY* helped the journal, which was almost forced to cease publication because it failed to attract enough subscribers to retain its mailing privileges with the post office, by drawing a large enough readership to allow it to continue (1995: 73). Indeed, although the change in post office policy, which now required magazines to present substantial lists of subscribers and pay for the mailing in advance, had already taken effect in 1907 (Mott 1957: 368), circulation data from the *N.W. Ayer and Son's American Newspaper Annual and Directory* suggests that in 1913, subscriptions to the *Ladies' World* jumped from an average of between 600,000 and 700,000 to one million (*Ayer and Son's* 1913: 1153). Edison's serial thus advertised the magazine rather than recruiting film viewers from its readership, which supports Enstad's argument that the cooperation was less a marketing strategy for the film studio than a means of 'rudimentary market research'. This research, she claims, 'served to inform the producers of audience desires but also encouraged readers to actively participate in the fantasy and, importantly, served to constitute and train an audience of fans' (Enstad 1995: 73). Every episode of *WHAT HAPPENED TO MARY* was thus laid out according to the likes and fantasies of its audience.⁸ The serial evolved alongside its viewers' appreciation and criticism and, by taking viewer response and suggestions into account, it assured viewers that Mary experienced her adventures presently, from month to month, in synchronization with the viewing and reading experiences of her fans.

Tie-ins as both marketing strategies and feedback trackers continued to be pivotal for film serials throughout the serial craze of the mid-1910s. THE

8 This audience was predominantly female at a time when gender hierarchies were being reconfigured, when the suffrage movement was gaining momentum, and laborers in female-dominated industries repeatedly went on strike (Enstad 1995: 69). Serials, according to Nan Enstad, 'contained many political potentials, but in part they offered women fantasies of respectable, serious, and rewarding labor and adventure that countered dominant narratives and ideologies'. Accordingly, serials did not portray factory or domestic workers but clerical workers, telegraph operators, or newspaper reporters (p. 74). Meanwhile, the female protagonists of other serials who were not steadily employed because they had some sort of wealthy inheritance waiting for them nevertheless indulged in interesting adventures outside the confinement of the home.

ADVENTURES OF KATHLYN (Selig Polyscope, 1913/14), which introduced the two-reel form and relied more heavily on cliffhangers or at least on suspenseful episode endings, appeared in synchronization with a tie-in in the *Chicago Tribune* (Canjels 2011: 16; Singer 2001: 210, 276).⁹ The following year, adventure serials with two-reel episodes, written tie-ins, and contests flooded the market, including for instance LUCILLE LOVE, GIRL OF MYSTERY, and THE PERILS OF PAULINE (both 1914), which were released in synchronization with tie-ins in the *Chicago Herald* and in the newspapers of William Randolph Hearst's syndicate, respectively (Singer 2001: 276). By the year's end, the film industry trades were declaring 1914 'the Year of the Serial' (Vela 2000: 41). The success of Pathe's PAULINE¹⁰ to some extent hinged on the studio's cooperation with Hearst's newspaper syndicate, which popularized the serial's tie-in with an unusually large number of readers (Dahlquist 2013b: 5-8). Studios at the time relied on the trade press to advertise directly to local film exhibitors, who would decide whether to show the serial in their theaters. Such advertisements in trade magazines frequently stressed the wide circulations of their serials' tie-ins (Stamp 2000: 105), encouraging exhibitors to book a particular serial because newspapers already advertised it in their area for them.¹¹ The cooperative format proved successful, and 'by the summer of 1914, almost every American film company that could had a serial on the nation's screens', with tie-ins in every major newspaper in the United States and in a range of magazines, reaching 'a potential readership well into the tens of millions' (Singer 1996: 75; 2001: 268-269).¹²

9 THE ADVENTURES OF KATHLYN consists of thirteen episodes, which were shown weekly. The first episode was a bit longer, which Rudmer Canjels compares to today's television pilots (2011: 16). The serial relates Kathlyn's adventures with wild animals in the Far East, capitalizing on the Selig Polyscope Company's studio zoo (Haenni 2015; Singer 2001: 213; Vela 2000: 40).

10 THE PERILS OF PAULINE is the most frequently analyzed serial today (cf. Stamp 2000; Singer 2001; Dahlquist 2013a; Denson 2014b; Morris 2014). The prominence of THE PERILS OF PAULINE is probably related to the fame of Pearl White and to the fact that despite the sole remaining of a nine-episode cut of the serial, it is the earliest serial available in somewhat complete form and it appeared on online platforms before other serials became available on the internet. The original serial consisted of twenty two-reel episodes, probably without cliffhanger endings (Canjels 2011: 17). Although it ranks among the most successful ones, serials such as THE MILLION DOLLAR MYSTERY or THE EXPLOITS OF ELAINE were similarly successful.

11 An advertisement in *The Motion Picture News* highlights the number of newspapers printing the tie-in and the number of people responding to a connected contest. It furthermore insists that 'Any Exhibitor Who Lets This Chance Pass Him Is Not Alive to His Prospects' (*Motion Picture News*, 1914a).

12 Singer does not take into account more episodic series such as THE BELOVED ADVENTURER, with its novelized version. Therefore, he arrives at the conclusion that 'virtually every' serial had a tie-in. For an extensive list of film serials and the newspapers or syndicates publishing

Tie-ins served a particular function in establishing a serial's presentist character. Their narratives were perceived as taking place in the present because they were simultaneously appearing elsewhere, thus informing the lives of their fans outside of the film theater in ways that increased and accumulated throughout the history of film serials. Serials were a part of more broadly circulating trans-media texts that 'promoted heterogeneous forms of consumption' (Stamp 2000: 115). Shelley Stamp stresses that

serialized stories released over the course of months and endlessly reiterated myriad formats and products generated an extremely heterogeneous text. While the continuing nature of plot lines guaranteed an ever greater propagation of material, the endless chain of accompanying tie-ins ensured an exponential reproduction of each narrative. As a result, the value fans might accord each incarnation of the tale—whether in print, on film, in song, or captured in a souvenir—diminished in relation to their overall proliferation. (p. 124)

This view of serials as heterogeneous texts corresponds to Rafael Vela's comparative reading of the film serial and its accompanying written tie-in in the case of *THE PERILS OF PAULINE*. The newspaper serial exploited the advantages of its literary form over the cinematic medium in that it described the thoughts and overall inner state of characters, and it included aspects that would have been censored on screen, for example prostitution or drug addiction. Film, in turn, profited from its own medium's abilities when it showed visually exciting instances, for example a hot air balloon ride in the first episode of *THE PERILS OF PAULINE* ('Trial by Fire'). Consequently, both incarnations of the story exploited their respective medium's advantages while working around its disadvantages. The result are two distinct though related stories, which, according to Vela, 'provided complementary, layered versions of the plot' (2000: 68-69). Similarly, Justin Morris affirms the transmedia text's 'multi-textual, multidimensional, and participatory' nature (2014: 45). Although tie-ins probably also helped viewers to understand plot elements (cf. Singer 1993: 497-99; 2001: 279), film serial narratives were heterogeneous and layered, and tie-ins did more than just

the tie-in, see Singer (1993). Moreover, Rafael Vela highlights that tie-ins were only common among producers who released their films through an affiliation with distributors, for example Universal, Mutual, or the General Film Company. Unaffiliated producers would sell their films through local agents who handled the exhibition throughout their region. Serials on this States-Rights market usually did not feature tie-ins until 1920, when National Film's *THE SON OF TARZAN* offered a tie-in although it was released without affiliation (Vela 2000: 125-126).

make up for transitional-era film's supposed lack of a formalized style and cinematography.

The heterogeneity of the multiple incarnations of the stories and their relations to each other also manifested itself in the reception schedules, or lack thereof, according to which the narratives appeared. Although advertisements at times specified the presumably correct order in which fans should consume written and filmic chapters, Stamp's research shows that in some regions the tie-ins were published before the episodes were screened in local theaters, and vice versa in others. This was necessarily the case, as a limited number of film prints circulated between cinemas at the time. This practice resulted in a differentiation of urban center and rural periphery, with the more remote venues receiving the reels at times six weeks after the publication of the tie-in. This was the case with the distribution of *THE EXPLOITS OF ELAINE* in the San Francisco Area, where its tie-in ran in the *San Francisco Examiner* (Stamp 2000: 117-118). Additionally, film audiences could migrate between local theaters to catch up on missed episodes or to risk a preview, and local exhibitors invented their own screening schedules, at times showing two or three episodes at a time or screening re-runs of entire serials (pp. 118-119; Canjels 2011: 18). Furthermore, the serializations in local newspapers also differed at times, with individual publications adding stills, portraits, or other visual material or—especially if a town's screening schedule ran behind the serial's original release dates—omitting the contests altogether (Morris 2014: 46). Local viewing and reading practices thus added heterogeneity to the already multi-layered transmedia texts.

The prize contests both fostered the mushrooming of heterogeneous texts and enabled producers, writers, or publishers to control these texts by means of exercising their authority over who would win. Prize contests offered 100 to 25,000 dollars either for correct guesses of upcoming aspects of the story or ideas and suggestions for the plot of following episodes or the overall outcome of the serial (Singer 2001: 265-267; Stamp 2000: 120-122). Viewers of *THE PERILS OF PAULINE*, for example, were encouraged to imagine histories and backstories concerning their serial heroine, which the newspapers then printed alongside the tie-in, again contributing layers to an already multifaceted and convoluted narrative. Paradoxically, the sanctioning of some stories as legitimate assets to the 'PAULINE universe' simultaneously encouraged the production and circulation of an increasing amount of texts written by readers and theater patrons, thus at the same time working against a control over the story's proliferation. Overall, the contests served to organize the viewers' and readers' active engagement with the story, and they 'channel their interest back into the product itself', as Stamp explains

(2000: 121). Moreover, the contests for PAULINE and other serials encouraged film viewers to read the tie-ins and pay close attention to detail in order to gain the necessary knowledge to write a convincing contest entry. Additionally, they drew returning readerships to the newspapers, because the next issue would list the contest's winners. Viewers and readers continuously engaged in tasks of creative writing and problem-solving that were similar to the detective work and writing endeavors that the serial heroines themselves performed on screen and in the written narratives (p. 122). Pauline, for instance, is a writer of adventure stories in her serial who—in the written tie-in—publishes her stories in the *Cosmopolitan* (Vela 2000: 106).

Especially serials that featured a contest for each episode, such as WHAT HAPPENED TO MARY or THE PERILS OF PAULINE, stressed the film serials' presentist focus. Such contests foregrounded narrative development and action in the present rather than a mystery with a deferred outcome. Allowing fans to alter the story as it propels along, serials highlighted the fact that upcoming story elements were not already fixed but would happen in the future. The serials actualized fan response in a narrative feedback loop, which again fostered the experience of the narrative as materializing presently, here and now, as a process rather than as a self-enclosed text. A similar processual and presentist tendency can be observed in the anecdote about Ida Damon: the contest had specifically not been to simply suggest or guess the name of a culprit or the location of the eponymous million dollars of THE MILLION DOLLAR MYSTERY. Instead, Thanhouser's contest asked fans of the story to come up with the 'how', to suggest the process leading to the resolution of the plot.¹³ It becomes clear that tie-ins emphasized in multiple ways the presentist nature of the film serial as a narrative form and media product that is continuously on the go. Consequently, they configured film reception and training as a group effort, that is, they encouraged film audiences to identify as a group. Ida Damon not only read the serialized magazine stories and watched the episodes in the theater, she also discussed her film and reading experiences with her mother (*Motion Picture News*, 1915b). Similarly, Stamp shows that tie-ins, just as the other marketing strategies employed at the time,¹⁴ encouraged spectators to

13 Paradoxically, Burns' articles treat THE MILLION DOLLAR MYSTERY much more as a riddle to be solved than as a task for creative writing. Whereas Damon came up with a solution, Burns' readers aimed to find one to an extent that leads to the suspicion that multiple contests may have been around, or that Thanhouser's contest was itself ambiguous.

14 The publicity for film serials during these years was not limited to tie-ins. Singer lists 'newspapers, magazines, trade journals, billboards, streetcars, sheet music, novelty giveaways, prize contests, coupons, [and] postcards' as means, venues, and options for advertisement, and

consider themselves part of a group: ‘Serials [...] offered multiple sites for consumption, most of which were located outside the space of the theater; and they encouraged viewers to see themselves as part of a community of fans (entering contests, gathering to play games, singing songs together), rather than as isolated “spectators”’ (2000: 115). This assessment resonates with the more general history of serial storytelling since the 1880s in which, as Ruth Mayer explains, ‘the entertainment market around penny papers, dime novels, serialized fiction, or the evolving sensationalist yellow press played a seminal role in the production of national and transnational community experiences’. These mass media, moreover, spread ‘fantasies of simultaneity, compatibility, and community’ (Mayer 2014: 16-17). Serials thoroughly embodied all of these aspects.

Tie-ins were part and parcel of a marketing strategy that aimed to maximize profits and to draw returning audiences. However, the coterminous existence of film serials and their tie-ins has implications that exceed the plain observation that they mutually advertised each other. Some of these implications also apply to feature films, which similarly bridged media by adapting previously published stories and novels or by having their stories fleshed out as written texts, for instance in *Photoplay* or in *The Motion Picture Story Magazine*, both of which published written accounts of filmic narratives beginning in 1911 (Singer 1993: 492-493; Henderson 2014: 13). These publications often added articles about technical aspects of filmmaking ‘meant to appeal to the middle-class and hobbyist audiences who were then making *Popular Science* profitable’ (McLean 2003: 3). Even though the ‘co-ordinated cross-media synergy’ of *WHAT HAPPENED TO MARY* does mark ‘a genuine turning point’, as Stuart Henderson stresses (2014: 13), films in general and especially franchises and multifarious forms of ‘remaking’¹⁵ engaged in conversation with their coexisting texts. Moreover,

he adds that Mary Fuller from *WHAT HAPPENED TO MARY* even advertised her own original perfume (2001: 265, 213). Among the giveaways and purchasable items were ‘calendars, spoons, pillow tops, [and] pin cushions’, according to Stamp (2000: 122-123). Such elaborate marketing campaigns were comparatively unique to film serials at the time, as the frequent changes of programming rendered extensive marketing campaigns for individual films almost useless. Film serials, however, recurred each week and thus made substantial advertising worthwhile (Singer 2001: 264-265; Stamp 2000: 107). The emergence of complexly coordinated marketing strategies—especially the widely circulating tie-ins—co-occurred with the rise of a national market for films. Production companies now formed publicity departments to organize marketing campaigns mostly for film serials and for a few exceptional longer features (Stamp 2000: 108; Canjels 2011: 17).

15 Kathleen Loock introduces remaking as an umbrella term for ‘narratives that initially exist as self-contained works of art and are then re-activated, repeated, changed, updated, and

movie story magazines experienced another peak from the 1930s to the 1950s, often resulting in the simultaneous circulation of multiple written fictions for the same film (McLean 2003: 3-7). What differentiates film serials from these other formats is that, although they weave similar networks of cross-reference, they expanded the engagement with these networks over a predetermined, interrupted length of time. Similar to sequels, serial installments constitute 'a method of renewal and response, particularly in terms of its incorporation of audience response into a continuation of a previously popular production' (Jess-Cooke 2009: 30). Serials translate this renewal into rigid weekly or monthly schedules that continuously reinforce the presence of the narrative alongside and in synchronization with the readers' and viewers' own schedules and timelines. They excel in the constant feedback loops of production and reception that inform serial narratives in general (cf. Kelleter, 2012a: 22), which foster this sense of the narrative as a continuous present.

To this day, the framing of a serialized installment between a 'previously on...' and '...to be continued' reinforces the presentist character of a serial's individual installments during the viewing experience. Somewhat paradoxically, serial episodes—or 'chapters', as they were often called before the advent of television—generate their sense of presence through references to a narrative past and future. The frequent recaps marking the beginning of serial chapters not only serve to recall the relevant information viewers need in order to understand the ongoing action, they also reframe the previous week's present events as now lying in the past. In other words, by reference to a narrative past and by promising a narrative future, serial chapters establish the action between that past and future as 'now'. Therefore, even highly repetitive serials depend on a continuous reactivation of past episodes and thereby emphasize their repetitive character.¹⁶ The second episode of *THE PERILS OF PAULINE*, for instance, acknowledges the heroine's previous exploits by depicting her taking a rest in response to an increasing journalistic interest in her ('The Goddess of the Far West').

continued', that 'revolve around diegetically consistent plotlines and characters within a joint storytelling universe'. Remaking is thus a practice that includes the production of remakes, sequels, prequels, etc. (2014b: 84).

16 Lorenz Engell foregrounds what he calls, with reference to Niklas Luhmann and Elena Esposito, the 'operative memory' of television series. The operative memory is radically presentist and cannot store knowledge. It therefore differentiates repetition and variation in minute decisions rather than based on comparison with past incidents. In other words, repetition is framed as such within a narrative, regardless of whether an instance truly occurred before in the series (Engell 2011: 119).

Pauline's fatigue thus establishes her adventurousness as continuous and repetitive despite the fact that she only experienced one adventure, that is, in episode one. Throughout the remaining chapters, PAULINE's combination of serial memory and repetitive episode storylines effects a curious imbalance, as all characters seem to remember past episodes except for the serial queen. Episode six thus begins with the acknowledgment that Pauline's (Pearl White) criminal legal guardian Koerner¹⁷ (Paul Panzer) 'has been seeking methods of eliminating' Pauline, who repeatedly agrees to be placed in dangerous situations, despite her fiancée's (Crane Wilbur) objections ('The Shattered Plane'). Whereas Pauline's obliviousness in these later episodes is a prerequisite for the continuous return of adventures, the serial's reliance on past actions to create a narrative present results in the attribution of the capacity to remember exclusively to male characters. This imbalance surfaces particularly at the end of episode six, when Koerner, in an exclamation that references both a narrative past and future as well as Pauline's lack of memory, assures a co-conspirator: 'we'll get her next time' ('The Shattered Plane'). A similar conflation of a narrative future orientation and an acknowledgement of repetitive episode plots occurs in PEARL OF THE ARMY (Pathe, 1916), when a representative of the preparedness serial's sinister Foreign Council remarks with respect to an attempt to thwart Pearl Travers' (Pearl White) investigations: 'get to work on it at once, ... there must be no slip-up this time' (episode 5, 'Somewhere in Grenada'). Such a self-description of serials as presentist narratives also provides a new angle to the notion of training. Film serials and their tie-ins familiarize their viewers with a repetitive formula, in which new episodes offer repeated variations of the same plot rather than a true forward momentum and narrative evolution. As Ida Damon's example illustrates, prize contests provided an opportunity for audiences to apply their acquired skills. The fact that all these efforts focus on the present, that is, that they refuse to pass beyond the moment of becoming, in a sense frees the idea of training from its need to be applied practically, outside of the narrative environment from which it originated. Although the skills will be put to the task elsewhere, as they help organize or 'manage' the contingency of options that characterizes the mass-cultural environment of modernity (cf. Brasch & Mayer 2016; Mayer 2016), they are not acquired with such an intention in mind.

To an extent, cliffhanger endings dissolve the paradoxical relationship of memory and repetition in serials because they reformulate the promise

17 In the edited nine-chapter version of the serial, the villain who in the tie-in appeared as Raymond Owen is renamed Koerner, maybe with reference to Paul Panzer's German nationality.

of a narrative 'again' in terms of continuation—despite the still repetitive plot structures. The cliffhanger structure increasingly became a norm of cinematic serial storytelling, and it co-occurred with the introduction of story recapitulations at the beginning of individual episodes. Cliffhangers and story recaps, in turn, have their own implications for the serial memory, which become apparent when considered in the light of the notion of meaning making in Niklas Luhmann's systems theory. According to Luhmann, the individual moment in time exists only with reference to past and present occurrences (Krämer 1998: 570; Luhmann 1997: 20-24). The notion of meaning gains particular relevance for film serials in its relation to the contingency of possible events in the world—in this case, in the narrative world of a particular film serial. Luhmann clarifies that references to the past point only to the contingent operations, the results of which can be apperceived in the present. References to the future, by contrast, suggest an endless array of possibly upcoming observations (1997: 21; see also Engell 2011: 117-118).¹⁸ The plot recaps provided in individual episodes radically reduce past plots to the minimum of information necessary to understand the action of the respective episode. In other words, the chapter introductions do not fill in possibly uninformed viewers about the narrative, but they offer a shortcut entryway into the present episode. By referencing a reduced narrative past and by pointing to the contingent narrative future, serials not only establish each episode as taking place in the present, they also make meaning in the first place.

In addition to constructing presence by turning to a narrative past and future, title cards of film serials often employed a grammatical present tense that constructed particular narrative information as being simply there instead of resulting from anything in particular. A diegetic newspaper article in the second episode of *THE PERILS OF PAULINE*, for instance, established her as 'that present day heroine so much talked about' ('The Goddess of the Far West'), and a newspaper article in episode six informed her that 'much activity is taking place at the airdrome' ('The Shattered Plane'). Similarly, *PEARL OF THE ARMY*'s eponymous serial queen is granted the episode's first spoken sentence when she informs her father in episode four, 'I tell you, father, I'm on the trail of the Secret Menace!'—informing the audience just as much as the diegetic father figure (episode 4, 'War Clouds'). Moreover, the pilot episode of

18 The original quote, in German, reads: 'Soweit Rekursionen auf Vergangenes verweisen (auf bewährten, bekannten Sinn), verweisen sie nur auf kontingente Operationen, deren Resultate gegenwärtig verfügbar sind, aber nicht auf fundierende Ursprünge. Soweit Rekursionen auf Künftiges verweisen, verweisen sie auf endlos viele Beobachtungsmöglichkeiten, also auf die Welt als virtuelle Realität, von der man noch gar nicht wissen kann, ob sie jemals über Beobachtungsoperationen in Systeme (und in welche?) eingespeist werden wird' (Luhmann 1997: 21).

THE EXPLOITS OF ELAINE establishes that ‘the secret society “The Clutching Hand” continues its sinister exploits’ and Elaine’s (Pearl White) father already takes an unexplained interest in uncovering the identity of the secret society’s eponymous leader. Such notions reinforce a narrative presence on the film screen that also finds its equivalent off screen, in a context of marketing and paratextual endeavors that weave a referential network outside of the cinematic institutions. The following pages will pinpoint the practices by means of which serials established their presence extra-cinematically in the lives of their fans across the decades. The analysis then returns to the serials themselves in an exemplification of their presentist mode of storytelling in the sound era.

Presentist Storytelling in the 1920s and 1930s

A rough timeline of the history of silent serials in the 1920s would show three phases that followed the initial serial craze. The first of these phases lasted from about 1917 or 1918 to 1923. These years in the motion picture industry were characterized by unstable relations between distributors and exhibitors, as the industry lacked a uniform standard of distribution and local exhibitors frequently engaged in disputes over distribution contracts (Maltby 2013: 143-144). Additionally, serials lost their national tie-ins in newspapers and magazines. Previously, newspapers had paid for the rights to print a particular tie-in or at least published them free of charge, resulting in the fact that ‘virtually every American serial before 1917 was packaged with a tie-in that ran its duration’ (Singer 2001: 276). Towards the end of the 1910s, however, publishers increasingly thought of them as advertisements and thus charged film producers and distributors accordingly. Moreover, both producers and exhibitors began to consider it unwise to give away or ‘spoil’ the story before the screening (Singer 1993: 495; 2001: 278). During these years, film serials were increasingly targets of censorship. From the mid-1910s onwards, censors across the United States demanded that violent scenes be edited out, and they often practically dissected entire episodes (Vela 2000: 154-155).¹⁹ In 1919, the National Board of Review ceased to approve film serials in general, causing

19 In 1920, Arthur B. Reeve (author of, among others, THE EXPLOITS OF ELAINE and THE MYSTERY MIND, and vice-president of Supreme Pictures) spoke out against a proposed Oklahoma bill to prohibit the interstate transportation of ‘thrills’, arguing that ‘if the reformers, cranks and censors have their way the law will eliminate from our plays, literature and cinema stories all the vital human emotions. We shall have a “perfectly lovely soda pop party” where inane ingenues will display the latest thing in chiffons and pretty faced boys will advertise somebody’s “correct college clothes”’ (Reeve 1920).

a public relations disaster for their producers just as wealthier competing studios were moving towards vertical integration (pp. 208-209). As a result, in the fall of 1921 and throughout 1922, Universal exclusively produced censor-proof serials. Similarly, Pathe produced serials that, while retaining thrills, worked without violence and gunplay, thus gaining the approval of the National Parent Teacher's Organization and eventually of the Censor Board (pp. 210-211).²⁰ However, Rafael Vela notes that at least in one rural Illinois theater in 1918, serial audiences were less than 30 percent juvenile (p. 140). Audiences do not seem to have been very different in 1922, when the implemented changes drove away the adult audience—a group large enough for Universal to quickly adapt and repeal their censor-proof style. The studio only released two more wholesome serials in 1923,²¹ and serials remained, as Vela stresses, 'dependent on a mixed audience' (pp. 212-213).

Whereas serial queens Pearl White and Ruth Roland continued to capitalize on their stardom during this phase, studios also sought to make up for the lack of tie-ins by referencing other public discourses through the showcasing of non-cinematic celebrities. Thus, Rolfe's *THE MASTER MYSTERY* (1919) featured the illusionist and escape artist Harry Houdini, and *THE MYSTERY MIND* (Supreme Pictures, 1920) showcased the French hypnotist J. Robert Pauline (*Exhibitor's Herald*, 1920b). *DAREDEVIL JACK* (Pathe, 1920) starred heavyweight boxer Jack Dempsey, and the light-weight boxing champion Benny Leonard appeared in *THE EVIL EYE* (Hallmark, 1920) (*Exhibitor's Herald*, 1920a). Pursuing a somewhat different strategy, the plot of *THE HOPE DIAMOND MYSTERY* (Kosmik, 1921) capitalized on the public discourse about the mysterious Hope diamond and its previous owner, the former noblewoman-by-marriage May Yohe. On the one hand, celebrity characters were apparent advertising stunts (cf. Vela 2000: 133).²² On the other hand, even though this kind of star discourse did not as readily feed into a transmedia narrative, the showcasing of stars provided another means for serials to transcend the boundaries of the narrative and carrier medium and

20 Universal produced *THE WINNERS OF THE WEST* (1921), *ADVENTURES OF ROBINSON CRUSOE* (1922), *WITH STANLEY IN AFRICA* (1922), and *IN THE DAYS OF BUFFALO BILL* (1922). Among Pathe's censor-proof serials were *HURRICANE HUTCH* (1922) and *THE WHITE EAGLE* (1922) (Vela 2000: 210-211).

21 *IN THE DAYS OF DANIEL BOONE* and *OREGON TRAIL* (both Universal, 1923). Two years later, in 1925, W. Ray Johnston, President of Rayart Pictures, similarly insisted that serials needed to cater to mixed audiences, therefore Rayart's *BATTLING BREWSTER* includes a noted cast (including Helen Holmes), 'good action', and is 'photographed on a par with the big features', but it also features a skillfully riding juvenile actor to please the child audience (*Exhibitor's Trade Review*, 1925a).

22 The pressbook for *DAREDEVIL JACK*, for instance, stresses the exhibitor's opportunity to profit from the immense press coverage of its celebrity protagonist.

to integrate synchronously into the fans' weekly routines through magazine and newspaper portrayals. Stars or public figures more generally helped establish the connections to the outside world upon which serials rely.

Another means of producing serials that tapped into existing discourses was to arrange tie-ins with, or to produce adaptations of, already popular novels or newspaper serials. In 1917, Paramount's *WHO IS NUMBER ONE?* appeared alongside a corresponding novel, and the film serial was advertised in bookstores. Similarly, in 1919, Pathe released *THE BLACK SECRET*, an adaptation of Robert Chambers' already running print serial *In Secret*. The serial novel later appeared as a bound volume, enabling a marketing strategy that included advertisements for the film serial in the Doran Publishing chain of bookstores (Vela 2000: 131-132). Such co-operations worked on a local basis: the previous cross-regionally syndicated tie-ins, which were organized to a large extent by the studios, were now replaced by marketing suggestions in pressbooks and trade magazines, and the organization and actualization of these ideas was passed on to local theater owners or managers. An early example of this is *THE ADVENTURES OF TARZAN* (Weiss Brothers/Numa Pictures, 1921) and its exploitation stunts. The *Exhibitor's Trade Review* noted that the film studio's publicity director had 'devised numerous novel and practical stunts that should aid the exhibitor in keeping his box-office staff working at high speed. What is more, the suggestions are not only practical, but can be utilized without the expenditure of any huge amount of money. They are inexpensive and attractive' (*Exhibitor's Trade Review*, 1921). Exhibitors were advised to co-operate with local bookstores selling the *Tarzan* books, who could furnish their windows with cutouts from the film posters to create a miniature jungle. Similar co-operations were suggested with toy stores, music stores (there were *Tarzan* songs as well), bird stores, and fur shops, and movie theaters were encouraged to use wild animal 'perambulators' for the day of the show and, if possible, to borrow a caged lion from a local zoo. Furthermore, the article urged exhibitors to 'follow the press book suggestions for newspaper display advertising as closely as you can', for instance by convincing local editors to publish the reviews and feature stories that the pressbook offered, especially as 'Monday is usually a slow news day for the papers and they will welcome features that carry interest' (*Exhibitor's Trade Review*, 1921).²³ A particular

23 Note that advice for the exploitation of feature films in the 1920s at times also asked local stores 'to create window displays linking their goods, whether they be pipes, sheet music, or drugs, to a film at the local cinema' (Horak 1989: 29). However, advertisements for feature films would have been of shorter duration.

serial and its advertisement thus aimed to take over a small town center to an extent, which meant that the serial would quite literally surround its audiences. Whereas some of the marketing suggestions seem outrageous and/or impossible, similar suggestions fill the pressbooks for film serials at the time. This practice of passing on the responsibility for the proper 'exploitation' of a serial to the exhibitor became common for every serial in the sound era, as well as for numerous features. Moreover, the suggestions for co-operation with local stores epitomize the role that local theaters played in their communities, where they prevented business activity in general from moving to the larger cities: 'Like the grocery, clothing, and drugstores in Main Street's retail zone, small-town movie theaters were economically inconsequential individually, but taken together, they were critical to their community's commercial activity' (Maltby 2013: 140-141).

The second phase of 1920s film serial production begins around 1923. Insecurities in the film business led to the establishment of the trade association, the Motion Picture Producers and Distributors of America, in 1922. The MPPDA devised a Standard Exhibition Contract,²⁴ which governed the distribution of films to independent cinemas and strengthened the distributors' rule for more than a decade to come, stabilizing the business and minimizing the cutting of films by local exhibitors (Maltby 2013: 143-144). By now, many of the big studios were vertically integrated, that is, they merged into business conglomerates increasingly controlling the production, distribution, and exhibition of their films (Sklar 1994: 141). Companies such as Famous Players-Lasky (including Paramount), Fox, and Metro-Goldwyn-Mayer dominated the market, keeping the studio system firmly in place.²⁵ They operated their own theater chains, which concentrated on lavish houses in metropolitan centers, thereby ensuring that the coverage of the equally urban-centered press focused on their films. These developments concluded the permanent obliteration of large synchronized tie-ins, as national newspaper syndicates based

24 According to Maltby, 'the SEC, the instrument by which the major distributors did business with the fifteen thousand independent exhibitors across the United States, was the most ubiquitous document of the Classical Hollywood cinema: approximately 750,000 of these contracts, governing eleven million film movements, were signed every year'. The contract was used until 1935 (Maltby 2013: 142).

25 The first studios uniting production, distribution, and exhibition were Paramount in 1919 and Loew's-Metro in 1921. By the late 1920s, the market would be divided between Warner Brothers, Paramount, Metro-Goldwyn-Mayer, Fox Film Corporation, and RKO. Universal, Columbia, and United Artists were in production and distribution, but released their films in cinemas of the other studios. This system ended in 1948 with the Paramount Consent Decree, which forced companies to separate production and exhibition to avoid monopolies (Horak 1989: 6-7, 11-12).

their flagship publications in urban centers, where serials were ceasing to be shown. Moreover, a large-scale dissemination of the newspaper tie-ins relied on the comparatively simultaneous appearance of serial episodes across the nation, but serials were now booked and screened by local exhibitors and small independent chains according to their own schedules.

The situation further intensified as the consolidated corporations imposed block-booking on local theaters, forcing exhibitors who wanted to show a particular feature to rent a plentitude of films alongside it—often enough to effectively fill an independent house's screening schedule. This booking system practically closed the market off for independent producers (Horak 1989: 24). The exclusively non-integrated producers of film serials now had to draw most of their profits from small independent theaters and therefore cut production budgets (Vela 2000: 162). However, to maximize the profits they could garner from these neighborhood houses and to prevent audience dissatisfaction, the biggest producers of serials, Pathe and Universal, started to produce more serials²⁶ but with less episodes each, reducing the typically fifteen to eighteen episodes per serial to ten or twelve episodes by the mid-1920s (p. 210). As a result, serials rebounded to a certain extent, and in 1926 Pathe confidently announced that their chapter plays ran in some forty percent of American cinemas (p. 221). Thus, whereas histories of the studio system provide an understanding of monopolization that makes the possibility of serials—and independent film production in general—difficult to grasp, the continued production of serials itself bears witness to their profitability. In a way, the numbers speak for themselves.

On 14 February 1925, the *Exhibitor's Trade Review* focused on film serials in a special issue that grants us a closer look at the form at this point in the history of the film business. The issue's editorial admits that after the initial heyday of the form in the 1910s, serials had 'been run into the ground by men who had no appreciation whatever of their possible merit or value' and who produced serials that were 'badly done'. New serials, the editorial postulates, were unquestionably better and paved the way for 'a revival of the serial product at a time when it is solely needed to meet a serious selling problem that involves the entire industry' (*Exhibitor's Trade Review*, 1925b). Another editorial piece in the same issue argues that although serials were of less quality than premium features, they would benefit the theaters suffering

26 They had formerly shot four to five serials a season; now they made eight to nine (Vela 2000: 210).

from two or three slow nights a week, especially as the influx of radio sets in homes kept patrons away from the movie theaters (*Exhibitor's Trade Review*, 1925d).²⁷ The editorial elaborates on this point, claiming that the impact of radio and the lack of continuity in cinematic products caused the instability of picture attendance from which theaters suffered at the time. Film serials promised such continuity but theaters had nevertheless discontinued showing them because viewers had complained about the serialized form. Comparing the film serial to serial magazine fiction, the editorial explains a paradox of seriality: the audiences or readers who complain about the fact that a story is presented in installments are often the same ones who reliably follow the story until its end. 'Showmen, good showmen, have cut out the serials on the ground that motion picture fans object to them. Of course they do. Just as fiction readers generally object to them. But this happens to be one of the rare cases where it is good business to give the public something it says it doesn't want' (*Exhibitor's Trade Review*, 1925c).

In the same issue of the *Exhibitor's Trade Review*, Elmer Pearson, Vice President and General Manager at Pathe Exchange, explained that the studio had 'formulat[ed] an entirely new serial policy' beginning with its 1924 releases because previous serials had been so repetitive that 'the audience was able to outguess the author, nine times out of ten'. Pathe's new serials were based on classic stories, such as James Fenimore Cooper's 'Leatherstocking Tales', or on stories by popular contemporaneous authors such as Mary Hastings Bradley or Albert Payson Terhune. Pathe also began re-editing serials into features (Pearson 1925). Nevertheless, the studio continued to rely on the successful marketing stunts tried a few years earlier. Thus, another heavyweight boxer, Gene Tunney, starred in Pathe's *THE FIGHTING MARINE* in 1926. Other studios similarly starred widely known persons or comparably famous fictional characters. *OFFICER 444* (Goodwill, 1926), for instance, starred police chief and publicly acclaimed criminologist August Vollmer.²⁸ Universal took a similar approach when they revived the scientific detective Craig Kennedy, who had solved cases for instance in *THE EXPLOITS OF ELAINE* in 1915, in *THE RADIO DETECTIVE* in 1926. The story by Arthur B. Reeve had been serialized in *Boys' Life*, the monthly magazine of the Boy Scouts of America, in 1923 and 1924 (Reeve 1923). With the release

27 The writer for the *Exhibitor's Trade Review* thus makes an argument similar to Roger Hagedorn's more general theoretical observation that seriality is a medium's means to sustain interest when rivaled by another medium. Nevertheless, the earlier proliferation of tie-ins also complicates Hagedorn's claims (cf. Hagedorn).

28 For further information about August Vollmer, see Cole (2001) and chapter five of this volume.

of the serial, the magazine published a report on the film's production, which was illustrated with stills. Serials such as *THE RADIO DETECTIVE* or *OFFICER 444* exploited an already existing media discourse economically, but they also created narratives that point beyond their diegetic confines on screen. The case of *THE RADIO DETECTIVE* additionally illustrates how some producers sought to limit their reliance on local cinemas more generally. In January 1927, Universal published an ad in *Boys' Life* thanking the Boy Scouts of America for their official endorsement and telling the children to have their scout master write to Carl Laemmle to ask how the screening could be arranged if the serial was not shown in their vicinity (*Boys' Life*).²⁹ Whereas Universal thus aimed to recruit viewers from the boy scouts, its marketing strategy acknowledged the possibility of either the lack of local cinemas or an exhibitor's inability or unwillingness to show the serial. Universal thereby continued a strategy commenced five years earlier when it had begun to sell its films to non-theatrical outlets, as portable projectors enabled film screenings for example in churches and YMCAs—a strategy that was much debated, as such arrangements drew viewers away particularly from local, exhibitor-owned theaters (Vela 2000: 158-162). As this example illustrates, film serials in the 1920s continuously strove to find new cross-media promotions as well as venues for their screenings, because the advancement of the studio system threatened not only independent producers but the serial as a cinematic form more generally. As a result, film serials continued to be interwoven into networks of multiple institutions, businesses, and media, and their reach exceeded the confines of the film theater. Such developments again underline the serial's presentism in both a temporal and a spatial sense.

The final phase in silent serials began in 1928 or 1929, when the small theaters that bought serials had to face the challenges of the transition to sound, the Great Depression, and ensuing changes in the film business that led to the termination of many independent studios. Pathe, the biggest producer of film serials since 1914, joined the larger, vertically integrated company RKO and terminated film serial production in 1929. The rural, subsequent-run cinemas that constituted the main outlet for film serials were lagging behind in the rewiring for sound films, so that film serials would have had to be produced in both silent and sound versions—a

29 The ad also asked children to send in ten cents to get an autographed picture of the serial's star Jack Dougherty, and it announced Universal's following serial called *FIGHTING WITH BUFFALO BILL*, the name for which Mr. R. Jacobs from Brooklyn, NY, received \$250 in a contest (*Boys' Life*).

financial burden that the small profit margins of the States Rights market could not (or would not) shoulder. The bulk of film serial production thus remained with Universal and a new upstart on the independent market: Mascot Pictures (Vela 2000: 224-226).³⁰

Whereas Hollywood's transition to sound generally dates to 1926 and 1927—somewhere around the release of Max Murnau's *SUNRISE* (Fox, 1927) and Alan Crosland's *THE JAZZ SINGER* (Warner Bros., 1927)—film serials with synchronized sound did not appear until two years later. Although exact pioneers are difficult to determine, among the first sound serials were *KING OF THE KONGO* (Mascot, 1929), *THE VOICE FROM THE SKY* (Ben Wilson Productions, 1930), and *THE INDIANS ARE COMING* (Universal, 1930).³¹ The end of the silent era and the beginning of film sound was commemorated with nostalgia for the early years of the serial craze. One of the final silent serials, *THE CHINATOWN MYSTERY* (Syndicate, 1928) bears evidence of an awareness that an era in filmmaking was coming to an end. Produced when the introduction of sound was well underway, the serial features 'the mysterious 13', a group made up entirely of former serial villains and heroines, male and female. These are introduced in sequence, revealing new members every couple of episodes, although missing footage or a producer's quirk results in the naming of only eight cameos: Francis Ford, Paul Panzer, Rosemary Thebe, Sheldon Lewis, Grace Cunard, Harry Meyers, Helen Gibson, and George Chesbro.³²

30 *THE INDIANS ARE COMING* (Universal, 1930), for instance, was produced both as a silent and as a sound serial.

31 *KING OF THE KONGO* was a part-talkie, but most of the original sound discs are missing. Some scenes remain, however, and the first sound sequence seems to appear in episode five. *THE VOICE FROM THE SKY*, by contrast, is a lost film, but some of its sound remains. Individual episodes of *THE INDIANS ARE COMING* have been archived, for instance at the Film and Television Archive at the University of California in Los Angeles. Authors name different serials as the first sound serial: Roy Kinnard claims it was *THE INDIANS ARE COMING* (2012: 22), for instance, and Cynthia Miller believes it to have been *ACE OF SCOTLAND YARD* (Universal, 1929) (2009: 63).

32 Francis Ford was an actor, writer, and director who directed about 170 films and acted in about 500 (Usai). He directed *LUCILLE LOVE*, *GIRL OF MYSTERY* (Universal, 1914) and *THE MYSTERY OF 13* (Burston, 1919), both of which he also acted in, and he wrote and directed *OFFICER 444* (Davis, 1926). Paul Panzer's most notable role was as the villain Owen/Koerner in *THE PERILS OF PAULINE* (Pathe, 1914). Rosemary Thebe played lead roles alongside Francis Ford in *THE SILENT MYSTERY* (Burston, 1918) and *THE MYSTERY OF 13*. Sheldon Lewis was known for acting as 'the Clutching Hand' in *THE EXPLOITS OF ELAINE* (Pathe, 1915) and as the title villain in *THE IRON CLAW* (Pathe, 1916). Grace Cunard was lead actress in *LUCILLE LOVE*, *GIRL OF MYSTERY* (alongside Ford). Harry Meyers cannot be placed. Helen Gibson is best known for *THE HAZARDS OF HELEN*, 1915-1917. George Chesbro appeared in *HANDS UP!* (Pathe, 1918) and in *THE HOPE DIAMOND MYSTERY* (Kosmik, 1921).

A similar sense of nostalgia carried over into the early sound era, when producers capitalized on what Kathleen Loock has identified as a trend in Hollywood features at the time: the production of ‘talker remakes’, that is, the remaking of silent films in the sound era (Loock 2016). In 1933, Universal released *THE PERILS OF PAULINE*, and detective Craig Kennedy and the master villain from *THE EXPLOITS OF ELAINE* (Pathe, 1915) reappeared in *THE AMAZING EXPLOITS OF THE CLUTCHING HAND* (Weiss Bros., 1936) three years later. Although these serials tell new stories,³³ newspaper articles in the corresponding pressbooks relate them to the history of their silent predecessors. The pressbook for *THE PERILS OF PAULINE*, for instance, calls the serial a ‘re-creation’, which would educate more recent serial fans about the history of the form:

For six months Universal made intensive preparation for a great serial adventure. Carl Laemmle, Jr. realized that to re-create the world’s most famous serial, “The Perils of Pauline,” would be a great money-maker for exhibitors. The new generation of theatre-goers has never seen this tremendous war horse of a score of years ago. But there isn’t a mother’s son or daughter in the United States who doesn’t know the name, “Perils of Pauline.”

The term ‘re-creation’ itself suggests an ambivalence of nostalgia and ‘making present’. On the one hand, *THE PERILS OF PAULINE* conjures up the history of the form, pointing out its historical relevance as a means to assert its contemporaneous one. On the other hand, the existence of a new *THE PERILS OF PAULINE* (instead of, for example, a possible re-release of the silent serial) effects a reliving of the history of film serials, starting in the sound era just where it started in the silent era. In a sense, the serial references film history and offers an ersatz history at the same time. The ‘re-creation’ of *THE PERILS OF PAULINE* thus relocates the serial to the present, complete with its two-decade history. A similar treatment of film history informs *THE CLUTCHING HAND*, which restages Detective Kennedy’s quest to reveal the identity of the Clutching Hand as it was first visualized in *THE EXPLOITS OF ELAINE* (Pathe, 1915) but uncovers a different fictional character beneath the crook’s disguise. Correspondingly, the serial’s pressbook assumes the audience’s familiarity with the actress Pearl White, but not with the 1915 narrative. The marketing

33 *THE AMAZING EXPLOITS OF THE CLUTCHING HAND* was in fact based on Arthur B. Reeve’s final novel of the same name. *THE PERILS OF PAULINE* recasts the protagonist as the daughter of a chemist and archaeologist and has Pauline travel to Asia in pursuit of a secret formula.

thus equips *THE CLUTCHING HAND* with historical relevance, but its story is firmly placed in the 1930s United States, with no narrative past referenced.³⁴

Film serials thus transitioned into the sound era by reasserting their ‘cross-generational appeal’ (Barefoot 2011: 181). Whereas juvenile viewers at Saturday matinees are often considered their core audience, the most acclaimed serials were typically those attracting an adult audience as well. In many theaters, serials were reliably part of the Friday night program, and they frequently appear on the bills of other weeknights as well (Higgins 2016: 9-12; Barefoot 2011: 176-178). Children also frequented those evening showings, but they did not constitute the majority of the viewers. As Guy Barefoot summarizes,

the film serial’s survival into the 1930s and beyond was not restricted to Saturday children’s matinees. Serials were made with children in mind and attracted a sizeable child audience, but that audience was not limited to children, nor were serials only made with children in mind or watched only by children. (p. 183)

Numerous pressbooks released at the time suggest ways for local exhibitors to work the ‘adult angle’ of a serial, often with different suggestions for male and female viewers.³⁵ Moreover, sound-era serials frequently adapted stories that were already broadcast on radio, whose audience around 1940 was two-thirds adult (p. 180).

Although a small group of film studios continued to control sound-era domestic film distribution, film serials reached an increasing audience. At least 233 sound serials were produced in the United States, and they were shown in almost half of the country’s cinemas, predominantly in rural areas (p. 168, 175).³⁶ The biggest studios—Mascot/Republic, Universal, and Columbia—released about four serials annually, providing one episode a week for an entire year (Higgins 2016: 5). As Barefoot ascertains, ‘in the second half of the 1930s it was seen as a developing rather than declining form

34 The pressbook for *THE CLUTCHING HAND* recounts that ‘in 1914, Reeve introduced his method of detection to the movies in one of Pearl White’s most famous serials, “The Exploits of Elaine”. This stirring chapter-play still holds the world-record both for the number of episodes included in it and the receipts from the gross sales all over the universe’.

35 Examples include *MANDRAKE THE MAGICIAN* (Columbia, 1939), *HOLT OF THE SECRET SERVICE* (Columbia, 1941), and *CAPTAIN AMERICA* (Republic, 1944). Universal placed less emphasis on adult viewers, it appears.

36 Occasionally, sound serials showed at Broadway theaters. According to Barefoot, the *Los Angeles Times* noted on 27 March that ‘Carl Laemmle takes pride in pointing out that Universal serials are shown at the Roxy’. Moreover, in 1938 *THE LONE RANGER* was shown at the 1700-seat Criterion Cinema on Broadway in New York (Barefoot 2011: 175, 181).

of cinema' and the serial 'did constitute an important part of what audiences watched' (2011: 184). In fact, serials experienced a second heyday in the 'golden age' of sound serials between 1936 and 1946 (Higgins 2016: 8, 98). During these years, serials were not only numerous but also particularly presentist, both in their styles of storytelling and in their marketing approaches.

Golden-era serials particularly drew on the success of comic strips at the time. A fan of 'the funnies' reading the *New York Journal and American*³⁷ in the fall of 1937 could have found *Flash Gordon* and *Ace Drummond* in the Sunday supplement on 3 October, both of which were adapted by Universal in 1936 (*New York Journal and American*, 1937a). The following Monday, the same newspaper would carry *Secret Agent X-9*, *Radio Patrol*, and *Tim Tyler's Luck*—all of which were Universal serials in 1937 (*New York Journal and American*, 1937b). Moreover, the same issue featured *Mandrake the Magician*, which would become a Columbia serial in 1939, and *King of the Royal Mounted*, which was turned into a film serial by Republic in 1940. Meanwhile, the biggest rival news syndicate, the Chicago Tribune-New York News Syndicate, carried the *Dick Tracy* strips, which Republic adapted in 1937, with sequel serials appearing in 1938, 1939, and in 1941 (*Los Angeles Times*, 1937b).³⁸ The same syndicate also offered Buck Rogers comics in Sunday supplements (turned into a film serial by Universal in 1939), and it ran a comic adaptation of *Tarzan*, the cross-media character having appeared in serials since 1920 (*Los Angeles Times*, 1937a).³⁹ During their golden age, film serials indeed struck gold by exploiting the comic strips of the day.

These comic strips were themselves cross-media endeavors before being tied up with film serials. In addition to their radio serializations, they appeared as printed volumes, and they offered a variety of extra-textual advertising paraphernalia.⁴⁰ However incidental the commonality, sound

37 Similar comic strips would have appeared in other newspapers of the King Features Syndicate.

38 Additionally, RKO released four DICK TRACY features between 1945 and 1947, followed by an ABC live-action television series in 1950/1951.

39 Tarzan serials include THE SON OF TARZAN (Howells, 1920), THE ADVENTURES OF TARZAN (Weiss, 1921), TARZAN THE MIGHTY (Universal, 1928), TARZAN THE TIGER (Universal, 1929; see also Denson 2008), TARZAN THE FEARLESS (Lesser, 1933), and THE NEW ADVENTURES OF TARZAN (Burroughs-Tarzan Enterprises, 1935).

40 At the time, the Whitman Publishing Co. printed select comics' panels alongside explanatory sentences for child readers in 'Big Little Books', which featured many characters from comic strips and film serials, for instance Ace Drummond, Flash Gordon, Tim Tyler, and Dick Tracy. A later series called 'Better Little Books' carried CAPTAIN MIDNIGHT. For DICK TRACY / DICK TRACY RETURNS, Whitman also published the 'Big Big Book', a cartoon book, a detective game, a card game, and a picture puzzle.

serials of the form's golden era drew on nationally syndicated newspaper material, thus relying on the same cooperation that had marked the serial craze of the mid-1910s. Whereas in the earlier period, studios supplied the stories that were elaborated upon in the newspapers, now the newspapers provided the stories, or more often just the protagonists. Publicity suggestions reference this cross-media context as a means of advertising. The pressbook for *FLASH GORDON*, for example, features a written statement intended for a radio announcement, saying:

Millions of people throughout this country believed they had found the thrill of the century when they first saw Flash Gordon's adventures in the newspapers. They became enchanted by the colorful drawings and the narrative originated by Alex Raymond, the successful young artist whose work has gained wide acclaim for him. Now there is a greater thrill awaiting everybody in this city. "Flash Gordon" will be shown at the _____ theatre on _____.⁴¹

Similarly, a pre-formulated radio announcement for *TIM TYLER'S LUCK* informed audiences that the character now appeared in film theaters;⁴² Republic used panels from 'Dick Tracy' to advertise the serial in their year-book; and the pressbook for *SECRET AGENT X-9* recounted the biography of Charles Flanders, who drew the comic strip. The same pressbook also carried a list of the larger city newspapers publishing the comic.⁴³ Film serial advertising thus played up the coterminous appearance of such stories and protagonists across the media, establishing a referential network that reassured their presence in the life-worlds of consumers.

As in the silent era, this emphasis on presence is not confined to cross-media synergies, but a similar presentism informs the film serials themselves. In addition to the presentism resulting from each episode's identification of a narrative past and future, sound serials stress a sense

41 Local exhibitors were meant to insert their own theater names and play dates in the blanks.

42 A similar suggestion appears in the pressbook for *ACE DRUMMOND*. Ads in local radio channels also announced serials with no corresponding program, such as *HOLT OF THE SECRET SERVICE*.

43 Similar reference to the newspaper strips appear, for instance, in the pressbooks for *ACE DRUMMOND* (Universal, 1936), *DICK TRACY RETURNS* (Republic, 1938), and *MANDRAKE THE MAGICIAN* (Columbia, 1939). Similar lists of radio stations airing a certain radio serial recur, for instance in the pressbook for *DICK TRACY RETURNS*. Whereas most serials capitalize on their drawn sources, the pressbook for *RADIO PATROL* almost entirely omits the fact. In this case, however, the serial itself begins each episode showing a boy on a couch reading comic strips.

of presence in their showcasing of communications mechanisms and a concurring fascination with liveness, which will be explored in more detail in chapter six. Diegetic radio mechanisms, such as in *THE VANISHING LEGION* or in *ACE DRUMMOND*, as well as televisual communication in serials like *THE CLUTCHING HAND* or *SPY SMASHER* establish multiple narrative threads as taking place simultaneously. They thereby add complexity through a layered present tense. *THE CLUTCHING HAND* in fact alludes to the presentist grammar of intertitles in silent serials: in the serial's final chapter, detective Craig Kennedy notices being spied upon and informs his journalist sidekick Walter Jameson and the viewers in a written message that 'someone is listening' (episode 15, 'The Lone Hand'). This presentism is furthermore fostered by a crime plot that unfolds alongside its detection. Its narrative organization resembles the hard-boiled detective novels of the late 1920s and 1930s, but crime plots informed film serials and their related written narratives from the beginning, at least since *THE EXPLOITS OF ELAINE* in 1914/15. The crimes investigated in these stories always add up throughout the narrative, as opposed to a more classical, retrospective detection.⁴⁴ Film serials in fact display an overall suspicion of the possibility of a sincere interest in the past, which surfaces in their representations of archeologists. In *PLUNDER* (Pathe, 1923), for instance, a treasure hunter who found diamonds in a 350-year-old cave consults a specialist at New York's American Museum of National History, where he is informed exclusively about their monetary value instead of about their history (episode 1, 'The Bandaged Man'). Similarly, archeologists in *THE PHANTOM EMPIRE* (Mascot, 1935) and *ACE DRUMMOND* (Universal, 1936) only pretend to research history in order to conceal their endeavors to secure access to valuable natural resources. Instead of an interest in history, these characters pursue financial rewards that would benefit their present existence rather than informing mankind about the past.

Stories of crime and detection not only unfold around the diegetic investigators over a serial's run; they similarly surround viewers through elaborate marketing strategies that seem to extend a serial's narrative world beyond the confines of the cinematic frame. Pressbooks for serials at the time typically included numerous suggestions for 'ballyhoo', that is, for gimmicks to advertise a serial in the cinema, in front of it, and in a town more generally. If carried out, these suggestions would turn a small town's

44 The distinction between retrospective, 'Sherlockian' detection and 'hard-boiled' detective methods has been described by Tzvetan Todorov, and it has been recently explored in a history of the detective drama on US television by Mareike Jenner (Jenner 2016; Todorov 1977).

main street into a serial fairground.⁴⁵ Especially independent cinemas 'had become well established as an integral part of the local retail economy, recognized by other merchants as a "decided asset to town" in either securing an increasing share of consumer trade, or preventing the departure of that trade to larger towns' (Maltby 2013: 140).⁴⁶ The pressbooks regarded their target exhibitors accordingly, treating them as local advertising agents and encouraging them to cooperate with neighboring businesses,⁴⁷ local institutions such as schools or the police,⁴⁸ or already existing clubs and societies.⁴⁹ Additionally, almost every pressbook encouraged the exhibitor to form a local club to organize the children. Clubs held weekly meetings at the cinema, and each child received a membership card to be stamped for

45 Ballyhoo was by no means new at the time but dates back to nineteenth-century brass band parades that were held for occasions like store openings or stage production premieres. For ballyhoo in the nickelodeon era, see Altman 2004: 126-131.

46 When the increasing sale of cars enabled patrons to travel to larger cinemas, thereby threatening local houses in the early 1930s, the Chamber of Commerce in a town in Texas even lent its cinema the money to wire for sound, because losing the theater would hurt the town's commerce more generally (Gomery 2005: 94).

47 The pressbook for *MANDRAKE THE MAGICIAN* suggested placing window displays at newsstands carrying the magazine version of a comic strip, having local novelty stores sell the magic tricks and puzzles, partnering with local bread or milk companies on a coupon system, and asking men's and women's apparel and department stores to arrange stills of well-dressed stars in their windows. *CAPTAIN MIDNIGHT* suggested cooperating with men's apparel shops, jewelry stores, and ice cream parlors (which should invent *CAPTAIN MIDNIGHT* sodas or sundaes). Other examples include cooperation with Plymouth car dealerships for *DICK TRACY RETURNS* (matching the serial's product placement), department and toy stores 'selling microscopes, chemical and scientific equipment sets for amateurs' for *SECRET AGENT X-9*, and cooperation with 'dealers in short wave receiving sets' for *RADIO PATROL*.

48 For *MANDRAKE THE MAGICIAN*, theaters could cooperate with local libraries who offered books on magic. Cooperations with the police included invitations to officers to attend the initial episodes of *DICK TRACY RETURNS* and *HOLT OF THE SECRET SERVICE* as well as an audience address by the police chief for *CAPTAIN MIDNIGHT*, for which kids could also vote for their favorite policeman as their 'local "Midnight"'. *CAPTAIN MIDNIGHT*'s pressbook also suggested having the Red Cross or a 'civilian defense organization' lecture the audience, especially children, on 'the impending dangers of war', defense, and first aid. *CAPTAIN AMERICA* suggested ads in YMCAs and in schools. Similarly, *DICK TRACY RETURNS* offered book covers for distribution in schools.

49 The pressbook for *FLASH GORDON* suggests cooperating with the local boy scouts. In the case of *DICK TRACY RETURNS*, the pressbook referenced the radio program and its affiliated club, the Dick Tracy Secret Service Patrol. The club was attached to the serial's biggest sponsor, Quaker Oats, who had a mailing list of the club members. For *CAPTAIN MIDNIGHT* (1942), the pressbook suggested cooperating with the 'Junior Aviator Organization', a club sponsored by the Scripps Howard newspaper chain, and *CAPTAIN AMERICA* (1944) suggested contacting the comic's 'Captain America fan club'. *MANDRAKE THE MAGICIAN* suggested contacting adult 'clubs and societies of magicians, both professional and amateur'.

each attended screening.⁵⁰ Clubs would also hold contests, as in the case of *MANDRAKE THE MAGICIAN*, the pressbook for which suggested 'smartest magician contests, contest for the best original trick or illusion, best essay on magic etc.'

Whereas such marketing stunts resemble practices of the 1920s, now the serials were based on comic heroes already circulating in newspapers and radio shows, and the studios had already arranged some larger co-operations with major business partners, especially for toys.⁵¹ Pressbooks nevertheless encouraged local advertising, urging exhibitors in whose town a corresponding comic strip was published in the newspaper to buy ad space on the same page or to obtain ad space in exchange for advertising the newspaper at the cinema.⁵² Exhibitors were also encouraged to pass along additional material to newspapers, such as reviews, feature stories, or contests, which would award, for example, the best detective short story for *DICK TRACY RETURNS* (Republic, 1938) or the best job of coloring the black and white newspaper strips of *MANDRAKE THE MAGICIAN*. The result is a mix of national and local advertising, in which the individual exhibitor's 'ballyhoo' transformed the consumption of a mass-marketed product into a local experience. Nevertheless, despite the pressbooks' encouragement of such individual adjustments of national campaigns to local needs, such efforts also needed to be kept at bay to avoid alienating the national sponsors. In their 1937-1938 Yearbook, Republic for instance pressured exhibitors of *THE LONE RANGER* (Republic, 1938) to okay the announcement of the serial in local radio stations with the respective sponsors of the radio program for that region. The studio additionally noted that 'any local commercial tie-ups except with licensed companies' were strictly prohibited. Therefore, while encouraging maximum publicity on a local basis, studios were struggling to keep these individual efforts from interfering with their cross-national campaigns.

The extent of the local marketing stunts is probably most visible from the pressbooks' suggestions for lobby decorations and 'street bally'. If,

50 Clubs include the 'Ace Drummond Junior Pilots', the 'Captain Midnight Adventure Club', and 'the Captain America Club'.

51 *FLASH GORDON* offered toy ray guns, play suits, pop-up books, sponge rubber balls, coloring books, and metal toy casting models. *MANDRAKE THE MAGICIAN* cooperated with a toy company producing the *Mysto Magic* set. *DICK TRACY RETURNS'* pressbook lists, for instance, tie-ups with Quaker Oats (box tops could be exchanged for *DICK TRACY* toys) and with manufacturers of *DICK TRACY* pocket knives, raincoats, wrist watches, a Siren Pistol and Target Game, a ventriloquist's doll, a *DICK TRACY* military brush set, flashlights, moccasins, coloring and printing sets, singing lariats, model rocket space ships, and toy 'bang guns'.

52 Such suggestions occur, for instance, in the pressbooks for *FLASH GORDON*, *ACE DRUMMOND*, and *MANDRAKE THE MAGICIAN*.

hypothetically, a theater owner followed the pressbook suggestions meticulously, his or her lobby would have been transformed entirely along the lines of the serial the cinema was currently running. There were posters, displays, cut-outs, and lobby cards to be ordered for every serial. Most serials suggested additional lobby stunts, for instance the placement of a working Dictaphone—that is, a microphone and receiver to be wired across the lobby—for *MANDRAKE THE MAGICIAN*; for *ACE DRUMMOND*, a model or real airplane in the lobby, with a hidden speaker and a theater employee talking to people in the plane without being seen; a large, clock-faced wheel of fortune that awards a prize if it stops at midnight for *CAPTAIN MIDNIGHT* (Columbia, 1942); or an exhibit of ‘the various arms and ammunitions used by gangland’ as a stunt for *DICK TRACY RETURNS*, in co-operation with the local police department.⁵³ For *FLASH GORDON*, the lobby could include a big drum hanging from the ceiling (building instructions suggested in the pressbook), with a theater employee costumed as a warrior from the serial striking ‘it with heavily padded stick at frequent intervals’ (pressbook), or a similarly home-made magic mirror on which posters of the serial become visible and invisible at intervals. Moreover, the lobby could also include a booth where a uniformed policeman takes the fingerprints of children and adults—a stunt suggested for *SECRET AGENT X-9*.

The street in front of the theater would similarly have been adapted to the serial, featuring a parade, costumed characters,⁵⁴ or, in the case of *DICK TRACY RETURNS*, a sedan with posters on the sides, ‘loaded with tough-looking individuals’ (pressbook). It seems as though the idea behind these suggestions for ballyhoo was to create an immersive film experience, but not by immersing viewers in the story depicted on screen. Instead of drawing us in, film serials reach out to us. The pressbook for *FLASH GORDON* captured this idea of making the neighborhood part of the film experience when it offered helmets to be ordered directly from the studio as give-aways to children before the screening. The pressbook promises that ‘your neighborhood will look like a little planet “Mongoo” when you give them away with the *FLASH GORDON* pistol!’ Instead of asking viewers to imaginatively join the world on screen—the kind of immersion idealized in *SHERLOCK, JR.* (Metro Pictures, 1924) when Buster Keaton

53 A similar stunt was suggested for *HOLT OF THE SECRET SERVICE*. The police should exhibit ‘police laboratory paraphernalia’ and ‘a real rogues’ gallery, wanted poster, fingerprint apparatus, guns, tear gas bombs, etc.’ (pressbook).

54 For parade suggestions see, for instance, *FLASH GORDON*’s pressbook; for costumed ‘perambulators’, see the pressbook for *CAPTAIN MIDNIGHT*.

enters a projected film—film serials literally took over and transformed the whole theater, and—ideally—a town's main street, establishing the continued spatial and temporal presence of a given serial in the daily lives of its viewers.

Serials are Presentational: Mechanical and Narrative Process

This 'reaching out' similarly registers on the screen itself. Film serials are radically presentational, that is, they present their attractions and their narratives just like local exhibitors present an airplane in the lobby or a poster in a local department store. Serials frequently showcase and comment upon their own narrative organization, they self-reflexively address their mediality, they insist on spectacular stunts, and they refuse to distinguish clearly between actors and characters, or more generally between the worlds on and off screen. Such a notion of presentationalism appears prominently in Matthew Solomon's reading of *THE MASTER MYSTERY* (Octagon, 1919), which I will detail before mapping various presentational methods of storytelling from the earliest serials to the golden-era classics.

THE MASTER MYSTERY showcases the popular illusionist and escape artist Harry Houdini in the role of Quentin Locke, a scientifically versed detective. He enters a company called International Patents, Inc. as a secret spy to uncover their agenda of purchasing inventions in order to suppress them, to the benefit of already established rival businesses.⁵⁵ This storyline serves as a framework for the portrayal of Houdini's spectacular escape stunts. Solomon argues that this staging of the magician's stunt work transfers the performative style of his stage shows to the film screen. As a result, the serial focuses on '*presentational modes of performance*—modes of performance that accomplish or demonstrate something, often something wonderful or marvelous—and not on representational modes of performance like

55 The serial's explanation that Locke is collecting 'evidence for conviction under the Anti-Trust Law' (episode 1, 'Living Death') can be read as a critical comment on the state of the film business at the time. The Motion Picture Patent Company (also called the 'Trust'), which had controlled film production through the licensing of patented technical equipment up to 1913, had increasingly weakened until its dissolution in 1918 (Curtis 2004: 257; Maltby 2003: 560; Sklar 1994: 142). Meanwhile, the independent studios opposing the trust were forming monopolies of their own. Famous Players-Lasky, for instance, integrated production and distribution in 1916 and created an exhibition chain of more than 600 theaters named Paramount between 1919 and 1921 (Sklar 1994: 143-146; Tzioumakis 2006: 25-27). In 1919, the monopolization of the film industry was thus looming large. The recurrence of anti-oligarchic themes in serials, for instance in *THE POWER GOD* (Goodwill, 1925), may be related to their concentration in independent companies.

acting, which simulates the actions and interactions of characters' (2010: 8; italics in the original). The serial's noteworthy stylistics result from its efforts to prove the legitimacy of Houdini's stunts: advertisements at the time promised that the serial would portray the illusionist's feats by filming them in a single take (Solomon 2010: 111-112). This promise is both an acknowledgment of and a response to the fact that the filmic medium itself has the capacity to create magic stunts cinematically, without the prowess of a magician or escape artist. After all, magicians such as George Méliès used film to demonstrate their physical artistry but also made use of the medium's capacity to produce marvels through montage and *mise-en-scène* (p. 2).

In Solomon's view, *THE MASTER MYSTERY* fails to deliver these unusually long takes; nor does it reveal Houdini's secrets (pp. 111-112). However, this failure may result from censorship practices that aimed to limit the serial's didactic presentation of, for instance, how to pick locks. For a re-release in New York in 1924, for example, the serial was placed under consideration of the state's censor board. In addition to too violent or gruesome visuals, the board in particular demanded that scenes that 'tend to incite to crime' be cut. Such scenes included, for instance, the very detailed depiction of Houdini employing pieces of an umbrella to unlock a door that is bolted on the inside.⁵⁶ As the serial's initial release coincided with the increased censorship of serials across multiple states, it is likely that other states similarly censored *THE MASTER MYSTERY*. As with any serial of the time, fans across the nation saw substantially different versions of the film depending on where they lived. The chapters originally placed under consideration with the review boards, however, were detailed enough to arouse the suspicions of the censors, and the rare occurrence of long takes in *THE MASTER MYSTERY* may have been the result of censors' demands to eliminate aspects of the stunts. Nevertheless, the version of the serial that is available today does include some unusually long takes in the second episode, which shows Houdini's escape from a straitjacket, and in the third episode, in which the magician frees himself from having been tied, in mid-air, to a coat hanger by unlocking and opening a door with his toes and propping up his weight on top of it (episode 2, 'The Iron Terror'; episode 3, 'The Water Peril'). The serial's claim to present Houdini's feats

56 This information on censorship is included in a special feature in the 2008 release of *THE MASTER MYSTERY* as a part of Kino International's three DVD collection *Houdini – The Movie Star*. A majority of the serial's footage as it is available today has been reassembled from previously edited and censored material.

rather than create them through editing and cinematography therefore impacted the filmic style of the episodes, and it similarly informed the magician's later films.

Reviews of the features that Houdini filmed in 1919 and 1920 scorned the films as being merely condensed serials (Solomon 2010: 7, 110). Whereas Solomon considers this rejection a result of the serial's prioritizing of sensations and stunt work over psychological depth, the reason could just as well be the presentational mode of storytelling itself.⁵⁷ Rather than resulting exclusively from Houdini's background in stage entertainment, the presentational quality is shared by a majority, if not all film serials of the time. However, whereas *THE MASTER MYSTERY*'s presentationalism strives to counteract accusations that Houdini's stunts were mere cinematic creations, other serials are presentational because they self-reflexively foreground the cinematic 'created-ness' of their stories. Throughout the silent and sound eras, film serials negated representational self-containment and articulated their character as filmic creation instead. As the following analyses will illustrate, the serials' presentational mode of storytelling registered in self-reflexive statements, expressionist montages, overt repetitions, and trick cliffhangers.

THE PERILS OF PAULINE (Pathe, 1914) rather overtly presents its story to an audience instead of inviting a more immersive kind of reception. Each episode rehearses the serial's formula, that is, a new plan by the villain Koerner to murder Pauline and her subsequent rescue by her fiancée, in a new thematic or generic setting such as the Wild West (episode 2, 'Goddess of the Far West'), a maritime theme (episode 3, 'The Pirate Treasure'), car racing (episode 4, 'The Deadly Turning'), or aviation (episode 6, 'The Shattered Plane'). As a consequence, the viewers' interest in upcoming installments concerns new thematic settings or featured death traps rather than plot development. For the producers, the formula allowed for the addition of almost endless episodes. In an article that eventually points to the advantages of the self-contained episodes of Lubin studio's *THE BELOVED ADVENTURER*, the *Washington Times* highlights the ongoing nature of *THE PERILS OF PAULINE*:

57 Houdini's two subsequently produced independent films threaten to be understood solely as failures in Solomon's study (2010: 111). However, Houdini's return to independent production and States Rights distribution could also result from the belief that through these release channels, the films reached an audience that was open to the presentational approach as opposed to audiences who frequented theaters of integrated chains and were used to studio-era representational filmmaking.

“The Perils of Pauline,” is very frankly an endless affair, the producers admitting that they will keep their heroine skipping from one adventure to another as long as the public evinces a liking for her. [...] practically everyone who sees one of the pictures [of *THE BELOVED ADVENTURER*] will want to see them all. But the point is that it is not absolutely essential, as is the case with “The Million Dollar Mystery,” the very best of the straight continued-in-our-next types. (*Washington Times*)

THE PERILS OF PAULINE thus showcased a similar schema in varying settings, propelling onwards like a narrative machine that churns out new incarnations of the same model or type. In its reference to *THE MILLION DOLLAR MYSTERY*, moreover, the quote from the *Washington Times* mentions that other serials did not follow *PAULINE*’s exact formula⁵⁸ but replaced episodic self-containment with an ongoing narrative and cliffhanger endings. All serials range on a scale between episodocity and an ongoing narrative flow; however, an individual serial would determine the interdependence of its episodes and then continue with its strategy throughout its run, that is, all episodes of one serial would use cliffhangers or none, individual actors would be introduced in each episode or in none at all, etc. Each serial thus adopted a structure and made it visible through its weekly reiteration. In short, serials exhibited narration as narration by serially reinforcing a similar structural framework in each episode.

Shane Denson sees a similar exhibition of narration at work in *THE PERILS OF PAULINE* as it showcases narration as an attraction, just as the filmic medium was an attraction in the first decade of film. The serial highlighted the principles of storytelling that later became invisible but that were nevertheless constitutive of narrative cinema, and it reinforced these principles through ‘practice, repetition and drilling’ as enabled by the serial form (Denson 2014b: 72; cf. Enstad 1995; Gunning 1986). The serial thus bears a ‘demonstrative function, as if the films are pointing out to viewers: “This is how we construct a story”’ (Denson 2014b: 72). Serials thereby complicate the differentiation between narration and monstration: between telling a story and showing it. The serial—which is itself a ‘showing/telling vehicle’—shows how it tells a story (Denson,

58 The exact structure of the episodes of *THE PERILS OF PAULINE* is difficult to ascertain today, as the available serial is a nine-chapter condensation of the original twenty chapters for a European market (Singer 2001: 322, fn39). Shelley Stamp compares two reviews of the same episode of *THE PERILS OF PAULINE*, which indicate that although each chapter was self-contained, one of the reviewers had attended a screening of reel two of an episode and reel one of the following one, which repurposed the mid-episode climax as a cliffhanger (2000: 119).

2014b, pp. 74-75). Adding another layer of presentationalism, *THE PERILS OF PAULINE* pinpoints its own demonstrative function when diegetic characters comment on the narrative. When the culprits enlist an old sailor in a plan to kill Pauline in episode three, they point to the sailor and say 'here's an interesting looking character we can use in our plan'. The maritime character then proceeds to relate some tall tales to Pauline, which are shown within the narrative, essentially exemplifying how stories are told within film (episode 3, 'The Pirate Treasure'; Denson 2014b: 74-75).

Similarly self-reflexive comments on the narrative content and formula of serials recurred throughout the silent era, especially in Pathe's Pearl White vehicles. In the World War I preparedness serial *PEARL OF THE ARMY*, for instance, Pearl Dare (Pearl White) hunts a spy within the armed forces. A high-ranking military official eventually exclaims in front of his soldiers that 'I want some action, all this talk about a "Secret Menace" is juvenile!' (episode 6, 'Major Brent's Perfidy'). While explicitly addressing the delay in the defense plans for the Panama Canal, the statement also highlights the frequency of villainous characters in serials and the fact that Pearl's hunt for the 'Secret Menace' postpones the serial's military action. A similar foregrounding of narration appears from intertitles that direct questions at the audience, such as before the reel break in episode four: 'What mysterious power brought all those involved in the defense plans together again, under such strange circumstances?' ('War Clouds')—a strategy that is mostly reserved for chapter endings.

Comparable instances appear in *PLUNDER* (Pathe, 1923), in which protagonist Pearl Travers (Pearl White) comments on the frequent appearance of mysterious, secretive characters⁵⁹ coming to the aid of serial queens when she tells her lover: 'Now don't make one of your usual exits, forgetting to come back: or I'll know you are just a Man of Mystery and not a Romantic Hero after all!' (episode 9, 'Game Clear Through'). In fact, *PLUNDER*'s presentational approach to storytelling repeatedly resorts to the insertion of non-diegetic cutaways to provide metaphoric commentary or explanation. In the initial episode, for instance, a thief attempts to evade capture by changing cars as they run parallel on New York's streets. The film then inserts a close-up of a shell game to explain the thief's approach.

59 The unknown rescuer also appears, for example, in *THE IRON CLAW* (Pathe, 1916), *THE HOPE DIAMOND MYSTERY* (Kosmik, 1921), and in *THE TIMBER QUEEN* (Roland, 1922).



4., 5. Two shots from *PLUNDER* (Pathe, 1923), episode one, 'The Bandaged Man'. In the first shot, a thief switches from the car on the left to the car on its right-hand side.

Similarly, the same episode inserts shots of a snarling dog to emphasize the anger felt by Travers' nemesis Jude Deering (Harry Semels) (episode 1, 'The Bandaged Man'). The following chapter visualizes Travers' nightmare of a character she falsely believes to have murdered in an expressionistic dream sequence. Moreover, *PLUNDER* continuously adds images and superimpositions to visualize a characters' thoughts and inner emotional states. Thus, when Travers and Deering competitively bid for stock of a downtown high rise, the treasure they believe to be buried underneath the building is superimposed between their heads, resembling a thought cloud in a comic book's panel (episode 5, 'To Beat a Knave'). Two episodes later, Deering, who at this point is believed to be responsible for Travers' alleged death, sees her figure superimposed into various settings three times (episode 7, 'Mocked from the Grave'). In this instance of unusual psychological depth, *PLUNDER* presents Deering's moral conflict by means of including visuals that are not physically manifest in the verisimilar filmic world.

Whereas similar elements did occur in classical features, their accumulation in this serial is nevertheless noteworthy, particularly when considered



6. Film still from Pearl Travers' dream in *PLUNDER* (Pathe, 1923), episode 2, 'Held by the Enemy'.

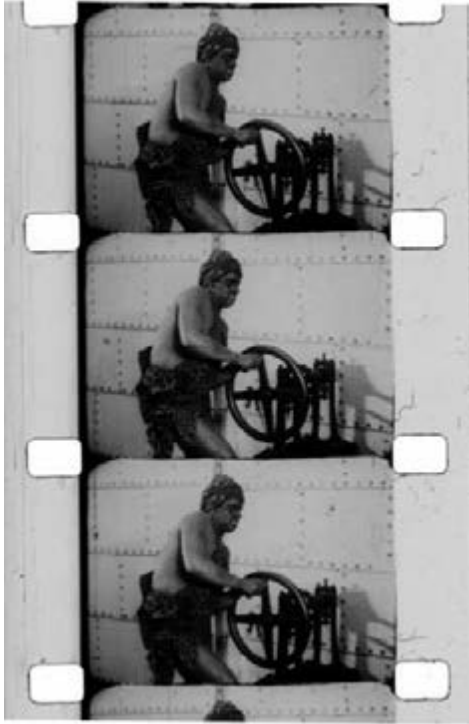
in the light of Denson's identification of the serials' prolonged transitional status. Produced in 1923, when the classical style was firmly implemented, *PLUNDER* exemplified what Denson considers the non-teleological, contradictory transitional status of silent-era serials: despite their help in training audiences for the classical paradigm, they refused to adhere to such a paradigm themselves (2014b: 72-73). Part of the issue at stake, I contend, is that film serials emerged from a transitional-era background in which they may have served to train an audience, but they outlived their transitional-era function. Serials consolidated into a form that continued to exist past World War II, and all through that time, they continued to demonstrate and present narration in ways that seem to outdo contemporaneous features.

Presentational Storytelling and the Operational Aesthetic

In addition to such minute, overtly self-reflexive instances, the presentational mode of address manifests itself in the focus on process that is shared by many serials. Their operational aesthetic casts the observation and tracking of processes as a pleasurable activity in itself. This appreciation helps to explain the viewers' continued interest in film serials and their concurrent willingness to partake in the kind of training that serials offer. The operational aesthetic of film serials is marked by the presentation of both narrative and technical processes as they interrelate. Such technical processes moreover include both mechanisms that are displayed on screen and film itself as a mechanism. This aesthetic of the operational surfaces repeatedly in a number of film serials—in fact, in a majority of those that survive. It is particularly evident in scenes that insist on the Goldbergian nature of the death threats against a serial's respective protagonist. In the following, I will point to the different shapes these scenes, and the operational aesthetic, can assume based on a number of examples.

Many of the technical mechanisms shown in film serials serve to delay the threat of the protagonist's death. In *ZUDORA* (Thanouser, 1914),⁶⁰ for instance, the eponymous serial queen's (Marguerite Snow) love interest, John Storm (Harry Benham), is held captive in a chamber with bolted steel walls. Outside of the room, a henchman of the serial's evil mystic tribe turns a strong wheel to operate the contracting walls of the chamber that

60 Episode two, 'The Secret of the Sleeping House', is the only episode of *ZUDORA* known to remain. It is available for online streaming at <http://thanouser.org>. For more information on the serial's framing story, see Singer 1993: 497-499.



7. A character operating the contracting chamber in *ZUDORA* (Thanhouser, 1914), episode two, 'The Secret of the Sleeping House'. Image Credit: Thanhouser Company Film Preservation, Inc.

threaten to crush John inside. Scenes of the henchman outside and John inside are interspersed with Zudora's rush to rescue her lover, who, as an interesting twist on gender stereotypes, faints in her arms when rescued. The contracting chamber serves to both visualize the impending doom and delay John's death (*ZUDORA*, episode 2, 'The Secret of the Sleeping House').

The creation of suspense by means of parallel editing and the delay of action is a stock element of the melodramatic mode of storytelling, which informs American film in general and film serials in particular (L. Williams 1998; Kelleter, Mayer, and Krah 2007; Singer 2001; Higgins 2016). This scene from *ZUDORA* visualizes a melodramatic delay of action in the form of a mechanized threat, employing a modernist imagery that differs radically from the *mise-en-scène* of the religious temple in which the contracting chamber is located. In fact, most other scenes in the episode are set at the temple, which is stuffed with ornamental drapery, lotus leaf plants, and religious idols, or in the similarly cluttered settings of late-Victorian homes. The inside and outside of the contracting chamber, by contrast, feature bright backgrounds, accentuated

lines, and an industrial aesthetic of steel bolts and handles. This visual contrast underlines the function of the contracting chamber as a machine that animates the film's melodramatic suspense. Moreover, it re-situates the serial's mystic plot firmly in the context of twentieth-century modernity: The image of the henchman as depicted is comparable to later images of machine operators such as in Fritz Lang's *METROPOLIS* (1927) or in the late photography of Lewis Hine. This climax of *ZUDORA*'s second episode thus inscribes modernity's machine aesthetic into the serial's mystic plot and *mise-en-scène*.

The melodramatic mode that informs especially the climactic endings of both cliffhanging and self-contained serial episodes is the result of the fact that we never see their mechanical contraptions function successfully. In melodrama, as Linda Williams explains, "in the nick of time" defies "too late" (L. Williams 1998; also quoted in Higgins 2016: 64): Serials place their protagonists in life-threatening situations and thus create suspense by suggesting that this time, they might meet their fate, only to have them once again escape in the last second. Film serials relentlessly repeat this formula although audiences know that the 'too-late' cannot possibly take effect as long as our heroes and heroines are scheduled to return in the following episode. The actual death of Elaine in the tenth episode of *THE EXPLOITS OF ELAINE* thus both takes the formula to an extreme and constitutes an ironic comment on it. In this case, the serial's male protagonist, the scientific Detective Kennedy, revives the serial-queen by electrical resuscitation after she has been declared dead by paramedics called to the scene (episode 10, 'The Life Current'). Twenty years later, Gene Autry dies in *THE PHANTOM EMPIRE*'s sixth episode and is brought back to life the following week (episode 7, 'From Death to Life').

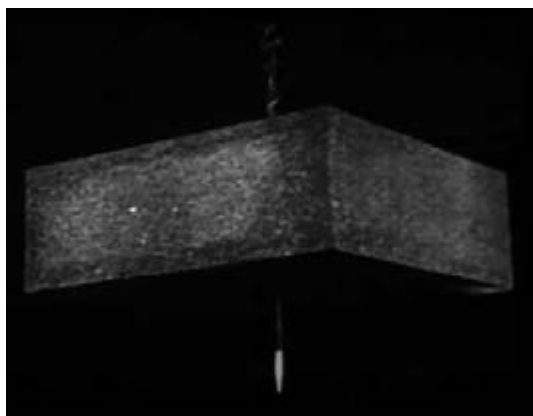
Notwithstanding such exceptions, the usual rescue 'in the nick of time' thwarts the successful operation of mechanical death contraptions, that is, they never truly kill any of a serial's characters. Nevertheless, suspense works on the pretense that mechanisms such as the contracting chamber could technically crush *Zudora*'s love interest. The films need to convince audiences of the impending doom and of the functionality of the contraption. In order to do so, they document and exemplify the chains of cause and effect that make the mechanism work. A prominent example of this appears in *THE EXPLOITS OF ELAINE*, a forerunner of many stock scenes in film serials more generally. In episode four, the villain called The Clutching Hand (Sheldon Lewis) sneaks into Detective Kennedy's (Arnold Daly) apartment and sets up a death contraption, hiding a rifle in the fireplace and attaching a thin thread to its trigger. He attaches the other end of the thread to a portrait of Elaine (Pearl White) hanging crookedly on the wall. Whereas detailed close-ups of the mechanism suggest its functionality, it is the task of the audience to

make the leap from cause to effect, that is, to understand that Kennedy will be shot as soon as his love for Elaine makes him look at the portrait and his fastidiousness makes him straighten the frame. That understanding always remains in the realms of the imagined, as Kennedy will not actually get shot: he has been alerted by his seismograph, which recorded that someone entered the apartment in his absence. Instead, Kennedy will reward our understanding of the mechanism by triggering it with an umbrella and thus demonstrating the effect of the machine. The moment of suspense, however, rested on the previous understanding of the threat (episode 4, 'The Frozen Safe').

Whereas this example from *THE EXPLOITS OF ELAINE* leaves the outcome of the chain of cause and effect to our imagination, other examples include a split-second instance before the episode ending that shows a mechanism's full effect, only to rewrite the scene in the following episode. In *A WOMAN IN GREY* (Serico, 1920), for instance, in a scene that works without such elaborate chains of cause and effect, the heroine Ruth Hope (Arlene Pretty) has her adversary at gunpoint and walks backwards, attempting to make an escape. However, a second villain opens a trap door to a basement torture chamber below. The final frame of the episode shows Ruth taking one step too far and stumbling into the hole. In the following episode, however, she is still standing at its edge (episodes 8, 'The Drop to Death'; and 9, 'Burning Strands'). The cliffhanger ending thus includes frames that are invalidated the following week, but suspense nevertheless hinges on the earlier knowledge that Ruth might fall into the trap. Instead of causing an epistemological crisis for the viewer, such instances exemplify the serials' presentational address. Similar to the explanatory shots of the shell game or a snarling dog in *PLUNDER*, this mode of address includes shots that clarify information rather than solely portraying verisimilar action.

This filmic strategy rests on the more general approach to story time and shot relations of serials, which comes to the fore in another cliffhanger in *A WOMAN IN GREY*. Towards the end of episode nine, Ruth is held captive in a former clubhouse by the villain's henchmen, an elderly but nonetheless frightening couple. While Ruth is gagged and tied to a bed, the camera follows the old lady as she moves the bed underneath a concrete block that is dangling from the ceiling on a rope. Afterwards, the villainous witch moves a coffee table with a burning candle so that it is positioned underneath the end of the rope. Alternating close-ups of Ruth, the concrete block above her, and the candle slowly burning through the rope indicate that eventually, the rope will snap and the concrete block will crush Ruth.

The actual threat, again, results from the viewers' understanding of the relation between candle, rope, concrete block, and serial queen (episode 9,



8.-10. Three successive shots from *A WOMAN IN GREY* (Serico, 1920), episode 9, 'Burning Strands', showing Ruth Hope (Arlene Pretty) bound and gagged, the candle burning the rope, and the concrete block with a pointed tip beneath it.

'Burning Strands'). Although the following episode confirms the placement of the bed underneath the concrete block in a vertical panning shot, a few seconds later the concrete block surprisingly plunges to the ground besides the bed. In what Singer describes as 'the serial's characteristic temporal overlap and dubious narrative "rewriting"' (1996: 77), the episode further adds sequences of Ruth's rescue by another of the serial's numerous suspicious characters (episode 10, 'The House of Horrors'). Singer describes this incident as follows:

The cliffhanger's overlap structure also creates an uncanny feeling of epistemological insecurity. We see the same events twice, but we barely recognize them as the same spatiotemporal phenomena, since they have mutated and expanded. The serial is, in a sense, the idiot cousin of Cubism. By accident, and in complete ignorance of its phenomenological insight, it accentuates the subjective and fragmentary nature of modern perception. The world becomes perceptually fractured as the authoritative narration of one episode is destabilized in the next, as supposedly identical events are reconfigured in strange and incongruous ways. (p. 77)

If we re-read the same narrative instance in *A WOMAN IN GREY* as a presentation of a filmic operation, that is, as a staging of a chain of cause and effect, then the serial's foregrounding of fragmented perception may appear less accidental. The presented chain of cause and effect includes the candle, which burns the rope, which in turn holds—and threatens to cease holding—the concrete block. On another level, that chain of cause and effect is a purely cinematic creation: fragmented shots arranged in succession, whose relation results from editing. The operational aesthetic can describe an appreciation of both the contraption suggested diegetically and the cinematic sequence of images. However, the 'overlap structure' suggests that the appreciation lies with the latter: the cinematographic chain of cause and effect can expand indefinitely, and it can add parts to the chain or alter them. Singer is essentially proposing the same but under the assumption that the addition of events in the chain extends the length of time over which the action unfolds. But the serial, as I have established, is radically presentist. Rather than describing a succession of events, the individual shots depict things taking place at the same time. The operational aesthetic is all about expansion, about operations occurring over time without taking up time, which runs continuously in the present. This presentist focus allows for serials to highlight simultaneity—to showcase things taking place at the same time from various angles. Therefore, the serial does in fact adhere to a Cubist logic rather than constituting its 'idiot brother'. The mechanical

angle of the operational aesthetic is thus twofold, as it applies to technical mechanisms and cause and effect chains in a film's setting but also to such chains as they result from editing and the Kuleshov effect.⁶¹ A similar kind of overlap structure came to be increasingly used throughout the silent era and was to become a stock feature of sound serials.

A logic of process and fragmentation also applies to broader plot structures that create suspense through multiple chains of cause and effect or 'what ifs'. A prominent example of this occurs in *THE TIMBER QUEEN* (Roland, 1922). In episode four, Jim Cluxton (Val Paul) takes Don Mackay (Bruce Gordon) hostage to prevent his marriage with Ruth Reading (Ruth Roland). Cluxton and his gang take Don to a shack and wire it with dynamite, so that it would explode if he attempted to escape. However, Don managed to leave a secret note for Ruth indicating his whereabouts. Fearing that Ruth will find him and cause the shack to explode, Don waits for two days in capture and holds his hand over an oil lamp to keep himself from falling asleep. Meanwhile, Ruth is on her way to the shack, and she is being pursued by Cluxton, who now aims to rescue her because he only wanted her unmarried, not blown to pieces (episode 4, 'Go Get Your Man'). This rather complicated set-up resembles the technical causes and effects of candle, rope, and concrete block in *A WOMAN IN GREY*. In fact, Don's body appears to be quite physically a part of a mechanism. Repeated close-ups of the grossly burned skin on the back of his hand highlight the side-effects of using a candle to stay awake. Don's body thus corporeally enters the chain of cause and effect that, in the worst-case scenario imagined by the viewers, would cause his and Ruth's death in an explosion. Once again, the complex arrangement of 'ifs' and 'thens' in less than a single reel's length delays the action and enables the parallel editing of multiple activities taking place in multiple diegetic locations. However, they also engage the viewer in a mental activity where both the possible rescue in time and the 'too late' depend on the imaginative capabilities of the viewer. That imagination of what will happen, in turn, relies on close-up shots and detailed descriptions of process.

Jennifer Bean considers a similar insistence of corporeality in silent serials a means to counteract the standardized routines that increasingly informed transitional-era film production. She locates the practice of foregrounding the corporeal at the intersection of the films and their discussions in magazines and newspapers. Whereas film studios and the films themselves blurred the

61 Named for 1920s Soviet filmmaker Lev Kuleshov, the 'Kuleshov effect' describes the viewers' assumption that the elements shown in two consecutive shots exist in a shared space, which enables filmmakers to create spaces cinematically (Bordwell & Thompson 2008: 227).



11. Don Mackay (Bruce Gordon) keeps himself awake by placing his hand over an oil lamp in *THE TIMBER QUEEN* (Roland, 1922), episode 4, 'Go Get Your Man'.

lines between actors and characters especially though similar or identical first names—Pearl White as Pearl Dare in *PEARL OF THE ARMY*, Pearl Travers in *PLUNDER*, etc.—the newspaper and magazine discourse insisted on the actual physical danger to which the actresses were exposed during filming. According to Bean, this insistence on the dangers of stunt filming imposes a quality of the real, which in turn introduces a possibility of 'discontinuity, interruption, accident' to the film: 'If the lived sense of the real turns on chaos, happenstance, and chance, then the real is that which refuses the systematic control of machines, the propensity to regulate, standardize, and serialize' (2001: 18-32). Serials thus referenced the reality of their heroines' imperilments to counteract their own highly standardized and controlled nature.

The conflation of actress/actor and character at the time worked in two ways: serials either showcased stars who were already famous for their physical skills, such as Harry Houdini or boxers like Jack Dempsey and Benny Leonard, or they equipped their stars with such a background through personal stories and interviews. Media coverage of *THE PERILS OF PAULINE*, for instance, continuously pointed to the supposed similarities between protagonist Pauline Marvin and Pearl White's own qualities of being daring, adventurous, fearless, and self-reliant (Dahlquist 2013b: 11-13). The serial, in fact, adds supposed parallels between actress and character when it

portrays Pauline's activities as an adventure writer for the *Cosmopolitan*⁶² but also depicts her eventual aspirations to become an actress. These are not part of the nine-episode edit available today, but the tie-ins reference this plotline, including film stills showing Pauline signing an acting contract with producer and director Louis Gasnier in a cameo appearance.⁶³ In such instances, the film and its promotion blur the lines not only between Pearl and Pauline but also between the serials' diegetic world and an extraneous star discourse. Magazine and newspaper accounts, which stressed not only the actress' prowess but also her non-diegetic imperilments, often describe dangerous situations on set and thereby coincidentally explain aspects of film production and on-site shooting. Bean references both instances in which actresses truly engage in the dangerous feats displayed on screen and instances in which the situation during shooting was less dangerous than it appears in the resulting film. In the latter case, Pearl White at times explained how a scene was created (Bean 2001: 26-27). The supposedly shared adventurous character of actress and character and the resulting interest in filming thus feeds back into an aesthetics of the operational, when articles about the actress double as explanations of the processes of stunt filming, whether with actual danger or in clever deceit.⁶⁴ Therefore, the pleasure of watching daredevil stunts and last-minute rescues lies not only in thrill and spectacle but partially also outside of the filmic text, in the engagement with discursive material that enables a glimpse at the processes of filmmaking.

All of these aspects—the showcasing of technical and narrative mechanisms, the display of bodies, the insistence on showing 'real danger', and the concurrent detailing of filmmaking strategies—feed into the presentational quality of film serials, which refuse to locate their attractions solely within the diegetic confines of the filmic world. Far from being restricted to the early years of serials, these tendencies continue into the late years of silent serial production and into the sound era. Prominently, the 1926 serial *OFFICER 444* (Goodwill) casts real-life police officers and enacts truly dangerous stunts in order to frame their stories as the portrayal of 'real'

62 At the time, *Cosmopolitan* was a literary magazine. Pathe was to recruit both the protagonist and the scriptwriter of its following serial, *THE EXPLOITS OF ELAINE*, from the magazine.

63 The Pearl White Clippings at Margret Herrick Library include excerpts from the newspaper novelization with film stills depicting Louis Gasnier and Pearl White as she signs the documents.

64 In fact, Bean describes how magazines published set photographs in order to give viewers a chance to decide for themselves whether a scene was a clever stunt or meant real danger (2001: 25). This decision-making effort echoes the behavior of mid-nineteenth-century visitors to P.T. Barnum's American Museum, who similarly decided for themselves whether the exhibited curiosities were plausible (Harris 1973: 77).

action rather than scripted stories. The shooting of the serial in Berkeley, California was covered by a local newspaper that highlighted the casting of a traffic officer to appear in the picture, pointing out that the serial would ‘advertise Berkeley’s police and fire departments all over the world’, but also mentioned the injuries suffered by three actors during stunt filming, including another traffic officer (*Berkeley Daily Gazette*, 1926b; *Berkeley Daily Gazette*, 1926a). More than ten years after Pearl White’s exploits as Pauline, the explanation of an actor’s accident during the shooting of *OFFICER 444* similarly explained how the stunt itself was effected, detailing some of the technicalities of filmmaking. Such a continued conflation of actors and characters, which transpires here through the casting of police officers to enact police officers in a serial, is taken to an extreme in *THE CHINATOWN MYSTERY* (Trem Carr, 1928), which essentially casts actors as actors in the cameo appearances making up the ‘mysterious 13’.

In the sound era, serials continued their presentational efforts and their abjuration of self-containment. In order to point beyond the confinement of the screen, serials used stunts as attractions that conflated actors and on-screen characters through their shared skill-set. Across the decades, film serials established their own circle of star actors and actresses who especially in the sound era were known for their physical prowess. Jo Bonomo, for instance, was famous for his muscle power, and Yakima Canutt’s skills as an actor, stuntman, and stunt director account for his remarkably frequent appearance in serials at the time (Tuska 1982: 16-18).⁶⁵ Other examples include child actors who were unusually versed in horse riding and horse stunts, for instance Betsy King Ross and Frankie Darro, who, similar to actors of the silent era, played parts that shared their first names in *THE PHANTOM EMPIRE* (Mascot, 1935). Pressbooks from the time similarly stressed the similarities of actors and their roles, for instance when suggested advertisements for *FLASH GORDON* described its lead actor Buster Crabbe as a ‘living “Flash Gordon”’. An article from *CAPTAIN MIDNIGHT*’s pressbook describes such confluences with respect to casting practices, arguing that the most important rule during casting is to ‘be yourself’. Instead of masquerading actors into particular characters, according to the article, casters were looking for ‘types’, that is, for people resembling aviators, FBI agents, or army officers in their daily lives. Conversely, the pressbook for *THE CLUTCHING HAND* argues that its fictional Detective Craig Kennedy ‘is very much a person; and, even though he has never

65 Cannutt’s popularity also becomes evident in the pressbook for *THE CLUTCHING HAND*, which includes an article headed ‘If Cannutt Can Not Do It —Then It Just Can’t Be Done’.

walked in shoe leather save across the written page, he lives and breathes, even as you and I'.

The presentational qualities of film serials during the sound era are manifold, and most of them can also be found in the late silent era. In fact, Nat Levine, whose production company Mascot Pictures released a number of serials and was responsible for the success of Republic serials after the studio bought Mascot in 1935, used marketing and storytelling strategies in the late 1920s that would become stock elements in the sound era (Tuska 1982: 10-15). Especially the frequent car chases and accidents that constitute visual spectacles rather than narrative necessities informed both eras. The serials' presentationalism at the time is also apparent in their insistence on staging real police-work or science and in their evocation of specialists extraneous to film production who vouched for adequate depictions. Thus, the pressbook for *ACE DRUMMOND* reports that Amelia Earhart Putnam witnessed the filming of some of the serial's aviation stunts, and *FLASH GORDON'S* pressbook highlights that scientists marveled at the serials' 'prehistoric monsters', which 'bear close resemblance [...] to the scientific reconstruction of animals that roamed the earth more than ten thousand years ago'. Additionally, a pressbook article for *DICK TRACY RETURNS* narrates how five real-life 'G-Men' fired the bullets shown on screen, because the government refused to allow tracer bullets to be sold to film production companies. The same pressbook stresses that the serial's writers studied FBI files and data before writing the script, and the pressbook for the follow-up, *DICK TRACY'S G-MEN*, explains that the adventurous incidences in the serial are 'taken from actual FBI files in Washington'. Such claims to present real stories rather than creating fictional ones continue a silent-era strategy of presenting police work, as it appears for instance in *OFFICER 444* (cf. Brasch & Mayer 2016). It moreover corresponds to the overt presentationalism of sound-era lobby displays, which included 'a real, working dictaphone outfit [...] not a toy, but a finely-made instrument that acts in the same way as the real dictaphones used by F.B.I investigators' according to the pressbook for *MANDRAKE THE MAGICIAN*, and 'a special display of police laboratory paraphernalia in your lobby' with 'a real rogues' gallery, wanted poster, fingerprint apparatus, guns, tear gas bombs, etc.' as suggested in the pressbook for *HOLT OF THE SECRET SERVICE*. Even the set designs of some serials were marketed as portrayals of real laboratories, as pressbooks for *THE CLUTCHING HAND* and *SOS COAST GUARD* suggest. Such references and suggested lobby exhibitions evoked a presentational realism that foregrounds individual showcased narrative, visual, and even tactile attractions. This is just one of the ways in which sound-era serials are markedly presentational.

Similar to silent-era exemplifications of how film can tell stories, sound serials continued to allow diegetic characters to comment on the narrative. Thus, a character in *THE PERILS OF NYOKA* (Republic, 1942) exclaims 'we have lost much time' at a point when the running episode indeed just stretched an action sequence halfway through the episode to an unusual length in comparison to other serial episodes. More bluntly, another of Nyoka's male companions exclaims 'this is going to be dangerous!' immediately before an attack (Higgins 2016: 119). Whereas such exclamations bluntly foreground the fact of narration, the presentational quality of film serials is not only a consequence of self-directed commentary or of the frequency of stunts. More generally, the increasingly formulaic structure and economic streamlining of film serials in the sound era fostered a presentational quality that encourages the viewers' awareness of narrative schematization, technological mechanisms, and film as a mechanism. It is especially in the interrelations of these three elements that the operational aesthetic of sound serials comes into its own.

Presentational storytelling both enables and fosters an aesthetic of the operational, as the presentation of mechanisms and the monstration of filmic narratives and technologies draws attention to an aesthetics of process. Such attention to process hinges on a reciprocity of repetition and fragmentation: on the one hand, filmic elements become discernible as modular and mobile fragments through their repeated use, and on the other hand, the refusal to smoothen the seams between such fragments foregrounds the modular composition of serials and fosters an awareness of repetition. Higgins illustrates the modularity and the operational aesthetic of sound serials drawing on an example from *THE PHANTOM EMPIRE* (Mascot, 1935). In the serial's first episode, the young ranch resident Betsy goes to see her brother Frankie in his secret laboratory in the hayloft of a barn. In order to get there, Betsy spins a wheel that lowers a rope ladder, steps on the ladder and ascends on it by another spin of the wheel. The mechanism simultaneously opens a trap door to the upper level. Betsy then pushes a button on the wall that lights a lightbulb on Frankie's desk in the adjoining room and, with another push of a button, Frankie opens an automatic sliding door and lets her in. In such instances, serials value procedure over plot, that is, they embellish simple plot points using complex mechanisms. In Higgins' terms, they 'throw emphasis behind "how" things happen, rather than "what" happens' (2016: 50). In addition to establishing Frankie's skills in mechanical engineering, the display of process in this scene constitutes a pleasurable viewing experience in itself. Furthermore, it demonstrates the division of a simple task (climbing a ladder) into an array of Goldbergian

steps and its concurrent, radically inefficient expansion over time (cf. Higgins 2016: 51). Similarly inefficient processes marked many cliffhanger endings at the time. Taking a multi-step death contraption in *CAPTAIN AMERICA* (Republic, 1944) as an example, Higgins describes such lethal apparatuses as ‘astonishingly inefficient malevolence’ and points out that such a cliffhanger is ‘wildly implausible but physically precise, fascinating in its complicated operation but simple in its function, and unabashedly presentational’ (p. 145).

These small-scale instances that foreground both compartmentalization and the combination of component modules into chains of cause and effect can be considered emblematic of the presentational storytelling in film serials more generally. Whole serials similarly take episodes as their component parts, and episodes are again composed of narrative, visual, technological, or generic components that recur, repeat, and appear in processual arrangements. J.P. Telotte places this composite character in relation to the historical context of the 1930s and 1940s, in which the industrial paradigms of serial storytelling as established during the nineteenth century—‘repetition, regularity, and predictable results’—began to be experienced in terms of their increasing ‘sway over the human’ (1995: 96). Discernible parts such as the setting up of the initial conflict in episode one, its reiteration in each episode’s initial recap, and so forth are elements of a machine, of a standardized industrial product offering a recurrent and predictable film experience. They are ‘both safe and comfortable. We simply inhabit[ed] its peculiarly conventionalized region for a time, step[ped] in as we might in a roller coaster car, and enjoy[ed] its almost predictable thrills for the known duration of the ride’ (p. 97).⁶⁶ These ‘machine-age characteristics’ of the serial form, according to Telotte, are the reason why serials accommodate ‘image stores of the technological’, that is, they are the prime site for science fiction before the genre’s breakthrough in feature films in the 1950s (1995, p. 96). Telotte’s reading thus shows again how the form’s narrative formula and its featured component parts, here in the form of generic props, interrelate.

Telotte’s observations rest upon Cecilia Tichi’s argument that ‘the machine-age text does not only contain *representations* of the machine—it too *is* the machine. It is a functional system of component parts designed to transmit energy’ (Tichi 1987: 16). Tichi’s generalization of the works of canonized

66 However, Telotte goes on to note that serials could only be successful by hiding their repetitive narrative formula and the repetition of footage, in the recaps and elsewhere, because audiences would cease to come to the cinema if they understood the formula (1995: 97). Conversely, I argue that the serials’ foregrounding of narrative, form, and repetition speaks against the claim that serials ‘tricked’ audiences into continuing to view the serial.

modernist writers, whose ‘fiction and poetry became recognizable as designed assemblies of component parts, including prefabricated parts’, is an oddly apt description of the structural set-up of film serials, especially during the sound era (p. 16).⁶⁷ The components of serial episodes come together on a number of levels, from broad narrative structures and stock characters down to individual takes and frames. Higgins describes the most readily identifiable modules as the five-part formula: the individual episodes of almost all serials of the sound era combine three action sequences—at the beginning, middle, and at the end—with two intermediate narrative expositions, which at times include the descriptions of mechanisms such as the rope-ladder-door contraption in Frankie’s laboratory in *THE PHANTOM EMPIRE* (Higgins 2016: 29–38). Whereas the five-part formula stabilizes the viewers’ experience and makes the serialized story easy to follow, the characters, settings, storylines, technologies, and mechanisms repeat across serials to an extent that makes them also easily identifiable as readymade modular elements. Cowboys, greedy capitalists or similarly greedy archaeologists, brave children, heroic policemen or firemen with comic sidekicks, ‘plucky’ females, skilled animals, and crazy scientists appear again and again, and narratives of abduction and rescue, brain-alteration and memory loss, hypnotism, surveillance and detection, and hunts for secret scientific formulae and mystical objects recur reliably. Car chases, death traps, featured technologies, and science fiction apparatuses are omnipresent, even in the Westerns. Spying devices, radio-controlled cars, airships, robots, and so forth in fact amount to ‘a kind of cinematic World’s Fair experience’, according to Telotte (1995: 99). These devices at times foreground the technologies of film production when they appropriate production equipment as props. In *THE AMAZING EXPLOITS OF THE CLUTCHING HAND* (1936), for instance, the eponymous master villain employs a spotlight to interrogate unreliable henchmen before executing them. This instance combines the presentational foregrounding of the spotlight with a reference to the famous villain’s first appearance on the film screen, where a similar spotlight doubles as a deadly death ray (*THE EXPLOITS OF ELAINE*, episode 9, ‘The Death Ray’). Moreover, it exemplifies how, in the playful world of film serials, the technologies of film production are also component parts that are conveniently ready to be appropriated on screen.

More generally, serials utilized previously filmed material and stock footage, recycling both film strips and props. *THE VANISHING LEGION*, for

67 In an ongoing study, Svenja Fehlhauer questions the absoluteness of Tichi’s descriptions and establishes alternate modernisms by reference to authors that have until now been excluded from the American high-modernist canon.

instance, includes stunt footage of the black horse Rex, which was originally shot for *WILD HORSE MESA* (Paramount, 1925) and reused later in the films *THE STRAWBERRY ROAN* (Universal, 1933) and *HIT THE SADDLE* (Republic, 1937) (Tuska 1982: 17-18). Similarly, *FLASH GORDON* uses props from *FRANKENSTEIN* and *THE MUMMY* (1932), and it incorporates newsreel footage, including shots of Charles Lindbergh landing his airplane in Paris. According to Higgins, among the serials that most thoroughly profited from such bricolage is *THE GREAT ALASKAN MYSTERY* (Universal, 1944), which assembles stunts and location shots from various more expensive features (2016: 127-32). In addition to such extraneous sources of image material, serials also recycled footage from their own production processes, at times outright repeating instances from just a few episodes earlier – especially of rather expensive stunt sequences. Thus, the hero's car crash in the ninth episode of *THE VANISHING LEGION* (Mascot, 1931) is actually a crash used previously in the same serial. But also less action-oriented scenes are repeated in the serial, for instance when its hero Happy Cardigan (Harry Carey) is captured twice and each time refuses to disclose crucial information, telling his abductors: 'Can't get water out of a dry well, mister!' (episode 7, 'The Crimson Cue').⁶⁸ Whereas such repetitions were a radically commercial-industrial means of creating a cheap product,⁶⁹ they also highlight a serial's montage character and the component elements it combines.

At times, serials made attempts to integrate repeat footage more seamlessly. In *THE AMAZING EXPLOITS OF THE CLUTCHING HAND*, for instance, Detective Kennedy watches a recording of an earlier instance in the serial on a televisual surveillance apparatus in his laboratory. In fact, the sequence shown within the diegetic television frame repeats an instance from the same episode (episode 6, 'Steps of Doom'). Similarly, the queen of *THE PHANTOM EMPIRE*'s underground kingdom surveils American society on a television screen that shows stock footage of car races, sporting events, war scenes, etc. (episode 1, 'The Singing Cowboy'; episode 2, 'The Thunder Riders'). Nevertheless, these strategies fail to integrate repeated or stock footage seamlessly, because its integration through diegetic technologies fosters an awareness of fragmentation rather than working towards suture. This failure results from the presentational mode of address itself: serials

68 Whereas it is known that serials at the time used repeat footage, the actual extent of the practice is difficult to assess because some digitally restored release formats also copy and paste sequences from a serial to restore missing scenes.

69 The repetition of the cliffhanger in an episode's beginning is also generally financially lucrative.

present or exhibit these surveillance mechanisms, turning the repeated or stock footage into examples of a working mechanism, that is, of an 'attraction' in Gunning's use of the term (cf. 1986). Repeated and recycled footage exemplifies a diegetic television's surveillance or recording capacity and it instantiates the exhibition of these mechanisms.

The serials' at times rather overt editing fed into their presentational character. Despite being shared by many contemporaneous features, arrow-shaped or v-shaped optical wipes highlighted the transition from one scene to another graphically and thereby underlined the fragmented nature of the filmic image. Again, despite the fact that numerous films without any relation to comic strips employed similar techniques, such optical wipes were nevertheless reminiscent of comics' panels. They showed, at a micro level, how film itself is made up of component frames that are arranged through editing. The optical wipe within a filmic product that is already closely aligned with comic strip culture thus is a reference to what in comic studies is considered the 'gutter': the interstice between panels that leaves room for the imagination (cf. Gardner 2012: 22, 34). More generally, such visual techniques exemplified the possibility of a showcasing of composition and compartmentalization on the film screen, in independent productions as well as in the products of the major film studios. To return to the previous example: when serials frame repeat footage through diegetic technologies, they position the gutter in the picture, between our perception of the image and our perception of diegetic characters' acts of perception. Instead of smoothening the stitch between two fragments, diegetic technologies turn the gutter into a prop.

All of these components, on all of these multiple levels, are parts of the film serial machine. According to Tichi's account of modernist writing, 'the components must all function systematically. There must be no unnecessary parts to lessen efficiency' (1987: 16). Whereas in the context of Taylorist-Fordist production, serialization and efficiency work as well as in the serial output of the film industry, the film serial as a product is, by contrast, pronouncedly inefficient. Instead of presenting a mystery and its step-by-step resolution, film serials add numerous steps in between in order to extend the narrative across ten to fifteen episodes. Especially the repetition of footage within a single serial is ineffective. Viewers do not learn anything new about the story, but the footage takes up time and delays a serial's narrative resolution. Metaphorically speaking, it is as though Ford was adding random extra fenders to his assembly-line cars. Film serials, that is, are purposely inefficient machines.

Thinking of film in terms of components brings us back to the trick cliffhangers discussed above. Such cliffhangers typically show the inescapable

death of a hero in a car crash or explosion, or after falling from a cliff, bridge, or airplane, and the following week they repeat the incident but add an extra shot before the crash that shows the protagonist's last-second escape. A very blunt example of this occurs in *THE AMAZING EXPLOITS OF THE CLUTCHING HAND*: Detective Kennedy and his comrade Jameson dovetail a villain's car and follow it into a barn, which has sliding doors on either side. Whereas the villain's car emerges on the barn's other end, Kennedy's car and the people inside are supposedly killed when the barn explodes. The following episode repeats the car chase, but it shows Kennedy's sedan emerging from the barn right before the explosion (episode 4, 'The Phantom Car'; episode 5, 'The Double Trap'). Higgins refers to this filmic technique as 'hidden ellipses', and he considers them 'the most common means of resolving cliffhangers' in the sound era (2016: 100). In fact, the strategy was used throughout the 1930s and 1940s to such an extent that no serial fan could have missed it, but this also means that this cliffhanging strategy could not have diminished a serial's overall appeal. Instead, the cubic element already present in the silent era intensified in the sound serial's insistence on the gutter. If individual shots are component parts of, rather than instances bound up in, a chronological sequence of events, their retrospective addition is part of a presentational mode and technique of storytelling rather than a 'trick' played on the viewers. As monstration rather than representational storytelling, such inserted shots confirm that a single added component suffices to turn the effective killing of a character into an ineffective story twist that is of no immediate consequence. The viewers' interest in the 'how' of filmic storytelling thus takes place at a micro level as viewers watching a cliffhanger sequence may wonder where the added sequence of images that shows the hero's escape will be inserted the following week. The question of how the protagonist escaped death translates into the question of where the film adds frames, shots, or takes to the scene. Sound serials thus literalize what theorists from Siegfried Kracauer to Roland Barthes and Jean-François Lyotard lamented as suture's loss: 'the interstices between the film's images opened up for perverse engagements' (Gardner 2012: 5).

This presentational foregrounding of the compartmentalized structure of film serials is what differentiates them most profoundly from other filmic forms. The difference becomes especially apparent in a comparison of the work of special effects wizard Kenneth Strickfaden. Strickfaden famously engineered the Tesla coil effects in *FRANKENSTEIN* (Universal, 1931), *THE MUMMY* (Universal, 1932), and *THE MASK OF FU MANCHU* (MGM, 1932). Afterwards, he was again employed for the production of the film serials *THE LOST CITY* (Krellberg, 1935), *THE AMAZING EXPLOITS OF THE*

CLUTCHING HAND (Weiss, 1936), and FLASH GORDON (Universal, 1936). In FRANKENSTEIN as well as in THE MASK, Tesla coil effects and electricity as a force more generally are portrayed in a combination of alternating shots of the electrical stunt and its diegetic admirers. This visualization foregrounds electricity as the force behind cinematic animation, and diegetic characters stand in for the film viewers (Denson 2014a: 87; Mayer 2014: 69). With reference to Siegfried Kracauer's 1926 account of the 'electric power plant' that enables film production, Ruth Mayer explains that electric lighting and the masks or make-up of actors together efface the fragmented relation of actors and non-human objects in the screen image (Mayer 2014: 72-73). In film production, electricity effects 'the realignment of the fragmented experience in the modern world' (p. 72). In THE MASK, Strickfaden's effects result in a 'markedly aestheticized enactment of electricity' (p. 69). They are employed in scenes that can be easily singled out from the rest of the films. In fact, the use of Tesla coil effects is similarly limited in time in its earlier incarnation in the silent serial THE POWER GOD (Davis, 1925), where it is used twice across fifteen chapters. The film serials of 1935 and 1936, by contrast, use Strickfaden's effects multiple times per episode. In the initial episode of THE LOST CITY, electrical sparks are dispersed throughout the set to an extent that makes them part of the background rather than any stylized, foregrounded stunt (episode 1, 'Living Dead-Men'). Instead of unifying fragmented elements of and in the filmic image, the electrical sparks signify a constant flow of electrical impulses that are themselves as fragmented as the serial form. In a pointed contradiction, the villain in THE LOST CITY employs electricity in a way that directly opposes its earlier use in FRANKENSTEIN: whereas Whale's film stages Tesla coil effects to picture the electric current animating its monster, the serial's villain destroys living people's brains to create robotic giants referred to as 'living dead-men' (episode 1, 'Living Dead-Men'). Even though the creation of Frankenstein's monster itself draws attention to the Benjaminian reproducibility of film (cf. Denson 2014a: 88), THE LOST CITY takes this to an extreme by visualizing the seriality of the process: 'Living dead-men', we learn, roam the African jungle one behind the other, capturing people and carrying them to the lost city, where one after another will have their brains removed and their physical statures enlarged (episode 1, 'Living Dead-Men').⁷⁰ Not only are the robot-men produced serially, they also endlessly self-perpetuate. Instead

70 These scenes, I should add, display a pronounced racism, as the 'living dead-men' are recruited exclusively from black characters living in the African jungles around the lost city, who, having undergone the brain deletion procedure, continuously utter apish groans.

of including one animation scene, the electrical currents of the film serial perform a serial animation. 'Living dead-men' thus embody the perpetual propelling of serialized production and fragmentary storytelling as it is taken to an extreme. This gesturing towards excess is part of the serials' thriving on presentist and presentational modes of storytelling. Serials foreground and celebrate fragmentation, they admittedly benefit from compartmentalization, and they showcase the manifold ways in which they do so. The result is a radically exteriorized narrative that reaches beyond the confines of the screen both in the form of a marketing that branches out across a small town's business center and in terms of an audience address that never ceases to reference its own artificial character and creation.

Bibliography

- Ace Drummond*. Dir. Ford Beebe and Clifford Smith. Perf. Noah Beery Jr., John King, Jean Rogers. Universal, 1936.
- Ace Drummond* (Universal, 1936). Pressbook. New York Public Library for the Performing Arts, Dorothy and Lewis. B. Cullman Center.
- Altman, Rick. 2004. *Silent Film Sound*. New York: Columbia University Press.
- 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.
- Bean, Jennifer M. 2001. "Technologies of Early Stardom and the Extraordinary Body." *Camera Obscura* 16 (3): 9-58.
- The Beloved Adventurer*. Dir. Arthur V. Johnson. Perf. Lottie Briscoe, Florence Hackett, Arthur V. Johnson. Lubin, 1914.
- Berkeley Daily Gazette*. 1926a. "2 Movie Actors Injured Jumping," January 9.
- . 1926b. "Movie Contract Offered Fisher," January 9.
- Bordwell, David, and Kristin Thompson. 2008. *Film Art: An Introduction*. 8th ed. New York: McGraw-Hill.
- Boys' Life*. 1927. "Advertisement," January. google books.
- Brasch, Ilka, and Ruth Mayer. 2016. "Modernity Management: 1920s Cinema, Mass Culture and the Film Serial." *Screen* 57 (3).
- Burns, William J. 1914a. "Helps to the Solution of The Million Dollar Mystery." *The Movie Pictorial*, July 4, 1914. archive.org.
- . 1914b. "Helps to the Solution of The Million Dollar Mystery." *The Movie Pictorial*, July 11. archive.org.
- Canjels, Rudmer. 2011. *Distributing Silent Film Serials: Local Practices, Changing Forms, Cultural Transformation*. Routledge Advances in Film Studies 7. New York: Routledge.
- Captain America*. Dir. Elmer Clifton, John English. Perf. Lionel Atwill, Dick Purcell, Lorna Gray. Republic, 1944.
- Captain America* (Republic, 1944). Pressbook. New York Public Library for the Performing Arts, Dorothy and Lewis. B. Cullman Center.
- Captain Midnight*. Dir. James W. Horne. Perf. James Craven, Dave O'Brien, Dorothy Short. Columbia, 1942.

- Captain Midnight* (Columbia, 1942). Pressbook. New York Public Library for the Performing Arts, Dorothy and Lewis. B. Cullman Center.
- Cole, Simon A. 2001. *Suspect Identities: A History of Fingerprinting and Criminal Identification*. Cambridge, MA: Harvard University Press.
- Curtis, Scott. 2004. "A House Divided: The MPPC in Transition." In *American Cinema's Transitional Era: Audiences, Institutions, Practices*, edited by Charlie Keil and Shelley Stamp, pp. 239-64. Berkeley: University of California Press.
- Dahlquist, Marina. 2013a. *Exporting Perilous Pauline: Pearl White and the Serial Film Craze*. Chicago: University of Illinois Press.
- . 2013b. "Introduction: Why Pearl?" In *Exporting Perilous Pauline: Pearl White and the Serial Film Craze*, edited by Marina Dahlquist, pp. 1-24. Chicago: University of Illinois Press.
- Daredevil Jack*. Dir. W.S. Van Dyke. Perf. Jack Dempsey, Herschel Mayall, Josie Sedgwick. Pathe/Astra, 1920.
- Daredevil Jack* (Astra/Pathe, 1920). Pressbook. University of California in Los Angeles, Young Research Library, Special Collections.
- Denson, Shane. 2008. "Tarzan Und Der Tonfilm. Verhandlungen Zwischen 'Science' Und 'Fiction.'" In *Ich Tarzan. Affenmenschen Und Menschenaffen Zwischen Science Und Fiction*, edited by Gesine Krüger, Ruth Mayer, and Marianne Sommer, pp. 113-30. Bielefeld: transcript.
- . 2014a. *Postnaturalism: Frankenstein, Film, and the Anthropotechnical Interface*. Bielefeld: transcript.
- . 2014b. "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.
- Dick Tracy Returns*. Dir. William Witney, John English. Perf. Ralph Byrd, Charles Middleton, Lynne Roberts. Republic, 1938.
- Dick Tracy Returns* (Republic, 1938). Pressbook. New York Public Library for the Performing Arts, Dorothy and Lewis. B. Cullman Center.
- Dick Tracy's G-Men*. Dir. William Witney, John English. Perf. Ralph Byrd, Phyllis Isley, Irving Pichel. Republic, 1939.
- Engell, Lorenz. 2011. "Erinnern/Vergessen. Serien Als Operatives Gedächtnis Des Fernsehens." In *Serielle Formen. Von Den Frühen Film-Serials Zu Aktuellen Quality-TV Und Online-Serien*, edited by Robert Blanchet, Kristina Köhler, Tereza Smid, and Julia Zutavern, pp. 115-33. Zürcher Filmstudien 25. Marburg: Schüren.
- Enstad, Nan. 1995. "Dressed for Adventure: Working Women and Silent Movie Serials in the 1910s." *Feminist Studies* 21 (1): 67-90.
- Exhibitor's Herald*. 1920a. "Leonard Company to Make Exteriors While En Route to Western Studio," March 6.
- . 1920b. "Produce First Psychic Serial," March 6.
- Exhibitor's Trade Review*. 1921. "How to Properly Exploit Newest Jungle Sensation," September 24.
- . 1925a. "A Good Serial Is the Biggest Box Office Builder," February 14.
- . 1925b. "Serial Pictures – A Powerful Competitive Weapon," February 14.
- . 1925c. "Serial Pictures Will Help to Stabilize Your Attendance – Give Them a Chance," February 14.
- . 1925d. "The Pessimist's Window," February 14.
- Flash Gordon*. Dir. Frederick Stephani. Perf. Buster Crabbe, Charles M. Middleton, Jean Rogers. Universal, 1936.

- Flash Gordon* (Universal, 1936). Pressbook. New York Public Library for the Performing Arts, Dorothy and Lewis. B. Cullman Center.
- Frankenstein*. Dir. James Whale. Perf. Mae Clarke, Colin Clive, Boris Karloff. Universal, 1931.
- Gardner, Jared. 2012. *Projections: Comics and the History of Twenty-First-Century Storytelling*. Stanford: Stanford University Press.
- Giebler, A. H. 1915. "St. Louis Girl Wins Prize." *The Moving Picture World*, March 13.
- Gomery, Douglas. 2005. *The Coming of Sound: A History*. New York: Routledge.
- Gunning, Tom. 1986. "The Cinema of Attraction: Early Film, Its Spectator and the Avant-Garde." *Wide Angle* 8 (3-4): 63-70.
- Haenni, Sabine. 2015. "Gender in the Jungle." Conference: *Managing Mass Culture*, April 25, Hannover.
- Hagedorn, Roger. 1988. "Technology and Economic Exploitation: The Serial as a Form of Narrative Presentation." *Wide Angle* 10 (4): 4-12.
- Harris, Neil. 1973. *Humbug: The Art of P.T. Barnum*. 1st ed. Boston: Little, Brown, and Co.
- Henderson, Stuart. 2014. *The Hollywood Sequel: History and Form, 1911-2010*. Basingstoke, Hampshire: Palgrave Macmillan.
- Higgins, Scott. 2016. *Matinee Melodrama: Play and the Art of Formula in the Sound Serial*. New Brunswick: Rutgers University Press.
- Hit the Saddle*. Dir. Mack V. Wright. Perf. Ray Corrigan, Rita Hayworth, J.P. McGowan. Republic, 1937.
- Holt of the Secret Service*. Dir. James W. Horne. Perf. Evelyn Brent, Jack Holt, Montague Shaw. Columbia, 1941.
- Holt of the Secret Service* (Columbia, 1941). Pressbook. New York Public Library for the Performing Arts, Dorothy and Lewis. B. Cullman Center.
- Horak, Jan-Christopher. 1989. *Dream Merchants: Making and Selling Films in Hollywood's Golden Age*. Rochester: International Museum of Photography at George Eastman House.
- Jenner, Mareike. 2016. *American TV Detective Dramas: Serial Investigations*. Basingstoke, Hampshire: Palgrave Macmillan.
- Jess-Cooke, Carolyn. 2009. *Film Sequels: Theory and Practice from Hollywood to Bollywood*. Edinburgh: Edinburgh University Press.
- Kelleter, Frank. 2012. "Populäre Serialität: Eine Einführung." In *Populäre Serialität: Narration – Evolution – Distinktion: Zum Seriellen Erzählen Seit Dem 19. Jahrhundert*, pp. 11-46. Bielefeld: Transcript.
- Kelleter, Frank, Ruth Mayer, and Barbara Krah, eds. 2007. *Melodrama! The Mode of Excess from Early America to Hollywood*. Heidelberg: Universitätsverlag Winter.
- King of the Royal Mounted*. Dir. William Witney, John English. Perf. Allan Lane, Robert Strange, Herbert Rawlinson. Republic, 1940.
- Kinnard, Roy. 2012. "Where It All Began: The Flash Gordon Serials." In *1950s "Rocketman" TV Series and Their Fans: Cadets, Rangers, and Junior Space Men*, edited by Cynthia J. Miller and A. Bowdoin Van Riper, pp. 17-32. New York: Palgrave Macmillan.
- Krämer, Sybille. 1998. "Form Als Vollzug Oder: Was Gewinnen Wir Mit Niklas Luhmanns Unterscheidung von Medium Und Form?" *Journal for History of Law (Rechtshistorisches Journal)* 17: 558-73.
- Loock, Kathleen. 2014. "'The Past Is Never Really Past:' Serial Storytelling from Psycho to Bates Motel." *Literatur in Wissenschaft Und Unterricht* 47 (1/2): 81-96.
- . 2016. "Sound Memories: 'Talker Remakes,' Paratexts, and the Cinematic Past." In *The Politics of Ephemeral Digital Media: Permanence and Obsolescence in Paratexts*, edited by Sara Pesce and Paolo Noto, pp. 123-137. New York: Routledge.

- Los Angeles Times*. 1937a, October 3. ProQuest.
- . 1937b, October 4. ProQuest.
- Lucille Love, Girl of Mystery*. Dir. Francis Ford. Perf. Grace Cunard, Fancis Ford. Universal, 1914.
- Luhmann, Niklas. 1997. *Die Gesellschaft Der Gesellschaft*. Frankfurt am Main: Suhrkamp.
- Maltby, Richard. 2003. *Hollywood Cinema*. 2nd ed. Oxford: Blackwell Publishing.
- . 2013. "The Standard Exhibition Contract and the Unwritten History of the Classical Hollywood Cinema." *Film History* 25 (1-2): 138-53.
- Mandrake the Magician*. Dir. Norman Denning, Sam Nelson. Perf. Warren Hull, Al Kikume, Doris Weston. Columbia, 1939.
- Mandrake, the Magician* (Columbia, 1939). Pressbook. New York Public Library for the Performing Arts, Dorothy and Lewis. B. Cullman Center.
- 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.
- McLean, Adrienne L. 2003. "'New Films in Story Form': Movie Story Magazines and Spectatorship." *Cinema Journal* 42 (3): 3-26.
- Metropolis*. Dir. Fritz Lang. Perf. Alfred Abel, Gustav Fröhlich, Brigitte Helm. UFA, 1927.
- 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.
- Milne, Peter. 1914. "Lucille Love: The Girl of Mystery." *Motion Picture News*, July 25.
- Morris, Justin J. 2014. "Extratextuality and the Silent Film Serial." *Cineaction* 94: 45-50.
- Motion Picture News*. 1914a. "Advertisement for The Perils of Pauline," April 4. Media History Digial Library.
- . 1914b. "Advertisement for Zudora," October 17. Media History Digial Library.
- . 1915a. "Remarkable Mechanical Devices Used in 'Elaine,'" March 6.
- . 1915b. "St. Louis Girl Wins Thanouser \$10,000 Prize," March 13. Margaret Herrick Library.
- Motography*. 1914. "Thrills in New Lubin Series," September 26, 1914. Margaret Herrick Library.
- Mott, Frank Luther. 1957. *A History of American Magazines, 1885-1905*. Cambridge, MA: Harvard University Press.
- N. W. Ayer & Son's American Newspaper Annual and Directory*. 1913. Philadelphia: N.W. Ayer & Son Newspaper Agents. <https://catalog.hathitrust.org/Record/006109711>.
- New York Journal and American*. 1937a. October 3. Columbia University, Butler Library. Microfilm.
- . 1937b. October 4. Columbia University, Butler Library. Microfilm.
- Officer 444*. Dir. Francis Ford. Perf. Al Ferguson, Neva Gerber, Ben Wilson. Ben Wilson/Goodwill, 1926.
- Pearl of the Army*. Dir. Edward Jose. Perf. W. T. Carleton, Marie Wayne, Pearl White. Astra/Pathe, 1916.
- Pearson, Elmer. 1925. "Why They Come Back – An Expert Talks of Audiences and Chapter Plays." *Exhibitor's Trade Review*, February 14.
- Plunder*. Dir. George B. Seitz. Perf. Harry Semels, Pearl White, Warren William. Pathe, 1923.
- Radio Patrol*. Dir. Ford Beebe and Cliff Smith. Perf. Catherine Hughes, Mickey Rentschler, Grant Withers. Universal, 1937.
- Radio Patrol* (Universal, 1937). Pressbook. New York Public Library for the Performing Arts, Dorothy and Lewis. B. Cullman Center.
- Reel Life*. 1915. "Facts and Figures and Such," February 27.
- Reeve, Arthur B. 1920. "Arthur B. Reeve Assails Effort To Bar Thrill Films From Mails." *Exhibitor's Herald*, January 24.

- . 1923. "Craig Kennedy, Radio Detective. Chapter 1: The Radio Robbery." *Boys' Life*, October. google books.
- Secret Agent X-9*. Dir. Lewis D. Collins, Ray Taylor. Perf. Lloyd Bridges, Keye Luke, Jan Wiley. Universal, 1945.
- Secret Agent X-9* (Universal, 1937). Pressbook. New York Public Library for the Performing Arts, Dorothy and Lewis. B. Cullman Center.
- Sherlock Jr.* Dir. Buster Keaton. Perf. Buster Keaton, Joe Keaton, Kathryn McGuire. MGM, 1924.
- Silverman, Kaja. 1983. *The Subject of Semiotics*. New York and Oxford: Oxford University Press.
- Singer, Ben. 1993. "Fiction Tie-Ins and Narrative Intelligibility 1911-1918." *Film History* 5 (4): 489-504.
- . 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.
- Sklar, Robert. 1994. *Movie-Made America: A Cultural History of American Movies*. New York: Vintage Books.
- Solomon, Matthew. 2010. *Disappearing Tricks: Silent Film, Houdini, and the New Magic of the Twentieth Century*. Urbana and Chicago: University of Illinois Press.
- S.O.S. Coast Guard*. Dir. Alan James, William Witney. Perf. Ralph Byrd, Maxine Doyle, Bela Lugosi. Republic, 1937.
- 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: Princeton University Press.
- Strawberry Roan*. Dir. Alan James. Perf. Harold Goodwin, Ruth Hall, Ken Maynard. Universal, 1933.
- Sunrise*. Dir. F.W. Murnau. Perf. Janet Gaynor, Margaret Livingston, George O'Brien. Fox, 1927.
- Tarzan the Fearless*. Dir. Robert F. Hill. Perf. E. Alyn Warren, Jacqueline Wells, Buster Crabbe. Sol Lesser/Principal, 1933.
- Tarzan the Mighty*. Dir. Jack Nelson, Ray Taylor. Perf. Al Ferguson, Natalie Kingston, Frank Merrill. Universal, 1928.
- Tarzan the Tiger*. Dir. Henry McRae. Perf. Al Ferguson, Natalie Kingston, Frank Merrill. Universal, 1929.
- Telotte, J. P. 1995. *Replications: A Robotic History of the Science Fiction Film*. Urbana and Chicago: University of Illinois Press.
- The Ace of Scotland Yard*. Dir. Ray Taylor. Perf. Grace Cunard, Crauford Kent, Monte Montague. Universal, 1929.
- The Adventures of Kathlyn*. Dir. Francis J. Grandon. Perf. Charles Clary, Lafe McKee, Kathlyn Williams. Selig, 1913.
- The Adventures of Tarzan*. Dir. Robert F. Hill, Scott Sidney. Perf. Elmo Lincoln, Louise Lorraine, Scott Pembroke. Great Western/Numa, 1921.
- The Amazing Exploits of the Clutching Hand*. Dir. Albert Herman. Perf. Rex Lease, Ruth Mix, Jack Mulhall. Weiss, 1936.
- The Amazing Exploits of the Clutching Hand* (Weiss, 1936). Pressbook. New York Public Library for the Performing Arts, Dorothy and Lewis. B. Cullman Center.
- The Black Secret*. Dir. George B. Seitz. Perf. Wallace McCutcheon Jr., Walter McGrail, Pearl White. George Seitz/Pathe, 1919.
- The Chinatown Mystery*. Dir. J. P. McGowan. Perf. Joe Bonomo, Francis Ford, Ruth Hiatt. Syndicate, 1928.
- The Evil Eye*. Dir. J. Gordon Cooper, Wally Van. Perf. Ruth Dwyer, Stuart Holmes, Benny Leonard. Hallmark/Asher's, 1920.

- 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 Fighting Marine*. Dir. Spencer Gordon Bennett. Perf. Marjorie Day, Walter Miller, Gene Tunney. Pathe, 1926.
- The Great Alaskan Mystery*. Dir. Lewis D. Collins, Ray Taylor. Perf. Edgar Kennedy, Milburn Stone, Marjorie Weaver. Universal, 1944.
- The Hazards of Helen*. Dir. J.P. McGowan, James Davis. Perf. Helen Gibson, Helen Holmes. Kalem, 1914-1917.
- The Hope Diamond Mystery*. Dir. Stuart Paton. Perf. George Chesebro, Grace Darmond, Boris Karloff. Kosmik, 1920.
- The Indians are Coming*. Dir. Henry MacRae. Perf. Edmund Cobb, Tim McCoy, Allene Ray. Universal, 1930.
- The Jazz Singer*. Dir. Alan Crosland. Perf. Eugenie Besserer, Al Jolson, Warner Oland. Warner Bros., 1927.
- The King of the Kongo*. Dir. Richard Thorpe. Perf. Boris Karloff, Jacqueline Logan, Walter Miller. Mascot, 1929.
- The Lone Ranger*. Dir. William Witney, John English. Perf. Lee Powell, Hal Taliaferro, Chief Thundercloud. Republic, 1938.
- The Lost City*. Dir. Harry Revier. Perf. William 'Stage' Boyd, Claudia Dell, Kane Richmond. Krellberg, 1935.
- The Mask of Fu Manchu*. Dir. Charles Brabin. Perf. Boris Karloff, Myrna Loy, Lewis Stone. Cosmopolitan/MGM, 1932.
- The Master Mystery*. Dir. Burton L. King. Perf. Jack Burns, Harry Houdini, Marguerite Marsh. B.A. Rolfe, 1919.
- The Million Dollar Mystery*. Dir. Howell Hansel. Perf. Florence La Badie, James Cruze, Marguerite Snow. Thanouser, 1914.
- The Moving Picture World*. 1914. "New Pathe-Hearst Serial," December 12. Media History Digital Library.
- The Mummy*. Dir. Karl Freund. Perf. Zita Johann, Boris Karloff, David Manners. Universal, 1932.
- The Mystery Mind*. Dir. Will S. Davis, Fred Sittenham. Perf. Violet MacMillan, Paul Panzer, J. Robert Pauline. Supreme, 1920.
- The New Adventures of Tarzan*. Dir. Edward Kull, Wilbur F. McCaugh. Perf. Herman Brix, Ashton Dearholt, Ula Holt. E. R. Burroughs, Ashton Dearholt/Burroughs-Tarzan, 1935.
- The Perils of Pauline* (Universal, 1933). Pressbook. New York Public Library for the Performing Arts, Dorothy and Lewis. B. Cullman Center.
- The Perils of Nyoka*. Dir. William Witney. Perf. Kay Aldridge, Lorna Gray, Clayton Moore. Republic, 1942.
- 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 Radio Detective*. Dir. William James Craft, William A. Crinley. Perf. Jack Dogherty, Jack Mower, Margaret Quimby. Universal, 1926.
- The Republic Yearbook*. 1937-38. Pressbook. New York Public Library for the Performing Arts, Dorothy and Lewis. B. Cullman Center.
- The Son of Tarzan*. Dir. Arthur J. Flaven, Harry Revier. Perf. Manilla Martan, Kamuela C. Searle, P. Dempsey Tabler. National, 1920.

- The Vanishing Legion*. Dir. Ford Beebe and B. Reeves Eason. Perf. Edwina Booth, Harry Carey, Frankie Darro. Mascot, 1931.
- The Voice from the Sky*. Dir. Ben F. Wilson. Perf. Neva Gerber, Wally Wales, Robert Walker. Hollywood, 1930.
- Tichi, Cecelia. 1987. *Shifting Gears: Technology, Literature, Culture in Modernist America*. Chapel Hill: University of North Carolina Press.
- The Timber Queen*. Dir. Fred Jackman. Perf. Bruce Gordon, Val Paul, Ruth Roland. Ruth Roland Serials/Pathé, 1922.
- Tim Tyler's Luck*. Dir. Ford Beebe, Wyndham Gittens. Perf. Jack Mulhall, Frances Robinson, Frankie Thomas. Universal, 1937.
- Tim Tyler's Luck* (Universal, 1937). Pressbook. New York Public Library for the Performing Arts, Dorothy and Lewis. B. Cullman Center.
- Todorov, Tzvetan. 1977. "The Typology of Detective Fiction." In *The Poetics of Prose*, pp. 42-52. Oxford: Blackwell.
- Tuska, Jon. 1982. *The Vanishing Legion: A History of Mascot Pictures 1927-1935*. Jefferson, NC: McFarland.
- Tzioumakis, Yannis. 2006. *American Independent Cinema: An Introduction*. Edinburgh: Edinburgh University Press.
- Usai, Paolo Cherchi. 2015. "Introduction for a Screening of The Chinatown Mystery." Conference: *Serialities 1915/2015*. University of California at Berkeley.
- 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).
- Washington Times*. 1914. "Washington Man Has New Idea For a Serial Film Story," September 17. Emmett C. Hall Scrapbooks. Margaret Herrick Library.
- What Happened to Mary*. Dir. Charles Brabin and Ashley Miller. Perf. Mary Fuller, Marc McDermott, Charles Ogle. Edison, 1912.
- Who is Number One?* Dir. William Bertram. Perf. Kathleen Clifford, Cullen Landis, Gordon Sackville. Paramount, 1917.
- Wild Horse Mesa*. Dir. George B. Seitz. Perf. Noah Beery, Sr., Billie Dove, Jack Holt. Famous Players-Lasky/Paramount, 1925.
- "William J. Burns." n.d. *The FBI: Federal Bureau of Investigation*. Accessed 15 July 2018. <https://www.fbi.gov/history/directors/william-j-burns>.
- Williams, Linda. 1981. *Figures of Desire: A Theory and Analysis of Surrealist Film*. Berkeley and Los Angeles: University of California Press.
- . 1998. "Melodrama Revised." In *Refiguring American Film Genres: History and Theory*, edited by Nick Browne, pp. 42-88. Berkeley and Los Angeles: University of California Press.
- A Woman in Grey*. Dir. James Vincent. Perf. Fred C. Jones, Arline Pretty, Henry G. Sell. Serico, 1920.
- Zudora* (renamed *The Twenty Million Dollar Mystery*). Dir. Frederick Sullivan. Perf. Harry Benham, James Cruze, Marguerite Snow. Thanhouser, 1914.

4. Detectives, Traces, and Repetition in THE EXPLOITS OF ELAINE

Abstract

Chapter 4 focuses on a single serial, Pathe's *THE EXPLOITS OF ELAINE* (1915), which substantiates film serials' crime fiction heritage, and calls for a critical reflection of the 'serial-queen melodrama'. The serial features numerous elements that became generic to film serials in later years, such as the detective, scientific gadgets, or the masked villain. It thus benefited from the success of crime fiction in the 1910s but lacked the narrative voice that untangles the mystery. Drawing on Walter Benjamin's introduction of the detective as a counterpart to the *flâneur*, the chapter proposes that viewers themselves become detectives as they connect tangentially related anecdotes and identify the mechanics of both the mystery and the narrative, engaging in 'operational detection'—a mode of film viewing that informs both silent- and sound-era serials.

Keywords: The Exploits of Elaine, Pearl White, Walter Benjamin, modernity, *flâneur*, detective

And when we had absolutely completed every particle of the furniture in this way, we examined the house itself. We divided its entire surface into compartments, which we numbered, so that none might be missed; then we scrutinized each individual square inch throughout the premises, including the two houses immediately adjoining, with the microscope, as before. (Poe 1841b: 500)

Although *THE EXPLOITS OF ELAINE* (Pathe, 1915) is often listed as another example of the serial-queen melodrama genre—an association that is based on its alliterated title and Pearl White's lead role—the serial also, or perhaps first and foremost, adapts popular detective fiction. Instead of being a self-reliant heroine, Elaine is a damsel in distress, which prompted

a contemporaneous reviewer to claim that 'it would be more accurate to say that Elaine is exploited rather than that she carries out any exploits' (Pangburn 1915). Craig Kennedy (Arnold Daly), the hero coming to her rescue, is just as much the serial's protagonist. Rather than being original to Pathe's serial, Kennedy was an established serial figure,¹ a popular fictional detective who appeared regularly in a series of short stories in the *Cosmopolitan* magazine between 1910 and 1918. Arthur B. Reeve's stories narrate Kennedy's investigations from the perspective of his friend and comrade, a young journalist called Walter Jameson: an arrangement that resembles earlier detective fiction duos, most notably Poe's C. Auguste Dupin and his unnamed narrator-companion, and Conan Doyle's Sherlock Holmes and Dr. Watson. Whereas these well-known forefathers proclaimed ratiocination and deduction, Kennedy is a Columbia University professor who sets out to apply scientific methods and technological inventions to crime detection. As a result, Reeve's stories always circle around one or more actual or fictional marvels of technology (Panek 2006: 77). The same focus on the presentation of modern technology informs *THE EXPLOITS OF ELAINE* and its accompanying serial novel, which appeared in the newspapers of William Randolph Hearst's syndicate alongside the release of the filmic episodes.² In its showcasing of novel or fictional gadgets, the film serial incorporates visual and narrative themes that similarly permeate later serials of both the silent and the sound eras. More generally, *THE EXPLOITS OF ELAINE*'s combination of a fictional detective, a murder plot, a masked master villain, and gunslinging action seem to prefigure elements that were to become

1 Ruth Mayer and Shane Denson define 'serial figures' as recurring fictional characters that appear in a variety of media in the twentieth and twenty-first centuries, for instance Dracula, Tarzan, Frankenstein's Monster, or Fu Manchu. Many of these figures date back to the heyday of media proliferation between 1880 and 1960 (Denson & Mayer 2012b: 185; see also 2012a). Although he is less known today, Detective Craig Kennedy appeared in short stories and numerous, often serial novels from 1910 to the mid-1930s. In addition to Pathe's *THE EXPLOITS OF ELAINE*, *THE NEW EXPLOITS OF ELAINE*, and *THE ROMANCE OF ELAINE* in 1915, the character reappeared in at least two more silent serials—*THE CARTER CASE* (Oliver, 1919) and *THE RADIO DETECTIVE* (Universal, 1926—before returning in the 1936 sound serial *THE CLUTCHING HAND* (Weiss Productions). The pressbook for the latter includes a biographical sketch of the detective as compiled from the full range of Detective Kennedy stories and films, titled 'Craig Kennedy Is a Very Real Person'.

2 Depending on an individual cinema's location, the film releases at times followed a few weeks after the appearance of the print chapter (Stamp 2000: 117-118; see chapter 3 of this volume). *Cosmopolitan* also belonged to Hearst's syndicate at the time, however, the magazine did not feature *THE EXPLOITS OF ELAINE*. It did however use set photographs from the production of the serial to illustrate Hugo Münsterberg's article 'Why We Go to the Movies', but without mentioning the serial (Münsterberg 1915: 26-27).

generic to later film serials, especially in the 1920s and 1930s. This chapter's exclusive focus on this particular serial therefore introduces narrative and visual themes and details a related mode of viewer address that is shared by later serials to an extent that questions the so far comparatively strict separation of film serial scholarship into the eras of silent and sound film.

Although *THE EXPLOITS OF ELAINE* provides ample space for the action and pathos of melodrama, Kennedy's approach to detection resembles earlier detective fiction in terms of his scrutiny, similar to Poe's description at the beginning of this chapter. Just as in 'The Purloined Letter', the microscopic view is futile without the genius detective. But whereas analysis in Poe's and Conan Doyle's stories is usually conducted retrospectively, detection in *THE EXPLOITS OF ELAINE* takes place in synchronization with the unfolding of the crime, which is both necessitated and foregrounded by the story's week-to-week serialization. The showcasing of detection and technology in the filmic episodes of *THE EXPLOITS OF ELAINE* draws on and feeds into the presentism and presentationalism of film serial storytelling as outlined in the previous chapter. Moreover, the serial combines and portrays the multiple dimensions of the operational aesthetic in its foregrounding of narrative and technological processes as well as of film itself as a process. As this chapter will show, the combination of presentational storytelling and detective plots, and particularly the presentation of medially recorded traces and clues to an attentive audience, updates the classic detective story to the media modernity of the twentieth century and transforms the viewing experience into an act of operational detection.

This chapter considers film viewers as renditions of Walter Benjamin's figure of the detective, as it is formulated within and alongside his conceptualization of the flâneur. The type of the flâneur has been taken up most prominently by Anne Friedberg, Miriam Hansen, and Vanessa R. Schwartz as a means to conceptualize changing perceptive subject positions in the twentieth century. In a less widely acknowledged adaptation of Benjamin's work to film studies, Tom Gunning has related transitional film practices to the figure of the detective, a less prominent alternative to the flâneur in the *Arcades Project* (Friedberg 1993, 1998; Gunning 1995b, 1997, 2003; Hansen 1987; Schwartz 1998). In the following, I will employ Benjamin's descriptions of a bourgeois nineteenth-century experience of urban Paris and its relation to the detective story as a backdrop for a study of *THE EXPLOITS OF ELAINE* that understands the serial as performing a self-conscious update of the classic detective story in accordance with the experience of modernity in the early twentieth century. The serial's imagery and mise-en-scène create visual spaces that resemble the secluded *intérieure* as described in the *Arcades*

Project, and its plotlines circle around the problem of the identification of the individual in the crowd as outlined by Benjamin. Yet the serial also questions the integrity of the *intérieur* and the possibility of tracing the individual in the first place and thereby disables the successful deductive efforts of the detective. As the chapter will describe in more detail, *THE EXPLOITS OF ELAINE* negates its protagonist detective's capacity to deduce the solution to a criminal mystery from traces left in the bourgeois parlor. Instead, the serial uses its diegetically showcased technologies to feed recorded clues to its viewers, who take on the task of detection. In this way, *THE EXPLOITS OF ELAINE* updates the detective story according to the promises and affordances of the filmic medium. As the second part of the chapter will show, the viewers' efforts at detection depend upon practices of surveillance and particularly on the film camera as a surveilling agent. In this context, mediated perception and film's capability to repeat self-reflexively showcase cinematic storytelling and the mechanics of the detective story, effecting the eventual replacement of the diegetic genius detective with the viewer's perceptive activity of operational detection.

Detective Kennedy, Traces, and the *Intérieur*

The first episode of *THE EXPLOITS OF ELAINE* appeared in cinemas in the United States on 28 December 1914, immediately following the final episode of Pathe's successful *THE PERILS OF PAULINE* (1914). *ELAINE* met with great success, sparking two sequels in 1915: *THE NEW EXPLOITS OF ELAINE* and *THE ROMANCE OF ELAINE*. The serial was in fact profitable enough to serve as an excuse for Pathe's exchange managers to raise their own salaries by twenty-five percent, which they announced when the serial's profits surpassed the one-million-dollar mark (*Motion Picture News*, 1915c; cf. Dahlquist 2013b: 14). The serial's plot concerns Detective Kennedy and his friend Walter Jameson's (Creighton Hale) pursuit of a sinister master villain called the Clutching Hand (Sheldon Lewis). They aim to avenge the murder of Taylor Dodge and save his daughter Elaine (Pearl White) from the villain's attempts to murder her as well. Together with Elaine and her family lawyer Perry Bennett (Sheldon Lewis), Kennedy and Jameson try to capture and identify the masked villain in a pursuit that covers the serial's fourteen episodes. Meanwhile, both Bennett and Kennedy are also romantically interested in Elaine, with Kennedy eventually winning her heart.

The serial's initial episode both establishes Kennedy as a traditional private detective and rejects the narrative implications of classically



12. From *THE EXPLOITS OF ELAINE*, episode one, 'The Clutching Hand': The eponymous criminal pours thermite on the top of the safe.

constructed detective stories. The episode shows how the Clutching Hand enters the Dodge residence, murders Elaine's father with vaporized poison, and breaks into the safe in his study. The camera minutely follows the criminal's maneuvers as he burns the top of the safe with a chemical powder and leaves intentional fingerprints on a bust of Shakespeare that decorates the top of the safe. A little later, Detective Kennedy studies the villain's traces, identifies the chemical powder as thermite, and examines the fingerprints on the bust only to find that they are his own.³

This narrative sequence establishes Kennedy's prowess in detective work and science. In fact, the first shot of him in the serial portrays him in his laboratory as seen through a magnifying glass—a shot that already correlates Sherlockian imagery with laboratory work. Whereas Kennedy,

3 The idea of faked fingerprints had been introduced in the French serial *FANTÔMAS* (Gaumont, 1913) a year earlier.



13. Detective Kennedy inspects the hole that was previously hidden by the bust of Shakespeare (THE EXPLOITS OF ELAINE, episode 1, 'The Clutching Hand').

just like his literary predecessors, arrives on the scene to examine the murderer's traces in retrospect, the narrative organization of this episode tells its story very much in line with the presentist and presentational mode of film serials more generally: it portrays the action chronologically in the present tense and it meticulously presents the villain's action before allowing the detective to enter the scene. This narrative strategy entails a large number of close-ups of objects, which enables the film's viewers to trace the villain's steps before the arrival of the detective. Rather than pointing out what we know already, Kennedy's function then is to explain and interpret, that is, to name the chemical powder 'thermite' and to identify the fake fingerprints as his own. In this manner, both Kennedy and the theater audience of *THE EXPLOITS OF ELAINE* emerge as detectives.

Benjamin relates the perceptive activity performed by detectives to his famous description of the flâneur. As part of the larger *Arcades Project*, the detective and the flâneur emerge from the arcade, a newly created public space in nineteenth-century France. Open streets with small department stores were roofed with glass to construct a space that is neither fully inside nor fully outside, but the exterior was screened in to function as an



14. Detective Kennedy in his laboratory (THE EXPLOITS OF ELAINE, episode 1, 'The Clutching Hand').

extended interior space. This space is home to the *flâneur*, the 'chronicler and philosopher' of the arcades (Benjamin 2003b: 19). For him, the arcade turns the crowded streets of an increasing urbanization into a familiar, interior environment.⁴ Benjamin describes the *flâneur* as 'a mirror as vast as the crowd itself, [...] a kaleidoscope endowed with consciousness, which, with each one of its movements, represents the multiplicity of life and the flickering grace of all the elements of life' (1999: M14a, 1). The *flâneur* always remains in the crowd; he vanishes into it and leaves no trace (Benjamin 2003b: 27). As a 'gentleman of leisure' who ventures through the arcades at his own speed, he is both a symptom of social and industrial-commercial change and its antithesis. The *flâneur's* refusal to take part in Taylorist industriousness, according to Benjamin, will feed into his eventual demise (p. 30).

The detective, by contrast, is no idler. Instead, the assignment and endeavor to detect provides him with an alibi for his supposed idleness. Whereas the *flâneur* is not a student of pedestrians who reads their social status, nationality, or character from their outward appearance, the detective

4 For the *flâneur*, 'more than anywhere else, the street reveals itself in the arcade as the furnished and familiar interior of the masses' (Benjamin 1999: M3a, 4).

is only seemingly unoccupied when he actually engages in the close observation of a presumed malefactor (1999: M6a, 4; M13a, 2). Benjamin explains the relation of the flâneur and the detective in 'The Paris of the Second Empire in Baudelaire', his first formulation of convoluted J, the largest collection of material within the *Arcades Project* (cf. Buck-Morss 1989: 205). The essay establishes the detective as one subcategory of the flâneur, in addition to the badaud—a distinction that was lost in 'On Some Motifs in Baudelaire', Benjamin's revision of the original essay after Theodor Adorno's criticism (Benjamin 2003a; Buck-Morss 1989: 205). In the earlier essay, Benjamin defines this trinity as follows: 'In the flâneur, the joy of watching prevails over all. It can concentrate on observation; the result is the amateur detective. Or it can stagnate in the rubbernecker; then the flâneur has turned into a *badaud*' (2003b: 41). Detection thus results from flânerie, but it also supersedes it.

The detective's activities of detection and observation correspond to an increasing skepticism towards the masses. One downside of the masses, Benjamin contends, is that they provide a refuge for what he terms the 'asocial'. Therefore, 'in times of terror, when everyone is something of a conspirator, everybody will be in the position of having to play detective. Flânerie gives the individual the best prospects of doing so' (2003b: 21). Previously nonchalant observers thus become detectives who learn to keep up with the accelerated pace of the metropolis in that they register facts in passing. Doing so, detectives will imagine themselves to be artists (p. 21).

THE EXPLOITS OF ELAINE stylizes its protagonist detective overtly as a close observer, while the viewers, as I have shown, themselves trace the steps and maneuvers of the Clutching Hand in the serial's first episode ('The Clutching Hand'). Instead of idly following a detective's explanation of a previously terminated criminal activity, they first observe and trace for themselves before they receive additional professional assistance. However, THE EXPLOITS OF ELAINE provides these efforts of detection with a modern twist, updating them to the existing or idealized technological standards of the mid-1910s. The serial itself foregrounds the necessity for such an update when Kennedy finds his own fingerprints on the bust in Taylor Dodge's study. Chemistry, science, and technology are equally available to villains and detectives, and by allowing for a fabrication of fake fingerprints, science enables the villain to anticipate and render helpless the detective's traditional means of detection or ratiocination. Although the first appearance of Kennedy in the initial episode establishes the detective's expertise, it simultaneously demonstrates the insufficiency of traditional methods of detection for a pursuit of the skilled master villain the Clutching Hand. In

its first episode, *THE EXPLOITS OF ELAINE* thus stresses the inapplicability of established means of detection and related narrative formulae and insists on a modernization or update.

The necessity for this update results particularly from the serial's instantiation and its following disintegration of the secluded bourgeois *intérieur*.⁵ An extensive collection of notes and references in the *Arcades Project* refers to the décor of domestic spaces in nineteenth-century France. These notes convey an understanding of the significance of the home as a highly fashioned space, which strives to seclude itself from and define itself in opposition to emerging modernity's urban spaces. Benjamin's notes cast the bourgeois *intérieur* as a carefully arranged tableau, which is marked by an abundance of material items, especially of fabrics (1999: 13, 7). The set serving as the Dodge home in *THE EXPLOITS OF ELAINE* is designed in a similar, late-Victorian fashion, with brocade fabrics in carpets, cushions, and curtains, its ornamental wallpaper, as well as its wooden boarding, pillars, and sideboards framing the walls.⁶ The often-shown parlor is of a particularly elaborate design, with a large ornamental desk chair and numerous carefully arranged decorative items such as flower vases, books, and a life-size knight's armor. The parlor and the adjoining study are set up to symbolize the wealth of Taylor Dodge and his daughter, as indicated by the pricey ornamental designs. Meanwhile, the fact that her father keeps a separate study in his house including a bust of Shakespeare signals a certain degree of education, and the cushioned materials and Elaine's pets create a sense of coziness.⁷

The home of Taylor and Elaine Dodge in the serial resonates with Benjamin's description in ways that similarly apply to other films of the era. However, such a set design is of particular relevance in detective fiction because of its capacity to register traces. By means of the trace, Benjamin draws a connection between the *intérieur* and the emergence of detective stories in the mid-nineteenth century: the fabrics and materiality of the

5 Benjamin employs the French term 'intérieur'. The English translation by Howard Eiland and Kevin McLaughlin, however, uses the English 'interior' (see Benjamin 1999). In the following, I will use Benjamin's original term, in accordance with Tom Gunning's use of the term (see Gunning 2003).

6 In the early 1900s, Victorian furniture was still very much around, although alternatives such as Art Nouveau or the Arts and Crafts Movement existed. However, just half a decade after *THE EXPLOITS OF ELAINE*, the Art Deco of the 1920s would become much more prominent in film sets.

7 My analyses in this chapter are based on a French release of the serial's first episode; later episodes have been studied in their American release versions. The French release of episode one does not identify the bust as Shakespeare's; however, the newspaper tie-in does.

intérieure enable an accumulation of traces; they register the marks left by human movement and action, which a skilled eye can reconstruct.⁸ For Benjamin, the cavernous nature of the *intérieure* invites a dream state of suspended coziness and seclusion from the outside world, and detective fiction is emblematic of the struggle to leave this state of being (1999: I2, 6). This relation of the trace and the *intérieure* marks Edgar Allan Poe's stories, as Benjamin mentions 'the confrontation with furniture in Poe. Struggle to awake from the collective dream' (1999: I1, 4).

The first episode of *THE EXPLOITS OF ELAINE* describes two penetrations of the secluded space that wake its inhabitants from their dream-like state of bourgeois comfort. First, the Clutching Hand secretly enters the Dodge family home in the original murder sequence. Additionally, Detective Kennedy's subsequent examination of the crime scene itself constitutes another intrusion. But his efforts at detection fail because the traces left by the Clutching Hand are calculated and coordinated. The fact that he leaves Kennedy's fingerprints on the Shakespearian bust attests to the criminal's control over his own traces and it questions the validity of pursuing detection by means of collecting traces in an age of modern science. The *intérieure* can be manipulated; consequently, the collection of traces ceases to suffice for thorough detective work in the twentieth century. Whereas Benjamin describes an original dream state and its disruption in detective stories, *THE EXPLOITS OF ELAINE* now recasts the latter as a product of bygone times and signals a new 'scientific awakening'.⁹

This rejection of the *intérieure*'s capacity to register or record traces can also be understood as a logical update of the concept of the *intérieure* to its appearance in film. Both the bourgeois parlor and the film set are carefully designed spaces in which objects are arranged in 'a visual ensemble' (1999: I3, 7).¹⁰ However, other notes from the *Arcades Project* cast the *intérieure* more in terms of the prop department's warehouse: references to historical periods or occurrences accumulate in a curious bricolage of styles (1999: I1, 6).

8 The corresponding note says: 'Plush—the material in which traces are left especially easily' (Benjamin 1999: I5, 2).

9 More than two decades later, *DICK TRACY* (Republic, 1937) employs a similar strategy. The initial chapter shows how Tracy quickly finds a murderer by comparing wood chippings left at the murder scene to the chippings used by a puppet player to stuff his puppets. This moment of accuracy and detailed tracing is then quickly followed by the insight that the puppet player is a small part of a larger criminal organization, which cannot be tracked with similar measures but requires a pursuit in real time, with up-to-date technology and quick action (episode 1, 'The Spider Strikes').

10 Benjamin acknowledges this in passing when he notes: 'Development of "The Interior" chapter: entry of the prop into film' (1999: I6, 3).

What previously appeared as the careful arrangement of fabrics in the nineteenth-century parlor is now cast as a mixture of historical references, which in their combination signify if anything a vague sense of history as such rather than any specific event or historical figure. In film, such accumulations of objects can assume a signifying function within the narrative, but they can also be somewhat coincidentally based on the prop cabinets of a respective film studio.¹¹ In the nineteenth-century parlor, however, Benjamin denies these props or objects all signification:

Nineteenth-century domestic interior. The space disguises itself—puts on, like an alluring creature, the costumes of moods. The self-satisfied burgher should know something of the feeling that the next room might have witnessed the coronation of Charlemagne as well as the assassination of Henri IV, the signing of the Treaty of Verdun as well as the wedding of Otto and Theophano. In the end, things are merely mannequins, and even the great moments of world history only costumes beneath which they exchange glances of complicity with nothingness, with the petty and the banal. Such nihilism is the innermost core of bourgeois coziness... (1999: 12, 6)

The ‘costume of moods’ resembles a filmmaking practice of designing spaces as signifiers for a fictional character’s emotional state and characterization. The *mise-en-scène* of the Dodge family home, with a bust in the study and a knight’s suit of arms in the parlor, is an accumulation of ‘meaningless’ objects similar to the nineteenth-century *intérieur*. In their conglomeration, these objects convey a vague sense of historicity, which registers as an awareness of history as such rather than as a reference to any specific past era or event. This vagueness particularly results from the missing link between objects such as the knight’s suit of arms and the bust. In a paradoxical manner, both the nineteenth-century *intérieur* and Pathe’s set designs assembled objects that enabled a room to put on ‘costumes of moods’ while simultaneously showing ‘complicity with nothingness’. This nihilism, as Benjamin calls it, is especially pronounced when supposedly historical objects are reduced to their sheer functionality and materiality—as happens when they become bearers of traces.

At this point, the fragments of the *Arcades Project* turn the concept of the *intérieur* inside out, as the objects so far established as embodiments

11 The latter would also account for the frequent reappearance of the knight’s armor in Pathe sets, for instance in *THE PERILS OF PAULINE* (1914) and in *THE HOUSE OF HATE* (1918).

of nothingness assume a particular meaning and function in a concrete narrative context. That is, objects spontaneously assume a short-term significance or signification in a story, as opposed to the historical meaning they explicitly do not carry. Especially detective fiction assigns individual objects a short-term significance, turning them from mere decorations into narrative props. Their new significance points to a specific outside and to an intrusion from that outside world, in the form of a murderer or burglar, into the secluded bourgeois space. Just as the arcade converted an outside into an interior space, the trace signifies the opening of the *intérieur* to the outside, thereby terminating the former dream state. Whereas the detective story thus opens up the *intérieur* and endows previously meaningless objects with agency, *THE EXPLOITS OF ELAINE* evokes the imagery of the detective story—the bourgeois design, the detective with his magnifying glass, the fingerprints—only to self-consciously distance itself from this narrative tradition. The *intérieur* portrayed in *THE EXPLOITS OF ELAINE* is a penetrable space from the start: before his murder, Taylor Dodge hides important papers in a secret cabinet in the wall. The presence of such a storage place, just as the more visible presence of a safe, already takes into account the possibility of a break-in. The serial then proceeds to stress the lacking seclusion by revealing traces, in the fake fingerprints, as manipulatable in the already permeable space.

Having established this problem space in its introductory episode, the following installments of *THE EXPLOITS OF ELAINE* rehearse its thoroughly modern solution: science and technology replace the efforts of observation and deduction upon which previous detectives relied. Instead of retrospectively studying the objects of the *intérieur*, Detective Kennedy installs complex technologies that enable him to either record or monitor activities in a particular space. In this context, the difference between recording and monitoring depends on a distinction of retrospective analysis and simultaneity. Recorded traces can only be analyzed in hindsight. Whereas ‘traditional’ traces such as fingerprints are always found retrospectively, the recorded traces of *THE EXPLOITS OF ELAINE* have been technologically collected by a previously installed mechanism, for instance a hidden seismograph that records human movement (episode 4, ‘The Frozen Safe’). Monitoring, by contrast, implies that a detective is spying on the villain’s actions live, aided by visual or audio technologies, for instance by an audio transmission device called the vocophone (episode 8, ‘The Hidden Voice’). As the following passages will outline, *THE EXPLOITS OF ELAINE* demonstrates technologies for both monitoring and recording, and each particular technology impacts the ways in which the episode narrates its story and its operational aesthetic.

In the fourth episode, Detective Kennedy installs a hidden seismograph in his apartment, which will enable him to see, in hindsight, whether anyone entered during his absence. Like the Dodge residence, Kennedy's personal apartment is an *intérieur* that has been opened up: instead of shielding it from intruders, Kennedy merely makes sure he registers them. Instead of preventing crime, he records it. And just as sewing machines were hidden in special furniture in the nineteenth century and television sets in the twentieth, Kennedy's seismograph is hidden in the hallway wall outside his apartment, invisible to the eye (Douglas 1982: 25-27, cf. chapter 2; Spigel 1992: 49). Hiding the mechanism is Kennedy's solution to the question of how to technologically protect his home from intruders without letting the technology itself become the intruder. More importantly, the seismograph technology enables a shift in the nature of the trace: proof of the villain's intrusion now exists only in the form of the graph written by the seismograph—the trace does not, however, register any of his apartment's objects or decorations. Decades after the period which, according to Benjamin, experienced a shift from meaningful objects to objects that only serve as bearers of traces, traces shift once again to now appear as mediated by modern technologies. Traces have lost their carrier objects, which are replaced by carrier media. As a result, the objects of the cinematic *intérieur* are deprived of even their short-term significance, and traces cease to be physically inscribed other than in the form of abstractions, as in the diagram drawn by the seismograph.

The serial's showcasing of the seismograph mechanism in this chapter corresponds to its larger agenda of displaying modern feats of technology and science. In fact, advertisements for *THE EXPLOITS OF ELAINE* foreground technologies as visual attractions and stress their authenticity. A full-page article announcing the serial's premiere on 28 December 1914, for instance, highlights the fact that the detective in the written short stories 'makes use of genuine scientific methods in the detection of crime' and considers it an 'added value' to the Kennedy short stories from the *Cosmopolitan*. The article furthermore stresses that the short stories had already helped to sell technological devices to police authorities. 'The author keeps so closely in touch with the newest discoveries in all branches of science', *Motion Picture News* reports, 'that he is able to solve mysteries by means which are as genuine as they are startling' (*Motion Picture News*, 1914c). Three months later, a trade press article covering the serial was headlined 'Remarkable Mechanical Devices Used in "Elaine"'. Probably straight from the studio press release, it highlights that 'the various remarkable mechanisms shown are not the product of the studio workshop, but the genuine article, in one instance



15. Detective Kennedy demonstrates the seismograph. Film still published with the newspaper tie-in for episode four, 'The Frozen Safe' (Reeve 1915).

at least the only one ever produced and tremendously costly' (*Motion Picture News*, 1915a). In *Motography*, the same article featured a closing statement in which Theodore Wharton of Pathe Studios stresses that

No, we are not faking any scientific apparatus in "The Exploits of Elaine". We don't have to. The inventors of these different remarkable machines voluntarily offer us the use of their devices, feeling that the use of them in a motion picture with the circulation of "Elaine" cannot help but bring new and valuable publicity. (*Motography*, 1915)

Such advertisements work with truth claims that resemble those put forth by P.T. Barnum in the 1840s. They highlight the sincerity of their props and stress that these mechanisms truly function. For theater patrons who regularly read the serial's newspaper tie-in, the corresponding film chapter allowed for a chance to see the mechanism from the story. Just as the descriptions and drawings of incredible exhibition pieces or technological marvels had attracted audiences to curiosity museums or public displays of

technologies in the nineteenth century and into the twentieth, the promotion articles and the written tie-ins of *THE EXPLOITS OF ELAINE* attracted audiences and fueled their curiosity by promising visual presentations of the technologies that audiences had previously read about. Simultaneously, this practice lent the serial an air of an educational appeal. Curiosity museums and descriptions and exhibitions of novel technologies always combined entertainment and instruction, and Pathe willingly tapped into this trend. Moreover, this advertising strategy and mode of address corresponds to an understanding of film viewers as Benjaminian detectives: the promised presentation of technological advancement justifies the leisurely time of film viewing just as the task of detection served as an alibi for the flâneur, transforming a leisurely activity into a meaningful but no less entertaining exercise.

Whereas the technologies of *THE EXPLOITS OF ELAINE* thus turn viewers into detectives through the serial's paratexts, within the serial's narrative, particular technologies serve to register traces and make up for the perceived unreliability of the *intérieur*. Such a technological registering of traces is not unknown to Benjamin's reflections. Although the *intérieur* retains its integrity to an extent, the arcades and urban spaces with their vast crowds missed a counterpart to plush in the *intérieur*. In other words, like the parlor in *THE EXPLOITS OF ELAINE*, the crowd lacked the means to preserve the trace, and Benjamin identifies photography as the solution to the problem. Its invention enabled the identification of the individual and the preservation of an individual's trace: 'Photography made it possible for the first time to preserve permanent and unmistakable traces of a human being. The detective story came into being when this most decisive of all conquests of a person's incognito had been accomplished' (Benjamin 2003b: 27). By resorting to technology to collect and register traces, *THE EXPLOITS OF ELAINE* thus transfers and adapts the methods of tracing individuals in the crowd to the *intérieur*. As a result, the serial obfuscates the distinction of interior and exterior spaces, as both rely on technology to provide traces.

The serial's eighth chapter, 'The Hidden Voice', is a poignant example of such a technologically enabled connection of spaces and the careful opening up of the *intérieur*. The chapter begins with a short demonstration of its featured technology, the 'vocophone', a loud-speaking telephone recently invented by the scientific detective. Kennedy places the intercom device in the apartment of his friend, the journalist Walter Jameson, for a test. Speaking through the vocophone, Kennedy wakes the sleeping journalist, calling 'Wake up, Jameson'. When the journalist does not reply, he again says 'Come, get up Jameson'. Jameson finally gets out of bed and scans his

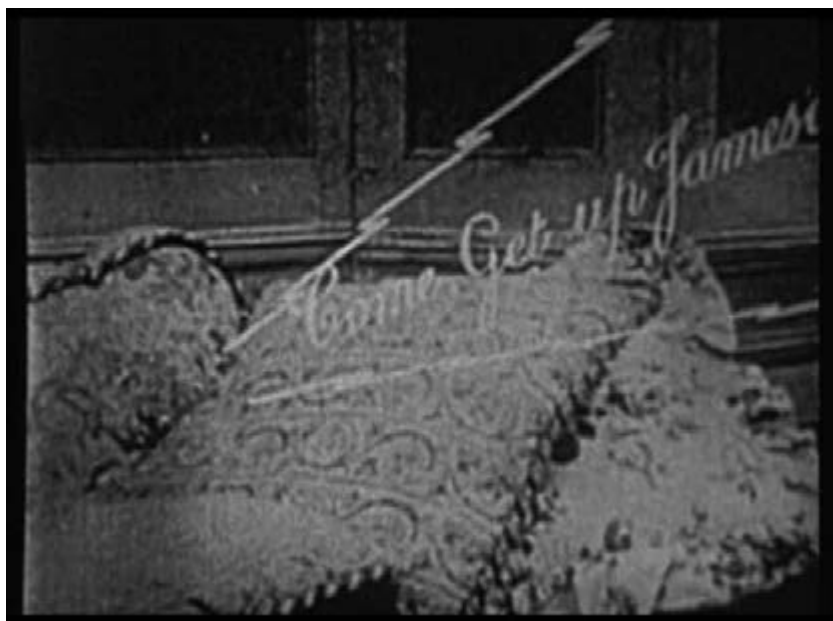
bedroom and an adjoining room for the source of the sound. Anticipating Jameson's search for the vocophone, Kennedy hid the mechanism under the thick brocade cushions on Jameson's couch. In addition to inaugurating a cheerful game of hide and seek, the invisibility of the vocophone leaves the secluded interior intact—a necessary precondition for the surprise effect of Kennedy's prank. 'Look on the couch', the detective suggests through the mechanism. And Jameson, upon finding the source of the sound, asks: 'What is that? Good luck Kennedy—to your latest invention'. This early, playful disruption of the *intérieur* prefigures the chapter's climactic ending, which draws on the viewer's knowledge about the functioning of the vocophone and, by extension, filmic narration, in multiple ways. All of these contribute to the serial's operational aesthetic, as the following passages will show.

First, the scene provides the showcasing of the vocophone as promised in the serial's advertising in the trade press and as described in the newspaper tie-in. The chapter thus continues the nineteenth-century trend of exhibiting novel inventions, adapting it for twentieth-century narrative film. Second, the vocophone functions as a mediator between cinematic spaces similar to the gardener's hose in the 1896 film *L'ARROSEUR AROSÉ*, as outlined in chapter two. As Gunning and, by extension, Lisa Trahair describe, the film shows how a boy steps on a gardener's hose to stop the flow of water and then steps off the hose, causing the water to spurt in the gardener's face. In this short scene, the hose serves to delay the cause-and-effect relationship between the boy and the gardener and thereby brings about the film's short narrative (Gunning 1995a; Trahair 2004; cf. chapter two of this volume). Similarly, the vocophone connects Kennedy's laboratory and Jameson's bedroom, thereby explaining the narrative cause-and-effect relationship between the two spaces. The presence of the mechanism structures both the interaction of the two characters on screen and the resulting narrative. Third, by establishing the connection between two diegetic spaces, the vocophone also explains the scene's parallel editing. When Kennedy leans back in his chair and enjoys his prank, the spectators will attribute his enjoyment to Jameson's befuddlement as the latter fails to find the origin of the voice that woke him. This attribution, however, depends as much on an understanding of crosscutting as it does on the narrative connection between Kennedy and Jameson, both of which are explained by means of the vocophone. In simultaneously foregrounding the technological functioning of the vocophone, the causes and effects in the narrative, and its cinematographic rendering, the scene thus combines all three elements of an operational aesthetic. The diegetic technological attraction both structures the way the story is told and explains the serial's approach to storytelling.

This short sequence precedes any other plot development in the episode, and it serves as a comic sketch that ridicules Jameson, who tousles his hair and has obvious difficulties in gaining consciousness after a good night's sleep, whereas Kennedy is up and awake in his laboratory. The comic sketch, however, also demonstrates particular functions of the vocophone that are crucial for an understanding of the climactic ending of this installment. The scene details that the vocophone does not need to be picked up in order to transmit sound and that the sound it transmits is loud enough to wake someone, even when the mechanism is hidden under numerous pillows. Jameson's answer then indicates that the vocophone works two ways: Kennedy can address Jameson and also hear what he replies. This detailed exhibition and explanation of the vocophone suggests a depiction of an ingenious invention. However, an early intertitle relativizes the remarkableness of Kennedy's invention: "Craig Kennedy, the scientific detective, experiments on his friend Jameson, with his new vocophone, a recently invented loud speaking phone." Although it is difficult to ascertain how novel the mechanism would have appeared to the serial's first audiences, the simple reference to the telephone frames the vocophone as new, but not as ground-breaking. After all, it is just a slight alteration from the telephone, which was ubiquitous maybe not yet in private households, but definitely on film screens (cf. Young 2003; see also chapter two of this volume). Rather than its telephonic qualities, it may have been the loud-speaking function of the vocophone that was remarkable at the time. Sound amplification was one of the major problems to be solved both for phonography and in early advances toward sound film.¹² The vocophone is thus a remarkable technology, but its close relation to the telephone simultaneously suggests a certain realism. Instead of exaggerated science fiction, the serial presents a mechanism that is familiar and reasonable enough to be believable.

The vocophone, the chapter's introduction suggests, enables Kennedy to be aurally and audibly present in the room. This presence is highlighted by the framing of his words, which appear not as intertitles but are written directly into a still of the frame. This visualization of Kennedy's call quite literally fills the room, forming an extra-diegetic *mise-en-scène*. Furthermore, Kennedy's presence in fact exceeds the diegetic, verisimilar space of Jameson's apartment: the vocophone seems to combine with the film camera into a larger audiovisual surveillance mechanism. After calling Jameson for the first time, Kennedy presumes that his friend did not get

12 I thank Shane Denson for pointing out sound amplification as the vocophone's chief attraction.



16. The serial's illustration of Kennedy's voice through the vocophone in *THE EXPLOITS OF ELAINE*, episode 8, 'The Hidden Voice'.

out of bed. After the second call, Kennedy somehow knows that Jameson is looking for the origin of the voice. This could be attributed to Kennedy's perfect intuition, but to the audience it may seem as if the mechanisms of the vocophone and the extra-diegetic camera itself have merged into an omnipresent technological surveillance apparatus.

This knowledge of the intricacies of the vocophone then becomes useful in the episode's climactic ending, in which the Clutching Hand and one of his henchmen attack Elaine in her parlor. Kennedy had previously hidden the vocophone in a suit of armor that decorates the room. He listens in on the proceedings of Elaine's predicament and, by means of the vocophone, leads the villains to believe that they have been trapped. They promptly hurry from the house and Elaine is rescued. For Elaine's safety, Kennedy monitors her parlor: he invests his scientific knowledge to engage in surveillance and to follow the proceedings over at Elaine's. Kennedy is thus a detective in the Benjaminian definition, who employs technology to monitor and observe. In the beginning of the chapter, his scientific interest provides the alibi for the leisurely prank he plays on Jameson. In the final moments of the episode, detection serves to justify Kennedy's methods, which otherwise might appear morally dubious.



17. The Clutching Hand and a henchman attack Elaine in her parlor. Note also the suit of armor to the right side of the frame (THE EXPLOITS OF ELAINE, episode 8, 'The Hidden Voice').

In both instances, the vocophone implies an opening of the *intérieur* to outside influences. Overall, it connects three domestic spaces: Kennedy's laboratory as the communicative hub, Jameson's apartment, and later Elaine's house. Except for in Kennedy's laboratory, the vocophone is hidden: in Jameson's apartment behind an overabundance of brocade cushions, and in Elaine's parlor inside the knight's suit of armor. The invisibility of the mechanism is pivotal for the narrative, as both Kennedy's prank on Jameson and the way he scares away the villains depend on the respective communication partner's failure to locate the origin of the voice. At the same time, the concealment of mechanisms, which resembles the clever hiding of the seismograph in episode four, is a recurring theme in the serial. Similarly, Benjamin mentions that nineteenth-century Parisians owned covers and sleeves for plenty of objects (2003b: 26). Whereas for Benjamin, such plush covers again served to collect traces, the concealment of technology in THE EXPLOITS OF ELAINE suggests that its intrusion into secluded homes was by no means uncontested. Quite paradoxically, the technology breaks up the *intérieur* yet simultaneously protects the *intérieur* against the villainous intruders who are seeking to harm Elaine. The vocophone is thus on the one hand a means to technologically secure the integrity of the *intérieur*, and



18. Split-screen of Kennedy in front of his vocophone and Elaine hugging hers (THE EXPLOITS OF ELAINE, episode 8, 'The Hidden Voice').

on the other hand it itself references the threat posed by villainous forces on the outside. As a consequence, the vocophone needs to be concealed.

In Elaine's house, the vocophone is hidden in a knight's suit of armor, that is, in an object that finds reference in the *Arcades Project* as a metaphor for the defensive positioning of art in the *intérieur* (1999: 12, 3). However, in the narrative logic of the film serial, neither the suit of armor nor the vocophone technology can step in as Elaine's legitimate savior. Instead, when Elaine takes the vocophone from its hiding place to embrace it in the final moments of the episode, a split-screen of her on one side and Kennedy on the other attributes the guarding function back to the detective and affirms the serial's love plot. This split-screen image of the two characters, each with the vocophone, visualizes the connection of different spaces through the vocophone, but also through editing. In other terms, the presence of the vocophone to a certain extent justifies and explains the technique of crosscutting. Moreover, the split-screen image aligns the spaces side by side that were, up to this point, shown in successive alternation. The shot thus reminds viewers not only of the connection between the protagonists but also of the simultaneity of the previously unfolding action. Placing the cut in the center of the frame, the instance

exposes its own means of visual narration, exhibiting the operational aesthetic of cinematic storytelling through the operation of the vocophone. This means of 'showing itself' furthermore disrupts the integrity of the *intérieur*: as Benjamin describes in the *Arcades Project*, the *intérieur* loses its status as a secluded private sphere as the boundaries between interior and exterior dissolve. In film, this relative homogenization is a result of the cinematic camera, which equally penetrates interior and exterior diegetic spaces. Through the split-screen at the end of the serial's eighth episode, the film foregrounds the omnipresence of the camera and, in connecting the filmic image to the vocophone technology, it highlights the camera's surveillance function. The serial thus not only stages technological props such as the seismograph or the vocophone with their capacities to record or monitor. Instead, the camera of twentieth-century film replaces the plush of the nineteenth-century *intérieur*: it records traces and presents them for analysis. In analyzing these traces, the film viewers collectively take up the task of detection.

Seen Through the Periscope: Surveillance and Repetition

The positive assessment of the vocophone's surveillance function in *THE EXPLOITS OF ELAINE* runs counter to Benjamin's condemnation of similar practices. In the serial, the detective's ability to monitor the activities in Elaine's house provides a sense of security. Benjamin, by contrast, unearths a skepticism about the 'modern administrative apparatus' and its increasing, coordinated registration and control of law-abiding citizens in the writings of Baudelaire and Balzac (1999: 225; I6a, 4). Whereas Balzac lists the timetables of public coaches, the counting and stamping of letters, and the numbering of houses as examples of bureaucracy's expanding sway over the population of Paris, Benjamin adds anecdotal evidence according to which Baudelaire kept several addresses and moved from house to house to evade his creditors (1999: 225; I6a, 4; 2003b: 26). To Benjamin, Baudelaire is the enduring, now displaced flâneur who aims to vanish into the crowd 'against the government's effort to establish a multifarious web of registrations—a means of compensating for the elimination of traces that takes place when people disappear into the masses of the big cities' (2003b: 26). In a way, and without Benjamin's acknowledgment, the administrative apparatus with its photographic technology becomes the detective (cf. 2003b: 27). Meanwhile, in aiming towards evasion, Baudelaire appears on the side of the criminal (p. 26). *THE EXPLOITS OF ELAINE* similarly references the

increasing surveillance practices of its own time, furthered by technological advancement, but it arrives at a different evaluation. Enabled by his technological prowess, Kennedy—as a scientist and inventor and not an agent of justice—provides for Elaine's safety. His act of surveillance is meant to provide security rather than exercise (political) control. Other instances in the serial, by contrast, refute a similarly simplistic association of surveillance and security. As the following examples will demonstrate, *THE EXPLOITS OF ELAINE* makes technologies of surveillance available to both the detective and the culprits. As I will show, the serial thereby questions the reliability of a technological registration of traces, and it encourages a reflection of cinema's own connection to surveillance practices. In this context, the serial eventually demonstrates the particular receptive practices afforded by detection and surveillance, which relate to repetition and seriality and which are crucial to the serial's operational aesthetic.

In chapter ten, 'The Life Current', the Clutching Hand tries to drive a wedge between Elaine and Kennedy in order to cause the detective to drop the case. The villain spreads news throughout the city that women were being poisoned by a kiss from a stranger. A female member of the villain's gang lures Kennedy to her apartment, telling him that she received the poisoned kiss and wants him to investigate. Before he arrives, she and a helper install a hidden camera in a stag's head that is mounted on the wall. When Kennedy arrives, the villain's henchwoman demonstrates how the poisoned kiss was given—she kisses Kennedy. Meanwhile, her helper operates the hidden camera to take compromising pictures of the situation. She will then show the images to Elaine, causing the love plot between Kennedy and her to stagnate.

On the one hand, this instance in the serial showcases the possibilities for surveillance that are enabled by film and photography. Simultaneously, the episode questions the truth claim of photography, as the camera captures an explicitly staged scene into which Kennedy is tricked. The scene rehearses for technologically mediated traces what the serial's initial chapter showed for non-technologically recorded ones: whereas the factitious fingerprints on the bust of Shakespeare in the serial's first episode point to the unreliability of non-mediated evidence, episode ten points to a similar manipulability of mediated, technologically recorded content. The serial thus depicts mediated traces as by no means more reliable than traditional ones, complicating the notion that technology makes up for the crowd's inability to bear traces. In this way, instead of opening a problem space and supplying the matching answer to recreate an earlier equilibrium, the serial refuses to solve modernity's riddles and revels in the complexity and

contingency of options instead.¹³ What remains is a distinction of old and new. After all, the camera in this scene is no new and remarkable invention. As a familiar technology, photography and film are easy to manipulate, in opposition to Kennedy's more innovative devices.

The most efficient of devices in this scene, however, is once again the film camera that enables the serial's narrative in the first place. It allows for a full overview of the ongoing action and thereby itself emerges as an agent of surveillance. As in the first episode of the serial, this overview manifests itself in the film's presentational (as opposed to *representational*) approach to storytelling, and it coincides with an operational aesthetic. The hidden camera in the stag's head is shown in numerous close-ups that detail the positioning of the camera lens in the stag's eye and the shutter that can be operated from behind the wall. This detailed depiction outlines the technological set-up of the surveillance mechanism, the knowledge of which is a precondition for viewers to understand the villain's following orchestration of Kennedy's predicament. The explanation is thus necessary for the narrative, but the episode's chronological explanation and instantiation of the photographic contraption also underlines the surveillance function of the non-diegetic camera. This camera, in turn, mediates the traces, which mostly appear as recorded or monitored by ingenious inventions within the serial's world, to its cinema audience. Within the serial's world, Kennedy is the detective who interprets traces, and Elaine, as a viewer of the photographs of Kennedy that were produced under wrongful circumstances, falls for the trick and is therefore not a skilled detective herself. The viewers, by contrast, engage in efforts of detection through the traces provided by the surveilling camera, as it details the photographic contraption and reveals the scheme carried out by means of the diegetic photography. Instead of asking viewers to interpret a trace such as the photograph, the serial allows them to watch the production of the trace. It highlights the manufacturing of the trace by providing another group of traces, that is, close-ups of the trace-producing mechanism in the stag's head. Through the serial's operational aesthetic, film spectators thus become detectives who correlate traces from different levels of mediation and who, by means of these efforts, make sense of the story as it unfolds.

The status of the film camera as an agent of surveillance was not new when *THE EXPLOITS OF ELAINE* was released in 1915. The camera's surveillance

13 This reveling in contingency is a general trend with film serials in the silent and sound eras that surfaces, for instance, in the narrative mode of *OFFICER 444* (Goodwill, 1926) or in the exhibition of a variety of media in sound-era serials (Brasch & Mayer 2016; see also chapters five and six in this volume).

function rather harks back to the earliest days of filmmaking, and it resonates with turn-of-the-century films about forced and stolen kisses. The story of the supposedly poisoned kiss in *THE EXPLOITS OF ELAINE* is in fact reminiscent of the Peeping Tom shorts of the cinema of attractions. Amanda A. Klein establishes what she calls the 'kissing cycle' in short films made between 1896 and 1906, which focus on and often joke about a kiss, including films like Edwin Porter's *THE KISS* (1900) or *WHAT HAPPENED IN THE TUNNEL* (1903). Klein relates these films to the late-nineteenth-century newspaper coverage of so-called 'mashers': white middle-class men who, in urban environments, approached distinguished women on the street and stole usually unwelcome kisses. Newspapers reported critically and substantially on this and demanded new social rules, as the mashers mostly did not face any consequences (2016: 22-25). According to Klein, the kissing cycle of films provided the visual record that was lacking in the newspaper accounts of actual incidents, and it offered thematic variations. Films often envisioned alternative outcomes in which spontaneous women reversed the assault to frame the mashers. In *WHAT HAPPENED IN THE TUNNEL*, for example, a woman uses the time in the dark, when the train passes through a tunnel, to change places with her African-American maid. The masher thus mistakenly kisses the maid, which the film presents as a racial joke on the masher theme (Klein 2016: 35-37).

The contemporaneous audience's memory of the masher discourse makes the crook's story of the poisoned kiss in *THE EXPLOITS OF ELAINE* less unbelievable than it may seem, and Jameson's trust in the supposedly poisoned woman's claims now seems a little less far-fetched. The episode's story is very much in line with the puns and variations on the masher theme in the kissing cycle. Nevertheless, Klein also maintains that, especially in later kissing cycle films such as *WHAT HAPPENED IN THE TUNNEL*, the women typically do not kiss back but rather appear to be violated by the kiss. This, she maintains, inaugurates the male gaze in the kissing cycle (2016: 28f). Whereas *THE EXPLOITS OF ELAINE* alters the gender relations by casting its male protagonist as being violated by the kiss, the serial in this instance retains the male perspective through the co-conspirator, who hides behind the wall to operate the camera's shutter. When Elaine finally looks at the resulting photographs, she is cast as both the voyeur of the images and the person violated by the trick.

Nevertheless, whoever's perspective we temporarily assume, they are all mediated by the surveilling, non-diegetic camera, and that perspective itself similarly harks back to the earliest days of moving picture production. According to Catherine Zimmer, turn-of-the-century films were often 'feats of surveillance', for instance *WORKERS LEAVING THE FACTORY* (1895), the Lumière Brothers' film of their employees' departure at the end of the

work day (2011: 428-429). Films made in the United States often addressed the mediated act of watching by placing visual technologies in the frame, as in *AS SEEN THROUGH A TELESCOPE* (1900) or *PHOTOGRAPHING A FEMALE CROOK* (1904). Especially Edison's 'caught in the act' stories combined such self-reflexive voyeurism with portrayals of crime and sexuality, as in *INTERRUPTED LOVERS* (1898) or *THE KLEPTOMANIAC* (1905) (Gunning 1995a: 35; Zimmer 2015: 6). Drawing like Klein on the masquerade film *WHAT HAPPENED IN THE TUNNEL*, Zimmer points out that the joke of the black maid taking the seat of her white employer during the dark frames in the tunnel 'is predicated on the failure and then reestablishment' of 'racial visibility and cinematic technology' (2015: 11).¹⁴ Without integrating the film apparatus in its frames, *WHAT HAPPENED IN THE TUNNEL* nevertheless foregrounds cinema's surveillance capacities while also laying bare its limitations, particularly its reliance on lighting. The film's point of view thus acknowledges that the camera's perspective is at times unreliable, a tendency that culminates in trick films that show things that explicitly do not occur in a verisimilar filmic world, for instance in films like *THE DOG FACTORY* (Porter, 1904) or *A TRIP TO THE MOON* (Méliès, 1902).

Both the presentational storytelling of *THE EXPLOITS OF ELAINE* and its operational aesthetic depend on the promise of the film camera's surveillance perspective. The serial's commitment to showcasing technology and its revealing close-ups of the photographic contraption foster a trust in the cinematic image that suspends an awareness of film's capacity for trick filming. In its juxtaposition of trick photography and cinematic surveillance, *THE EXPLOITS OF ELAINE* refuses to participate in a general trend of transitional-era film in which, in Scott McQuire's terms, 'cinematic credibility shifted from emphasis on the geometrical plane of perspective to planes of fictive and narrative logic, a change Commolli aptly described as the movement from optical to psychological realism' (1998: 76). Instead of participating in this trend without comment, the serial addresses the shift by comparing and contrasting technologies and visual perspectives. Explaining its diegetic technologies as attractions and employing them as guidelines for an understanding of the following narrative, the serial draws on an optical realism that will help put its psychological appeal in place. Thus, in addition to inviting an emotional investment in its story, *THE EXPLOITS OF ELAINE* exemplifies how such emotional investment comes into

14 Zimmer's study at this point elaborates on the connection of race and surveillance and the production of race through surveillance as it harkens back to the pursuit of escaped slaves in the United States (2015: 11-13).

being—an exemplification that, once again, draws on an all-encompassing camera perspective. Whereas other serials of the time share a comparable optical realism—for example in their insistence on breakneck stunts or in the showcasing of dangerous animals—and also self-consciously exemplify filmic storytelling,¹⁵ ELAINE's showcasing of the fabrication of fake images through an all-encompassing, all-conveying camera and its resulting juxtaposition of cinema's conflicting modes of address is unique. Particularly in its weekly demonstration of narrative technique through its showcased technologies and operational aesthetic, *THE EXPLOITS OF ELAINE* capitalizes on the serial format for a scheduled rehearsal of cinematic viewing practices.

The surveillant camera perspective occasionally poses a problem for a narrative that continuously promises but serially defers the identification of its cloaked master villain. The camera depicts the villain and his actions from the beginning and thus always threatens to prematurely reveal his identity. Hiding from the camera, the Clutching Hand is continuously in disguise, even in scenes that include no other character but himself (for instance in chapter one, 'The Clutching Hand'). The serial addresses the camera's threat by allowing the villain and the camera to engage playfully with notions of masking and unmasking. In episode nine, for example, Detective Kennedy attempts to remove the Clutching Hand's disguise by ripping the bandana off his face—only to reveal another bandana underneath. Earlier, in episode six, the serial highlights its dialectic of surveillance and concealment when it shows the Clutching Hand sitting on a chair, his back turned towards the camera, donning his coat and a facial disguise with slightly awkward motions because he cannot turn around and face the camera ('The Vampire'). His inelegant struggle to get dressed self-reflexively foregrounds the camera angle and the serial's visual technique of hiding the villain in plain sight. Again earlier, towards the end of the fourth episode, the viewers almost see the villain unmasked—he takes off his facial disguise, but the screen fades to black just in time to hide his face ('The Frozen Safe'). Such scenes tease the viewers, foster their interest in the villain's identity and in the upcoming episodes, and underline the filmmaker's capacity to decide when to reveal the villain's face. Moreover, they emphasize the fact that the camera itself is an agent with its own specific interests.¹⁶ At the same time, such instances

15 See in particular the presentational storytelling in *THE PERILS OF PAULINE* in Denson 2014b and in chapter three of this volume.

16 These instances in which the serial acknowledges the viewer's limited perspective oppose a conceptualization of the film spectator in terms of Foucault's panopticon, which presupposes a viewer's '*imagined* visual omnipotence'. It was this panoptic concept of spectatorship that prompted Anne Friedberg's turn to the flâneur/flâneuse for visual culture studies (1998: 256).

remind viewers that an image of the villain's face would be informative indeed. These instances thus self-reflexively point to the serial's paradox of a presentational practice of showing everything on the one hand and a rule of the camera perspective that veils elements on the other. As Gunning phrases it in another context, 'visuality and obscurity *together* define detective fiction and films' (2005: 74; italics in the original). Whereas the serial's diegetic technologies such as the vocophone, the seismograph, or the hidden camera monitor and record traces, the camera perspective that enables the story manages the visibility and obscurity driving its narrative. This relation becomes especially pointed in chapter nine, 'The Death Ray', an episode that features a diegetic visual mechanism that rather closely resembles early film and that furthermore illustrates the relation of surveillance and moving image reception to the operational aesthetic and cinematic seriality.

The episode begins with a threatening letter from the Clutching Hand urging Elaine and Bennett to discharge Kennedy and have him leave the country. If the detective refuses to do so, the villain promises that a pedestrian will die outside of his laboratory every hour the following day. On the same day, Kennedy's recently ordered periscope is delivered to the laboratory. The detective explains how it works to Jameson in a scene that details the functioning of the mechanism and its installation in the window. After this introduction, the periscope is put to the task in a longer sequence in which the protagonists witness two pedestrians collapsing in the street. Both of them have been murdered by two of the Clutching Hand's co-conspirators, who operate a 'death ray' from another building. The death ray closely resembles the spotlights used in film production, but in the narrative world of the serial it issues a lethal beam of light, aimed with the help of regular binoculars. Overall, the scene pits multiple means of surveillance against each other: the detective surveils the street through the vocophone, whereas the villains monitor both the street to aim their weapon and Kennedy's laboratory to check whether he signals his defeat.

The periscope in this chapter resembles a window mirror, a mechanism that Gunning describes was popular in nineteenth-century France. At the time, inhabitants of urban apartment buildings installed special mirrors in their windows to monitor their front doors. Relating it to Benjamin's notion of the *intérieur*, Gunning considers the window mirror a mechanism that made the exterior accessible to the inside space. He stresses that 'ultimately, the interior cannot withstand the exterior, it can only transform the nature of its looming invasion optically' (2003: 107). The window mirror symbolizes a relation between *intérieur* and outside spaces that resembles the one instantiated by the vocophone. It secures the *intérieur* by enabling a view



19. Jameson installs the periscope in the window (THE EXPLOITS OF ELAINE, episode 9, 'The Death Ray').

of the front door, but it also threatens it by referencing the outside and, to an extent, letting that world access the *intérieur*. That access of the outside, through both the window mirror and the detective's periscope, is always mediated. Gunning arrives at a similar conclusion concerning optical toys more generally when he argues that 'the nineteenth-century parlor became [...] the locus of optical devices and philosophical toys of all sorts—the stereoscope, the kaleidoscope, the magic-lantern—that seem to open the viewer's gaze onto a different world, but only under the dominion of the image and semblance' (p. 107).

Kennedy's laboratory is no typical secluded parlor but a thoroughly modernized space. Nevertheless, the periscope transforms the vision of the street and protects the laboratory space, particularly from the view of the villains; and the characters within the laboratory share the voyeuristic interest in the outside vision of Benjamin's nineteenth-century bourgeois Parisians. Jameson is the first one to see a pedestrian die in the street, and he alerts Kennedy to the scene. When the second pedestrian dies an hour later, Elaine and her lawyer Bennett have joined Jameson and Kennedy, and they all wait to witness the next murder. Instead of ending the spectacle by displaying the requested signal for his defeat in the window, Kennedy



20. The serial depicts the action on the street as it is framed by the periscope (THE EXPLOITS OF ELAINE, episode 9, 'The Death Ray').

calls his friends to see it happen again. His behavior in this instance reflects the basic premise of serial cinema, that is, the urge to see the next episode. The periscope removes Kennedy and his companions from the reality of the action on the street and thereby in a way obscures the macabre notion of the scene. Meanwhile, the serial's characters engage in a task that the serial's spectators know too well: the repeated engagement with a mediated image.

The characters' viewing of two high-angle takes of a street scene is again reminiscent of early film practices. Gunning refers to turn-of-the-century actuality shorts that showed streets that were familiar to their spectatorship. Advertisements for such films at the time stressed the possibility of watching these films numerous times, arguing that the repetition of the film would provide spectators with an opportunity to study the scene (Gunning 1997: 35). In a similar manner, Kennedy may be watching the repeated murder as a means to analyze the villain's approach. Watching a second pedestrian die verifies that the original incident really happened, and it provides Kennedy with an opportunity to study the incident. Repetition is therefore not simply a strategy of producing economically profitable popular-cultural artifacts, it is also a narrative strategy that influences the

film experience in multifarious ways. As Ruth Mayer stresses, 'by now, in the wake of Umberto Eco's and other critics' reflections on the principles of serial narration, it is almost a truism to insist on the productive effect of repetition and reiteration, especially in popular culture' (2014: 124). Admittedly, the view of the second murder is not an exact repetition but a highly reiterative second installment, because a second person is being murdered after all. However, even the exact repetition of already viewed actuality footage would engender a slight variation, as it designates the earlier viewing as the initial one. As Gilles Deleuze explains, exact repetition is impossible, as even with minute duplications the mere knowledge of the existence of a prototype, which with the existence of its double loses its singularity, necessarily alters the reception experience (2007: 15-25). Repetition and variation are thus necessarily intertwined, and their distinction is one of degree rather than kind (cf. Eco; Jahn-Sudmann & Kelleter 2012: 206). Serial narratives in general, but in particular the periscope scene in *THE EXPLOITS OF ELAINE*, propel the story forward through repetition, performing what Frank Kelleter terms 'the cultural work of repetitively varying narration' (2012a: 13).¹⁷ In a continuation of *ELAINE*'s efforts to demonstrate its own conditions of storytelling, the viewing of the second murder itself pinpoints how repetition changes its original, as the second murder affirms the villain's intention and persistence. Nevertheless, instead of becoming productive in its reformulation as variation, repetition itself and repeated viewing occasion an operational aesthetic by offering a means of analyzing the image. After all, Kennedy's view of the second murder enables him to analyze the ongoing action just as the serial's narrative formula reveals itself to returning viewers through its weekly repetition. The murder watched twice in *THE EXPLOITS OF ELAINE* points to the demonstrative, presentational quality of film serials, which spectators enjoy not despite their repetitive nature but because of it. In other words, in relation to both Kennedy and the film viewers, repetition turns the flâneur into a detective.

In this episode and in *THE EXPLOITS OF ELAINE* more generally, repetition takes on a number of functions, including, as the following paragraphs will illustrate, excess, outbidding, irony, and a self-reflexive engagement with seriality. First and foremost, repetition itself can be a source of pleasure. As Mayer points out when she describes possible modes of engagement with narratives about Fu Manchu, 'the ideal approach

17 The original quote, in German: 'Es geht um die kulturelle Arbeit wiederholt variierenden Erzählens selbst' (Kelleter 2012a: 13).

[...] is not to read for the plot, or rather, not to read for the plot alone. Yet the text does not foster analytical detachment either: It is all about the pleasures of recognition, actualization, reiteration and appropriation' (Mayer 2014: 95). Reiteration as such and its recognition inform the reception experience enabled by film serials in similar ways. The repeated, somewhat morbid viewing of the death of one, then a second pedestrian in *THE EXPLOITS OF ELAINE*, I argue, points to the pleasure of reiteration—a pleasure that likewise informs the experience of watching a film serial as a whole. Eco points to the pleasure of repetition when he recounts a past rejection of the study of mass-cultural artifacts in what he calls 'modern aesthetics':

A popular song, a TV commercial, a comic strip, a detective novel, a Western movie were seen as more or less successful tokens of a given model or type. As such they were judged as pleasurable but non-artistic. Furthermore, this excess of pleasurability, repetition, lack of innovation, was felt as a commercial trick (the product had to meet the expectations of its audience), not as the provocative proposal of a new (and difficult to accept) world vision. (Eco 1985: 162)¹⁸

More than a simple list of the supposed commercial tricks of popular culture, I consider Eco's notions of repetition and an excess of pleasurability as interdependent. After all, commercial popular culture naturally revels in the repetition of likeable elements that attract a returning audience. Excess, particularly of emotionality and pathos, is a significant element of film's melodramatic mode of storytelling, which originated in French stage traditions and informed American filmmaking in general and serials in particular (Brooks 1995; L. Williams 1998; Kelleter, Mayer, & Krah 2007; for melodrama and silent serials, see Singer 2001). The repetition of pleasurable, already excessive elements then constitutes the excess of serial narratives, which in a sense augment the excess of the melodramatic mode through its weekly reinforcement.¹⁹ At the same time, it is this weekly rendition that lays bare the process of melodramatic storytelling and thereby occasions the serial's operational aesthetic.

18 Although Eco is right that this distinction of repetition and innovation, mass culture and high art, did and does exist in scholarship, we have to bear in mind that three years prior to the release of *THE EXPLOITS OF ELAINE*, cinematic seriality itself was the innovation, just as repetition was the innovation with the street scene actualities described by Tom Gunning.

19 For a more detailed account of serials and melodrama, see chapter five of this volume.

While fostering melodrama, excessive repetition can also tend towards irony, and an ironic reading of the murder of two uninvolved pedestrians is another possible engagement with the scene. In his philosophical critique of repetition and difference, Deleuze argues that 'repetition is a thing of humor and irony' and that transgression and exceptionality are part of its nature (2007: 20). In the same vein, Frank Kelleter and Andreas Jahn-Sudmann acknowledge in their analysis of twenty-first-century television series that seriality at times provokes ironic readings. In their account, serial narratives 'repeatedly intensify the successfully established markers of distinction' that differentiate one series from another and as a result at times border on the socially unacceptable (2012: 207). In this context, irony emerges as a narrative's reaction to its own tendency to outbid both its own earlier episodes and other series (p. 214). In *THE EXPLOITS OF ELAINE*, spectacular thrill effects continuously aim to surpass the violence and sensationalist appeal of earlier episodes. Elaine is frequently bound and gagged; she shoots a henchman of the Clutching Hand; and we almost witness a secret blood transfusion to save that henchman, among other scenes that rival one another (episode six, 'The Vampire'). The two murders of unknowing, uninvolved bystanders take the violence of the serial and its diegetic villain to new extremes. Moreover, the increasing 'audience' of these murders, especially as Elaine and Bennett join to watch the second attack, foreground the voyeurism that is involved in outbidding. In this episode, the serial relieves its own combination of outbidding and repetition—and the resulting increase in violence—through a self-reflexive acknowledgment of its own repetitious character. The periscope scene thus exemplifies Kelleter and Jahn-Sudmann's argument that repetition as an originally 'quantitative operation [...] eventually culminates in meta-serial intelligence' (p. 208). The result of such meta-serial moments is a narrative practice that the authors, with reference to Jason Mittell, call an 'operational' or 'procedural' aesthetic that foregrounds the mechanics of storytelling (p. 213).

The viewer's recognition of repetitive filmic practices precludes neither an appreciative reception experience nor ironic readings. Nevertheless, the engagement with the serial narrative takes place with the viewer's full knowledge of the story's commercial, episodic character. Kelleter and Jahn-Sudmann consider this awareness itself a result of outbidding and, more generally, of scenes that emphasize their own serial structure and options for continuation. The authors further stress the importance of such meta-serial reflections for studies of serial narratives, arguing that 'if we want to understand how invariance and variability interrelate, we

should also consider the *recursive dynamic* of serial narratives, that is their tendency to (medial) self-observation' (2012: 207).²⁰

In ELAINE's tenth episode, this meta-seriality coincides with the self-reflexive acknowledgment of the media apparatus through the periscope image and the integration of the spotlight, which doubles as the villain's 'death ray', in the frame. The view that the periscope provides resembles filmic perception in its fixed visual frame and perspective, and because it enables communal viewing.²¹ By way of referencing the filmic apparatus, the serial foregrounds not only its own seriality but cinema's capacity for serial storytelling more generally. It highlights the fact that film allows for repetition in a way that is in line with the advertisement of the repeated viewing of actualities as described by Gunning. Twenty years into the history of motion picture projection, THE EXPLOITS OF ELAINE stressed a capacity that characterized the filmic medium from the start. This curious correlation of retrospectivity and the comparative novelty of film serials in fact resonates with the paradoxical challenge of 'practicing reproduction as innovation' that serial narratives face more generally (Jahn-Sudmann and Kelleter 2012: 207). The distinction of repetition and variation collapses at this point as THE EXPLOITS OF ELAINE, very much in line with Deleuze's observations on repetition, turns repetition into a novelty (cf. Deleuze 2007: 20-21).

Instead of enabling detection through broad overview perspectives, THE EXPLOITS OF ELAINE rehearses the viewers' efforts of detection through a repetitive weekly application and practice. The serial thereby makes up for the rejection of supervision that it shares with other silent-era serials (cf. Brasch & Mayer: 2016). It replaces high-angle views with point-of-view shots, thereby urging the viewers to arrive at an understanding of the portrayed spaces for themselves. THE EXPLOITS OF ELAINE thus harks back to viewers' detective efforts of earlier decades. As mentioned before, Gunning connects the analytic affordances of the detective with repetition when he quotes an 1896 advertisement for a film projector called the Jenkins Phantoscope, which highlights the possibility for repeat viewings and thereby evidences how the advent of the motion picture transformed modernity's kaleidoscopic

20 Original quote: 'Möchte man verstehen, wie sich Invarianz und Variabilität in Serien zueinander verhalten, sollte man auch die rekursive Dynamik serieller Erzählungen berücksichtigen, also ihren Hang zur (medialen) Selbstbeobachtung oder abstrakter gesprochen: das eigendynamische Moment ihrer Evolution, ermöglicht durch ein konstant mitlaufendes Reflektieren auf die Bedingungen und Möglichkeiten der eigenen Fortsetzbarkeit' (Jahn-Sudmann & Kelleter 2012: 207).

21 In a more futuristic reading, it also points to the live-experience enabled later by television and to its placement in the communal parlor.

viewings of endlessly reorganizing street scenes: 'The motion picture intervenes on this scene, not by organizing it, but by capturing it in a form which allows endless repetition, opening the way for a studied apperception' (Gunning 1997: 35).

Meanwhile, ELAINE's weekly introduction of a new technology offers both variation and a means of reflecting upon a mechanism's respective means of monitoring or recording. The latter results in a reflection of the perspective of surveillance itself. Gunning describes this activity in the context of Benjamin's writing on the panopticon: 'The nineteenth-century detective not only observes and investigates but also—at least potentially—investigates his or her point of view' (2003: 110). The spectating position of the detective thus implies a recursive moment that reflects its own perspective of observation, detection, or surveillance. Whereas all films potentially invite such recursive self-reflexivity, its weekly rehearsal in *THE EXPLOITS OF ELAINE* not only enables film viewers to become detectives but trains and reinforces their detective skills. Whereas the emerging feature film was aimed at single viewings, the film serial capitalized on seriality's dialectic of repetition and variation. The variation between individual episodes provided an opportunity to transpose the analytic benefits of repetition while integrating it—in the form of succeeding rather than straightforwardly repeating chapters—into the changing realities of motion picture exhibition.

Because of its introduction of novel or fictional mechanisms and the concomitant self-reflexivity of cinematic narration and presentation within the highly repetitive form of the film serial, *THE EXPLOITS OF ELAINE* particularly encourages and rewards its viewers' efforts at operational detection. Instead of having the diegetic detective interpret the clues for the film viewers, the camera grants the viewers a look for themselves and thereby turns them into detectives in Benjamin's sense of the term. In the long run, the frequent repetition of the serial's form and of the viewer's assigned task provides the viewing experience with a machinic momentum, which defines the operability of the detective effort and which, in its intensity, is unique to film serials and which continued to inform them long after *THE EXPLOITS OF ELAINE* played in local cinemas.

Bibliography

- As Seen Through a Telescope*. Dir. George Albert Smith. G.A. Smith, 1900.
A Trip to the Moon. Dir. Georges Méliès. Perf. Blouette Bernon, François Lallement, Georges Méliès. Star Film Company, 1902.

- Benjamin, Walter. 1999. *The Arcades Project (1927-1940)*. Translated by Howard Eiland and Kevin McLaughlin. Cambridge, MA: The Belknap Press of Harvard University Press.
- . 2003a. "On Some Motifs in Baudelaire (1940)." In *Walter Benjamin: Selected Writings*, edited by Howard Eiland and Michael W. Jennings, Volume 4, 1938-1940: 313-55. Cambridge, MA: Harvard University Press.
- . 2003b. "The Paris of the Second Empire in Baudelaire (1938)." In *Walter Benjamin: Selected Writings*, Volume 4, 1938-1940: 3-92. Cambridge, MA: Harvard University Press.
- Brasch, Ilka, and Ruth Mayer. 2016. "Modernity Management: 1920s Cinema, Mass Culture and the Film Serial." *Screen* 57 (3).
- Brooks, Peter. 1995. *The Melodramatic Imagination: Balzac, Henry James, Melodrama, and the Mode of Excess*. New Haven: Yale University Press.
- Buck-Morss, Susan. 1989. *The Dialectics of Seeing: Walter Benjamin and the Arcades Project*. Cambridge, MA: The MIT Press.
- Dahlquist, Marina. 2013. "Introduction: Why Pearl?" In *Exporting Perilous Pauline: Pearl White and the Serial Film Craze*, edited by Marina Dahlquist, pp. 1-24. Chicago: University of Illinois Press.
- Deleuze, Gilles. 2007. *Differenz und Wiederholung*. Paderborn: Fink.
- 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.
- Denson, Shane, and Ruth Mayer. 2012a. "Bildstörung: Serielle Figuren Und Der Fernseher." *Zeitschrift Für Medienwissenschaften* 7 (2): 90-102.
- . 2012b. "Grenzgänger: Serielle Figuren Im Medienwechsel." In *Populäre Serialität: Narration – Evolution – Distinktion*, edited by Frank Kelleter, pp. 185-203. Bielefeld: transcript.
- Dick Tracy*. Dir. Alan James and Ray Taylor. Perf. Smiley Burnette, Ralph Byrd, Kay Hughes. Republic, 1937.
- Douglas, Diane M. 1982. "The Machine in the Parlor: A Dialectical Analysis of the Sewing Machine." *The Journal of American Culture* 5 (1): 20-29.
- Eco, Umberto. 1985. "Innovation and Repetition: Between Modern and Post-Modern Aesthetics." *Daedalus* 114 (4): 161-84.
- Fantômas*. Dir. Louis Feuillade. Perf. Edmund Breon, Georges Melchior, René Navarre. Gaumont, 1913.
- Friedberg, Anne. 1993. *Window Shopping: Cinema and the Postmodern*. Berkeley and Los Angeles: University of California Press.
- . 1998. "The Mobilized and Virtual Gaze in Modernity: Flâneur/ Flâneuse." In *The Visual Culture Reader*, edited by Nicholas Mirzoeff, pp. 253-62. London and New York: Routledge.
- Gunning, Tom. 1995a. "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.
- . 1995b. "Tracing the Individual Body: Photography, Detectives, and Early Cinema." In *Cinema and the Invention of Modern Life*, edited by Leo Charney and Vanessa R. Schwartz, pp. 15-45. Berkeley and Los Angeles: University of California Press.
- . 1997. "From the Kaleidoscope to the X-Ray: Urban Spectatorship, Poe, Benjamin, and Traffic in Souls (1913)." *Wide Angle* 19 (4): 25-61.
- . 2003. "The Exterior as Interieur: Benjamin's Optical Detective." *Boundary 2* 30 (1): 105-30.
- . 2005. "Lynx-Eyed Detectives and Shadow Bandits: Visuality and Eclipse in French Detective Stories and Films before WWI." *Yale French Studies* 108: 74-88.
- Hansen, Miriam. 1987. "Benjamin, Cinema and Experience: 'The Blue Flower in the Land of Technology.'" *New German Critique* 40: 179-224.

- Interrupted Lovers*. Dir. William Heise. Edison, 1896.
- Jahn-Sudmann, Andreas, and Frank Kelleter. 2012. "Die Dynamik Serieller Überbietung: Amerikanische Fernsehserien Und Das Konzept Des Quality-TV." In *Populäre Serialität: Narration – Evolution – Distinktion: Zum Seriellen Erzählen Seit Dem 19. Jahrhundert*, edited by Frank Kelleter, pp. 205-24. Bielefeld: Transcript.
- Kelleter, Frank. 2012. "Populäre Serialität: Eine Einführung." In *Populäre Serialität: Narration – Evolution – Distinktion: Zum Seriellen Erzählen Seit Dem 19. Jahrhundert*, pp. 11-46. Bielefeld: transcript.
- Kelleter, Frank, Ruth Mayer, and Barbara Krah, eds. 2007. *Melodrama! The Mode of Excess from Early America to Hollywood*. Heidelberg: Universitätsverlag Winter.
- The Kiss or May Irwin Kiss*. Dir. William Heise. Perf. May Irwin, John Rice. Edison, 1896.
- Klein, Amanda A. 2016. "The Kissing Cycle, Mashers, and (White) Women in the American City." In *Cycles, Sequels, Spin-offs, Remakes, and Reboots: Multiplicities in Film and Television*, edited by Amanda Ann Klein and R. Barton Palmer, pp. 22-40. Austin, TX: University of Texas Press.
- L'Arroseur Arrosé*. Dir. Louis Lumière. Perf. François Clerc, Benoît Duval. Lumière, 1895.
- Mayer, Ruth. 2014. *Serial Fu Manchu: The Chinese Supervillain and the Spread of Yellow Peril Ideology*. Philadelphia: Temple University Press.
- McQuire, Scott. 1998. *Visions of Modernity: Representation, Memory, Time and Space in the Age of the Camera*. London: SAGE.
- Motion Picture News*. 1914. "Pathé Serial Marks Era in Film History," December 19.
- . 1915a. "Remarkable Mechanical Devices Used in 'Elaine,'" March 6.
- . 1915b. "Banquet Ends Pathé Exchange Convention," July 31.
- Motography*. 1915. "Remarkable Machines Shown," March 6. Media History Digital Library.
- Münsterberg, Hugo. 1915. "Why We Go to the 'Movies.'" *Cosmopolitan*, December. HathiTrust.
- Officer 444*. Dir. Francis Ford. Perf. Al Ferguson, Neva Gerber, Ben Wilson. Ben Wilson/Goodwill, 1926.
- Panek, LeRoy Lad. 2006. *The Origins of the American Detective Story*. Jefferson, NC: McFarland.
- Pangburn, Clifford H. 1915. "The Exploits of Elaine (Pathe – Fifth Episode)." *Motion Picture News*, February 6.
- Photographing a Female Crook*. Dir. Wallace McCutcheon. American Mutoscope & Biograph, 1904.
- Poe, Edgar Allan. 1841. "The Purloined Letter." In *The Works of Edgar Allan Poe, Vol. 1*, edited by John H. Ingram, pp. 494-513. London: A&C Black.
- Schwartz, Vanessa R. 1998. *Spectacular Realities: Early Mass Culture in Fin-de-Siècle Paris*. Berkeley and Los Angeles: University of California Press.
- Singer, Ben. 2001. *Melodrama and Modernity: Early Sensational Cinema and Its Contexts*. New York: Columbia University Press.
- Spigel, Lynn. 1992. *Make Room for TV: Television and the Family Ideal in Postwar America*. Chicago and London: University of Chicago Press.
- Stamp, Shelley. 2000. *Movie-Struck Girls: Women and Motion Picture Culture after the Nickelodeon*. Princeton: Princeton University Press.
- The Amazing Exploits of the Clutching Hand*. Dir. Albert Herman. Perf. Rex Lease, Ruth Mix, Jack Mulhall. Weiss, 1936.
- The Carter Case*. Dir. William F. Haddock, Donald MacKenzie. Perf. Marguerite Marsh, Herbert Rawlinson, Ethel Grey Terry. Oliver Films, 1919.
- The Dog Factory*. Dir. Edwin S. Porter. Edison, 1904.
- 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 House of Hate*. Dir. George B. Seitz. Perf. John Webb Dillon, Antonio Moreno, Pearl White. Astra/Pathé, 1918.
- The Kleptomaniac*. Dir. Edwin S. Porter. Perf. Aline Boyd, Phineas Nairs, Jone Stewart. Edison, 1905.
- The New Exploits of Elaine*. Dir. Louis J. Gasnier, Leopold Wharton, Theodore Wharton. Perf. Arnold Daly, Creighton Hale, Pearl White. Pathe, 1915.
- The Perils of Pauline*. Dir. Louis J. Gasnier and Donald MacKenzie. Perf. Paul Panzer, Pearl White, Crane Wilbur. Eclectic/Pathé, 1914.
- The Radio Detective*. Dir. William James Craft, William A. Crinley. Perf. Jack Dougherty, Jack Mower, Margaret Quimby. Universal, 1926.
- The Romance of Elaine*. Dir. George B. Seitz, Leopold Wharton, Theodore Wharton. Perf. Arnold Daly, Creighton Hale, Pearl White. Pathe, 1915.
- Trahair, Lisa. 2004. "The Narrative-Machine: Buster Keaton's Cinematic Comedy, Deleuze's Recursion Function and the Operational Aesthetic." *Senses of Cinema*, no. 33. http://sensesofcinema.com/2004/33/keaton_deleuze/#8.
- What Happened in the Tunnel*. Dir. Edwin S. Porter. Perf. Gilbert M. Anderson, Bertha Regustus. Edison, 1903.
- Williams, Linda. 1998. "Melodrama Revised." In *Refiguring American Film Genres: History and Theory*, edited by Nick Browne, pp. 42-88. Berkeley and Los Angeles: University of California Press.
- Workers Leaving the Factory*. Dir. Louis Lumière. Lumière, 1895.
- Young, Paul. 2003. "Media on Display: A Telegraphic History of Early American Cinema." In *New Media 1740-1915*, edited by Lisa Gitelman and Geoffrey B. Pingree, pp. 229-64. Cambridge, MA: MIT Press.
- Zimmer, Catherine. 2011. "Surveillance Cinema: Narrative between Technology and Politics." *Surveillance & Society* 8 (4): 427-40.
- . 2015. *Surveillance Cinema*. New York and London: New York University Press.

5. Repetition, Reiteration, and Reenactment: Operational Detection

Abstract

Chapter 5 studies the film serials of the 1920s, a so far uninvestigated decade of film serial production, with a focus on operational detection. *THE HOPE DIAMOND MYSTERY* (Kosmik, 1921), *THE POWER GOD* (Davis, 1925), *OFFICER 444* (Goodwill, 1926), and the sound serial *RADIO PATROL* (Universal, 1937) repeat footage, reiterate, or reenact instances and thereby self-consciously foreground formulaic narrative structures and practices of recycling. These circular recurrences of anecdotes encourage viewers to compare and contrast scenes and frames, enabling them to identify a serial's theme, its central concerns, or to detect its crime. All of these exemplary serials mobilize forms of repetition to enable viewers to detect a theme or enigma, both fostering and rewarding acts of operational detection. The chapter details how, in encouraging operational detection, serials offer their viewers a subject position that is located at the nexus of immersion, self-reflexivity, and embodiment.

Keywords: Repetition, seriality, operational detection, anecdotal storytelling, film serials of the 1920s

In investigations such as we are now pursuing, it should not be so much asked “what has occurred”, as “what has occurred that has never occurred before”. (Poe 1841a: 422)

Viewers of film serials can be compared to detectives who continuously observe, multiple times, but always carefully, a process that is not yet completed and that at times defies coherence. The task of the spectator-detective is to correlate and conjecture, to detect the correspondences, and to draw the connections that define the cause-and-effect relationships between individual narrative and visual fragments within a film serial. Taken from

Benjamin's conceptualization of the detective as a subcategory of the flâneur in the *Arcades Project* to the much more mediated realm of cinematic experience,¹ the viewer-detective's film reception takes into account the narrative and the technological affordances of the cinematic medium, as viewers connect both story fragments and the segments of film, that is, individual frames, scenes, or entire episodes of a serial. Film serials thus engage their viewers in a task that I call 'operational detection'. In a sense, operational detection reverses the investigative approach proposed in Edgar Allan Poe's 'The Murders in the Rue Morgue'. Traditional detective stories such as Poe's evolve around an enigma to be solved and a capable (though amateur) investigator to solve it. They respond to modernity's increase in acceleration, contingency, and anonymity by casting the detective as an organizer who, often retrospectively, combines individual observances into a coherent whole. In film serials, by contrast, crime and pursuit take place almost simultaneously, and the pursuers frantically and chaotically follow the developments instead of serving as correlational anchors (Mayer 2017: 21-22). The actual efforts to correlate and to make sense of the action on screen is relegated to the viewers, who take on the task of detection. In the serialized cinematic format, which defers resolution to the final episode, detection assumes an operational quality: the viewers' investigative efforts serve to make sense of ongoing processes, from episode to episode. Operational detection then describes their act of identifying correspondences, that is, repetitions, reiterations, and reenactments. This is why the viewers' approach to detection is the reverse of Detective Dupin's task in 'The Murders of the Rue Morgue': film serial audiences specifically ask 'what has occurred that *has* occurred before?'

This chapter will delineate operational detection as a subject position and mode of reception in four case studies: in the silent-era serials *THE HOPE DIAMOND MYSTERY* (Kosmik, 1921), *OFFICER 444* (Goodwill, 1926), and *THE POWER GOD* (Davis, 1925), and in the sound-era police serial *RADIO PATROL* (Universal, 1937). All of these serials offer thrilling film experiences within framing narratives that are propelled onwards from episode to episode but that are also highly repetitive. Instead of aiming to obscure repetition, these serials employ it in ways that correspond to the more generally presentist and presentational character of film serials as outlined in chapter three. Their narrative and visual references of earlier instances within the same serial encourage viewers to draw connections and compare scenes

1 For a more detailed account of film serial viewers as detectives, see chapter four of this volume.

beyond the chronological succession of episodes. Such references occur on various levels, which I will distinguish by referring to them as repetitions, reiterations, or reenactments. Each episode of a serial repeats basic narrative information to help audiences understand the plot and remind them of important character constellations, and it usually also repeats part of the cliffhanger of the preceding week. Additionally, many serials and their individual episodes reiterate narrative information, themes, or discourses from media outside of this particular film. The four examples, moreover, reenact instances from their own previous installments, providing near duplicates of earlier scenes that encourage comparison and contrasting. Especially these latter instances of reenactment, as I will show, capitalize on and foster operational detection, and they encourage the viewers' reflexive engagement with serial storytelling.

Serials employ repetition, reiteration, and reenactment to evoke affective impulses and, over time, to intensify affect by reinstating and pressurizing particular emotional states. As a side effect, serials thereby challenge established paradigms of film viewing. They invite and reward a mode of reception that is more detached than immersion but also more engaged than a film experience in the form of Brechtian alienation. Moreover, operational detection places film serials at the conceptual threshold of a 'cinema of attractions' and 'classical Hollywood.' Therefore, before illustrating operational detection in film serials of the 1920s and 1930s, I will take a step back and detail the possible effects of various filmic forms of reprise for the viewer. First, I will show how repetition and correlation were pivotal to the transformation of the filmic medium from sensational apparatus to transparent conveyor of moving images, and thus explain the situation of operational detection between the conceptual extremes of immersion and alienation, which particularly informs film serials. Second, I will relate the serials' use of repetition, reiteration, and reenactment to their indebtedness to melodrama as a body genre. The serials' exhibitionist uses of the three forms of reprise foster affect in ways that self-consciously stress the embodied over the immersed viewer. Therefore, in order to illuminate how filmic forms of reprise help to invoke the viewers' affective responses, I will take cues from the study of another body genre: pornography, arguably one of film's most repetitive and reiterative of genres.

This conceptual framework will enrich the passages afterwards, which illuminate how *THE HOPE DIAMOND MYSTERY*, *OFFICER 444*, *THE POWER GOD*, and *RADIO PATROL* each resort to repetition, reiteration, and reenactment to evoke physical sensations and to engage their audiences in a reception experience that is both emotionally and analytically engaging.

Contemplation, Immersion, and Body Genres

Historically, film serials emerged as a part of what has been termed transitional cinema (Hansen 1994). However, rather than recognizing the transitional period in terms of a shift in which the earlier form—the cinema of attractions (Gunning 1986)—was replaced by its successor, classical Hollywood, the following pages consider film's transition to be a shift from one mainstream to another, in which both filmic styles and their respective modes of engagement continue to exist. Within their early years and throughout the studio era, film serials combined elements of both. When considered not as chronologically superseding eras of filmmaking but as two distinct cinematic styles, the 'cinema of attractions' and 'classical Hollywood' can be imagined as constituting two ends of a scale along the lines of which individual films can be aligned—regardless of their respective dates of production. Defined as such, both film styles provide vocabulary that helps to sketch the cinematic style of and mode of engagement with film serials.

Tom Gunning determines the years between 1895 and 1907 as the period of the 'cinema of attractions'—a time when the fascination of film viewing rested on the spectacular novelty of the apparatus and on the fact that it enabled the projection of moving images (cf. 1986, see also chapter two of this volume). Films were mostly shown as a part of variety shows, which contrasted their technological projection with live acts such as vaudeville sketches and sing-alongs. This method of programming foregrounded film's mediality, and the films themselves incorporated a corresponding notion of display when actors directly faced the camera or through trick filming, which particularly exemplified the possibilities of the new form. These films invited their audiences to engage with cinema as an opaque medium instead of immersing them in a narrative world. Nevertheless, as Shane Denson asserts, an audience's appreciation of a visual trick or their surprise about an actor's look at the camera depend on the 'referential potential' of the filmic medium, that is, on the knowledge that film has the capacity to immerse its spectators in a narratively enclosed fictional environment. Therefore, the equation of the cinema of attractions and medial opacity and its juxtaposition against a 'classical Hollywood' that casts the filmic medium as fully transparent is by no means absolute or accurate, but a mere simplification (Denson 2014a: 63-66).

Nevertheless, early film bears a tendency towards opacity that was inverted by 1917 (Denson 2014a: 66). Classical Hollywood cinema, the kind described by Bordwell, Thompson, and Staiger as firmly in place by then, 'idealizes absorption into the diegetic world' (Denson 2014a: 60; cf. Bordwell,

Staiger, & Thompson 1985). Instead of engaging with the filmic medium, spectators now watch particular films, which often direct less attention to their own technological mediation. Viewers are no longer concrete beings sharing a physical theater space with the cinematic apparatus; they are film's 'implied spectator', an abstraction devoid of gender, class, race, or physiological differences (Denson 2014a: 66-67).

Serials emerged during the period between the two mainstreams of viewer address, that is, roughly between 1909 and 1917,² when the transition in film style, exhibition, and technology registered differently with individual spectators (Denson 2014a: 60-61). Beginning with Edison's *WHAT HAPPENED TO MARY* (1912) and the releases of the serial craze that peaked in 1914 and 1915, serials exploited the possibilities of immersion and attraction, developing their own style and mode of address that existed and thrived until the mid- to late 1940s.³ Serials thus verify Charlie Keil's assertion that in the transitional era 'the erratic process of devising effective storytelling devices often results in an aesthetic beholden to neither the attractions nor the classical phase' (2006: 196). The style and mode of address that film serials formulated borrowed aspects from film's earliest years and from transitional-era strategies of narrative containment. Tracing these elements enables an understanding of their particular and at times peculiar use of repetition, reiteration, and reenactment—elements that especially harken back to turn-of-the-century filmmaking.

Moving beyond Gunning's establishment of the technological apparatus as early film's true 'attraction', Charles Musser appraises the importance of narrative in early films and proposes to consider them 'a cinema of contemplation' and 'a cinema of discernment in which spectators engage in intellectually active processes of comparison and judgment' (2006: 160). The act of contemplation results from an exhibition practice that was common before the turn of the century, when films of about twenty-second length were shown in loops. Viewers observed, for instance, the motions of water running down a waterfall. According to Musser, 'such sustained presentations also encouraged spectators to contemplate and explore the image. As this evidence suggests, one way that early audiences were meant to look at films was not unrelated to the way they were meant to look at

2 The dates demarcating American cinema's transitional era are disputed. I follow Denson in locating the period between 1909-1917, who takes the periodization from Miriam Hansen. For more information on the periodization see Denson 2014a: 72, fn 24.

3 For a historical overview of film serial style and mode of address, see chapter three of this volume.

paintings' (p. 162). Contemplative film viewing is therefore rooted in an aesthetic appreciation of the moving image and is by no means dependent upon narrative. Musser ascertains that it is indeed the repetitive engagement with a looped moving image that enables the transformation of an initial shock experience or 'attraction' into contemplation (p. 167). A similar effect of repetition informs the weekly rehearsal of a formula in a film serial's episodes, which encourages the viewers to acknowledge its operation. Part of the exclusion of film serials from the 'classical' corpus may indeed be the result of their aesthetic appreciation not being rooted in carefully orchestrated narrative intricacy but in the ready identification of their formula through its weekly rehearsal.

A second mode of engagement with turn-of-the-century film that Musser outlines—the 'cinema of discernment'—similarly results from a rehearsal of film reception. The medium naturally lost its spectacular character as viewers returned to sites of film exhibition and as film viewing became a regular part of urban life in the United States. Taking *THE BLACK DIAMOND EXPRESS* (Edison, 1896) as an example, Musser explains that such films of onrushing trains were also shown in loops. In order to interest theater patrons who had already seen the film or comparable ones, exhibitors spoke to the audience about the details of the train, for example speed records (2006: 169). This and other practices, such as Edison's filming of sequences from stage performances that encouraged viewers to compare between "the original" and its reproduction' (p. 165), newspaper critics' comparisons of the different roles played by the same actor or of different actors in similar roles, or the comparison of different films depicting trains at full speed, testify that visitors engaged in more intricate viewing activities than simply being stunned (p. 171). Musser reminds us that

Early film spectators performed significant intellectual activity involving comparison, evaluation and judgment—as opposed to (or simultaneously with) either the enraptured spectator passively contemplating a beautiful picture or the "gawker [...] held for the moment by curiosity and amazement". [...] Spectators were not just given over to visceral states of astonishment or contemplation: They were critically active. (p. 170)⁴

In its inaugural decade, film thus already offered the delights connected to repetition (of entire shorts), reiteration (of material seen or information generated elsewhere), and reenactment (of scenes from stage plays on film,

4 Musser cites Tom Gunning in this quote (Gunning 1994).

or in remade films). Such practices surface in different ways again and again throughout the history of cinema, not only in film serials but in all aspects of Hollywood's remaking culture.⁵ In film serials, *THE MILLION DOLLAR MYSTERY* (Thanouser, 1914) is a particularly apt example of critical film viewing, as the repetition of a narrative formula and the reiteration of story elements in each episode schooled the devout fan Ida Damon to such an extent that it allowed her to plot the serial's concluding episode.⁶ Musser describes a similar effect of rehearsal or education: 'Returning to the theater to see films for a second time did not necessarily mean the theatergoer was seeking some vestige of astonishment. S/he was now becoming an authority, a sophisticate.' (2006: 171). These are the viewing practices that the film serials of the 1910s, with their formulaic stories and interactive fan cultures, capitalized on. Despite lacking the means to channel and market fan articulation, serials of the 1920s continued to invite comparative viewing and critical reflection through their use of repetition, reiteration, and reenactment.

Serials thus activated formal, narrative, and visual elements in ways that are comparable to early film practices. In other words, serials continued these practices into studio-era film production before and after the transition to sound. Scott Higgins similarly ascertains the relevance of repetition for the sound serial, in an argument that can be extended to silent-era releases:

[C]ompression and repetition work together in the sound serial to forge a cinematic world at once clear, direct and single minded but also frantic, compulsive and focused to the point of obsession. To a certain extent, the long running time and interrupted viewing of a fifteen-chapter serial makes redundancy unavoidable. Each episode must quickly reacquaint returning viewers with characters and their traits, while new viewers need to be brought up to speed. A practical concern for clarity between episodes, however, does not explain the exhaustive repetition within each chapter. (2016: 36)

Instead, repetition is a characteristic trait of sound-era serials, which, according to Higgins, offer alternative pleasures to the norms of narrative integration that many scholars and fans associate with American films of the studio era (p. 4). He takes the second episode of *FLASH GORDON* (Universal, 1936) as an example, which clarifies Ming the Merciless' (Charles Middleton)

5 'Remaking', in Frank Kelleter's and Kathleen Loock's definition of the term, includes remakes but also sequels, prequels, etc. (Loock 2016).

6 For more details on Ida Damon, see chapter three of this volume.

plan to marry Dale Arden (Jean Rogers) seven times within fifteen minutes (p. 36; *FLASH GORDON*, episode two, 'The Tunnel of Terror'). In this episode, the narrative exceeds the amount of repetition that is necessary to keep viewers up to date substantially. With reference to Bordwell, Higgins concedes that films of the classical style also repeat important pieces of information to ensure that viewers can follow the story. However, feature films try to avoid attracting attention to these reinforcements of plot information. Film serials, by contrast, resolutely and unashamedly repeat and reiterate, in the sound serials Higgins describes (pp. 36-37) as well as in silent serials like *THE EXPLOITS OF ELAINE* (Pathe, 1915), as the previous chapter has shown, and certainly in the 1920s. This refusal to hide the fact of narration—that is, to favor presentation over representation—and the less immersed reception of serial spectators are mutually dependent. Higgins describes the relationship of a self-conscious narrative and repetition as follows:

Unlike features, serial narration tends not to recede to the background. The declarative, presentational address of an episode's opening recap and closing cliffhanger makes way for directive and empathic storytelling throughout each chapter. An episode's narrative compression creates a kind of situational intensity; all roads lead to the next crisis. In this narrational environment, repetition pressurizes the problem space; each mention amplifies the deadline's menace. Moreover, repetition and the five-part format help make the act of storytelling visible. Even as a chapter builds tension, viewers can recognize the game at hand and appropriate it to play outside the theater. (pp. 36-37)⁷

Film serials thus employ repetition as a means to insist on and reinforce the intensity of their action plots. They offer prolonged thrill rides across numerous action sequences that are narratively integrated into a chain of episodes but that also self-consciously rehearse numerous ways of reinforcement and reprise. Placed on an imagined scale between the hermeneutic engagement with 'attractions' and its supposedly classical counterpart, film serials indeed appear right at the center: audiences discern⁸ the plot through

7 In *Matinee Melodrama*, Higgins explains that sound serial episodes are often organized in terms of a five-part structure: they begin with an action sequence, followed by a dialogue sequence, the episode's 'middle action', and another dialogue sequence before the episode's final cliffhanger. Serial episodes are thus organized as 'AbCdE', with capitalized letters standing for action and lower-case letters symbolizing dialogue sequences (2016: 29-35).

8 Quite aptly, Merriam Webster's online dictionary describes 'to discern' as 'to detect with the eyes'.

its weekly reinforcement and serials present their narratives as though they were attractions, never letting an immersive narrative conceal the fact of its own 'narrated-ness'. This combination of repetition and presentational narration is a prerequisite for the viewers' efforts at operational detection.

A similarly presentational style of narration informs some transitional-era films that are not part of an advertised serial or series. In a study of D.W. Griffith's *THE LONEDALE OPERATOR* (1911), Gunning identifies repetitions at the level of individual shots, often highlighted by means of tinting. These repetitions foreground both the film's editing techniques as well as its narrative structure: "THE LONEDALE OPERATOR not only is systematic in telling its story but also foregrounds its formal system through repetition, alternation, and rotation" (Gunning 2004: 23). It is this midway between an immersed state of film viewership and a more self-aware experience of the film technology as opaque that serials embrace. Whereas comparable instances also occur within studio-era feature productions, film serials intensify this middle state and turn it into a trademark characteristic.

Film serials' unique approach to storytelling relies on a combination of 'compression and repetition', in Higgins' words. This combination is somewhat paradoxical, as repetitions are the likeliest elements to be removed from a condensed, compact narrative form. Yet the dialectic of self-conscious, presentational narration and the serials' evocation of thrill both depend on repetition. In other words, it is because of repetition that serials both display the fact of narration but nevertheless foster affect. In order to examine the evocation of affective responses, I turn to ideas from the study of another genre that draws on repetition: pornography. In *Pornography and Seriality*, Sarah Schaschek describes the relevance of recurrence, compression, and formulaic narrative with reference to Susan Sontag:

As a film genre, pornography derives a great portion of its pleasure from the recurrence and predictability of its images, and the meaning of the formulaic structure of the genre cannot be underestimated. "It is the nature of the pornographic imagination to prefer ready-made conventions of character, setting and action", Susan Sontag writes in her 1967 essay on "The Pornographic Imagination". The pornographic universe, she adds, is incomparably economical. Basically, in order to be arousing, "everything must bear upon the erotic situation", even if this means risking a "fatiguing repetitiveness". (Schaschek 2013: 2)⁹

9 Schaschek acknowledges that Sontag originally wrote about pornographic literature, which nevertheless bears a similar tendency of formulaic narratives and repetition.

In other words, pornographic film resorts to established narrative formulae to reduce the story time in favor of an iteration of visual elements that foster a viewer's arousal. Repetition and compression work together to provoke the physical responses that are at the core of the consumption of pornographic films (pp. 40-46). Sontag and Schaschek describe a narrative set-up that resembles film serials in that both forms sidetrack innovation to the benefit of affect. However, whereas the affects of porn culminate in the viewers' arousal, film serials aim to maximize thrills.

Serials thus adopt a narrative strategy that they share with other forms geared towards affect. Linda Williams has prominently identified such forms as 'body genres', which generally exceed the confines of a classical Hollywood film style (1991; cf. Schaschek 2013: 40). Taking porn, horror, and the 'women's film' as examples, Williams stresses that body genre films tend to display 'the spectacle of a body caught in the grip of intense sensation or emotion', and they register in their viewers' bodies respectively with 'sexual pleasure, fear and terror, or overpowering sadness' (L. Williams 1991: 4). Instead of articulating their experiences and feelings with language, the audience's reactions to these films are marked by pre-reflective utterances including the gasps and moans of porn, screams of horror, or the sounds related to crying in melodrama (p. 4). Notably, the narratives of these films are 'marked by "lapses" in realism, by "excesses" of spectacle and displays of primal, even infantile emotions, and by narratives that seem circular and repetitive' (p. 3; quoted in Schaschek 2013: 40).

Williams particularly considers melodrama a body genre. At the same time, melodrama is the narrative mode that scholars such as Ben Singer and Scott Higgins have identified as the bedrock of the blood-and-thunder narratives of film serials from *THE PERILS OF PAULINE* (1914) to *THE PERILS OF NYOKA* (1942) (Singer 2001; Higgins 2016). In fact, just as film serials benefit from the repository of transitional-era filmmaking, the generic elements and narrative styles of melodrama provide a sourcebook not only for the production of film serials but, as Williams stresses, for most if not all American films. And again, whereas the 'superficial realism' of American features may cloak their nineteenth-century stage heritage (L. Williams 1998: 42), film serials unabashedly employ, reemploy, and stage melodrama especially through the weekly rehearsal of the episode formula. This presentational foregrounding of melodramatic strategy results in a double-edged film experience, which capitalizes on the thrill and pathos of melodrama and simultaneously explicates their creation. This duality results from the fact that serials use repetition in ways that harken back to melodrama's evocation of affect on the one hand, and foster discernment on

the other (cf. Musser 2006). Serials thus simultaneously demand emotional investment and contemplative reception practices and thereby encourage viewers to conduct operational detection not only of the plot but also of the affordances of the medium and the ways it fosters affect.

In a way, this duality of discernment and affect is inherent in the multiple uses of the term ‘embodiment’ in film scholarship. Shane Denson points to the difference between its definition in phenomenological studies of human-technology relations and in analyses that counter psychoanalytic or semiotic film theory, such as feminist film scholarship (2014a: 59-60). The latter take ‘embodiment’ to refer to non-diegetic film viewers and their awareness of being physically present in the literal space of the theater. This self-aware state of physical embodiment, Denson stresses, is the opposite of what philosophers of phenomenology have described with reference to Don Ihde as ‘embodiment relations’, in which viewers incorporate a prosthetic technology into their subjectivity. Their attention and intentionality then bypass the technology, which enables their immersion or absorption into a world created on screen. Classical Hollywood film, in other words, increasingly ‘privileges phenomenological embodiment relations at the expense of spectators’ own embodiment’ (Denson 2014a: 60). Denson concludes that

the wedge of separation introduced by the segregation of filmic and theater spaces was thus lodged not between spectator and film but instead insinuated itself between an abstract spectator and the embodied viewer—between a normative viewing subject on the one hand and the physicality of theater, body, and film technology on the other. (p. 68)

It is this separation that film serials dismantle, as they capitalize upon but also frequently disrupt embodied relationships with film technology. Serials construct an implied viewer who is always cast as physically present in the concrete space of the theater and beyond it. This awareness of viewers as being embodied surfaces pointedly in the connection of serials to magazine and newspaper novels in the 1910s and comic strips in the 1930s, which extend the narrative into viewers’ lives outside of the theater, and in the elaborate lobby and window decorations and other ‘ballyhoo’ suggested in serial pressbooks. Instead of immersing viewers in the film experience and bypassing their awareness of the cinematic apparatus, serials branch out into the viewers’ non-filmic environment. Through its paratexts and ballyhoo, a serial’s narrative begins to share a life-world with its viewers,

and the cinema and the eras' multiple other media outlets are a part of that environment.¹⁰

In part, the serials' deviance from a more readily immersive model of spectatorship results from their division into episodes that reference each other and the broader context of the series or serial. The break between installments encourages an awareness of the cinematic mediation of the film as well as a critical reflection about the ongoing, unresolved narrative. A spectator's momentarily immersed state of reception is forcefully broken up with the presentation of an episode's ending or, more abruptly, with its cliffhanger. A large question mark on the screen or a 'see the next episode of xxx at this theater next week' not only reminds viewers of next week's episode but quite consciously points to the 'mediated-ness' of every episode—stressing that spectators themselves cannot control when to see the following episode. The previous state of immersion, however, itself existed only for a brief instant because the episode's beginning likely failed to engulf its viewers, due to its introduction of characters and re-caps of previous plots.¹¹ Instead of drawing viewers in, serials reach out to them, addressing them in their respective theater seats and even beyond, in their daily lives between a serial's individual installments. Thus, whereas a physical response such as a gasp in a thrilling situation might have disrupted the immersed state of an idealized film spectator, the serial viewer never became that absorbed in the first place. In this way, serials circumvent the separation of the filmic and the theater space and forfeit a clear distinction of physical embodiment and an embodied, or prosthetic, relation to the cinematic technology.

Serials reiterate a similar formula each weekly episode to an extent that directs attention towards both the formula and its repetitiousness. In this context, viewers may also reflect upon a serial's means of evoking affect, as thrills also occur on a regularized schedule and follow recurring patterns. The experience of watching a film serial is thus decidedly 'machinic': viewers watch the 'storytelling engine' at work; they witness its ever-repeated motion, which is itself an end rather than a means towards the delayed resolution of the story. In this sense, the viewers' activities

10 See chapter three of this volume. Whereas features similarly use ballyhoo, the extra-filmic life-world they create usually exists for a shorter period of time and does not unfold alongside the viewers' weekly personal routines.

11 We can understand the 'what happened last week' blurb at the beginning of episodes of television series as a way to 'bracket' the re-cap with its presentational address and thus further an immersive film experience afterwards. Film serials of the 1920s, however, often integrated the re-cap instead of framing it as extraneous to the episode.

of detection or discernment are indeed operational: viewers are invited to reflect upon the operation of the cinematic serial machine and upon their own engagement with its operation. As episodes follow one after the other, serials accumulate convoluted arrangements of characters, plots, schemes, and images. The result is a continuous negotiation of narrative explanation and occasional attempts at containment versus the rapid frenzy characterizing modernity at large. As Ruth Mayer has shown in her reading of *THE TRAIL OF THE OCTOPUS* (1919), the serial references the synoptic view and understanding of classical detectives such as Sherlock Holmes, but it shows the non-transferability of this set-up to the context of American serial cinema. These serials are hopelessly convoluted and they ‘explode[] the confines of linear narration’. The task of the viewer thus resembles the job of the now defunct diegetic detective, who was ‘relentlessly striving to turn chaos into order, processing random events of violence or loss as interlinked “cases” that needed to be assessed, correlated, and resolved’ (Mayer 2017: 23, 25). Serials invite such acts of detection, although without enabling actual possibilities of resolution, by encouraging viewers to cross-reference several instances across multiple episodes, outside of the serials’ weekly scheduling. As the following case studies will show, serials repeat, reiterate, and reenact instances to establish relations between narrative and visual elements outside of the serial’s release schedule and narrative chronology. Serials encourage a comparison of such instances, fostering discernment as well as affect, both of which combine into the pleasurable and thrilling activity of operational detection. The following case studies will be presented out of chronological order, beginning with *THE HOPE DIAMOND MYSTERY* (1921) and *OFFICER 444* (1926), which both structure their presentational address similarly, followed by *THE POWER GOD* (1925), which also encourages operational detection but without a directly proposed narrative agenda. Instead, the serial correlates scenes in a way that later occurs more pointedly in the 1937 sound serial *RADIO PATROL*.

The Two Serial Structures of *THE HOPE DIAMOND MYSTERY*

THE HOPE DIAMOND MYSTERY (1921) combines four different storylines in four settings, each of which centers around a valuable mineral called the Hope diamond. The serial’s initial scenes are set in Britain, where Lord Francis Hale (Captain C. Clayton) unsuccessfully attempts to buy the Hope diamond from an American merchant (William Marion) for his wife. The setting then switches to sixteenth-century Burma for an interlude that provides

the backstory of the French merchant Travanier (George Chesebro) and his theft of the diamond from an ancient religious idol. The eighth episode relocates to the United States in the 1920s, where a villain in yellowface (Harry Carter) attempts to steal the diamond from its owner, the American merchant from the early episodes set in Britain. The serial's final episodes are set on a remote island, where the chief villain, who has dropped his mock-Asian attire, once again endeavors to steal the diamond—this time by hypnotizing the merchant's young secretary Mary (Grace Darmond) and placing her under his spell. The four stories and settings differ in terms of their visual aesthetics, which range from showing a strong similarity to other film serials of the 1910s in the early scenes, to the elaborate acting in the Burmese setting, to a 1920s realism of the island setting.

Across its fifteen episodes, *THE HOPE DIAMOND MYSTERY* thus skips through four stories, with four sets of characters, whose interrelation results from the casting of the same actors in comparable roles in each story. Additionally, the stories connect through their shared myth of the Hope diamond, which in each story sparks greed and adulterous love relations. Juxtaposing these four stories, the serial manifests the immorality apparent in each of them as a direct effect of the diamond on its owners and on its pursuers. Conversely, the myth of the Hope diamond only comes into being because the viewers compare and contrast the serial's multiple storylines.

The serial itself points to the added value of a comparative reading in its third episode ('The Forged Note'). In a sequence set in early twentieth-century Britain, the American merchant lends the diamond to Lord Hale as its prospective buyer, before being placed in 'suspended animation' by a group of villains.¹² Knowing the merchant to be out of the way, Hales' servant Dakar (Boris Karloff) and the criminal Nang Fu both consecutively attempt to obtain the diamond by presenting Hale with a forged note from the merchant. However, the second trickster makes his attempt while the initial one is still in the house and thus spoils both of their schemes. The repeated attempt alerts Hale, who compares the handwriting on both notes and thereby detects the trick. Through close-ups of the notes, the viewers examine the notes and perform a task of comparison that resembles their efforts to correlate the serial's four story sections. Like Hale abstracted the trickery from its repeated application, viewers can detect the spell of the

12 Suspended animation was a means to temporarily render the villain powerless, which was also used at the end of *THE EXPLOITS OF ELAINE*, probably to justify the villain's return in *THE NEW EXPLOITS OF ELAINE*. In *THE HOPE DIAMOND MYSTERY*, suspended animation is used to put the character of the American merchant on hold until his return numerous episodes later.

Hope diamond from the threefold reenactment of its effects. Such a reading, however, is based on a perception of the serial's structure that differs from its release in fifteen consecutive episodes. In other words, *THE HOPE DIAMOND MYSTERY* combines two strategies of sequencing: on the one hand, the serial adheres to the multi-episode structure that was common for film serials at the time, replete with repeated plot and character introductions and cliffhangers endings, which I will refer to as formulaic seriality. On the other hand, the serial assembles its four sequences in a montage that is reminiscent of D.W. Griffith's *INTOLERANCE* (1916).¹³ I will refer to this latter organizational structure, in which individual stories connect with reference to a shared theme such as 'intolerance' or a myth such as that of the Hope diamond, as thematic seriality.

Rudmer Canjels stresses the serial organization of *INTOLERANCE*, a film that also assembles four stories in different settings and endows individual passages with a moment of heightened emotionality or suspense before switching diegetic locations. According to Canjels, the film is organized according to 'a form of seriality that is focused on the repetition of the same idea and disrupts the linear narrative flow'. The disruption between its passages is 'naturalized through use of theme', but it nevertheless 'bursts through the story in quite obtrusive ways' (2011: 8). The connection between the passages results from the comparative perception of the audience instead of from an editing technique that smoothens the transition from one passage to another. Griffith acknowledged this fact when he stated that 'the greatest value of the picture will be in its suggestive value to the audience, in the manner in which it will force it to create and work out the idea that I am trying to get over' (quoted in Hansen 1994: 137). *THE HOPE DIAMOND MYSTERY* similarly invites its viewers to abstract an overall theme from a correlation of the four stories. Nevertheless, the results of the viewers' comparisons differ: in Griffith's film, they know they will encounter four different stories, each of which portrays one instance of intolerant behavior. *THE HOPE DIAMOND MYSTERY*, by contrast, does not give away its trope as easily. Instead of naming the theme invoked in each story—which could be greed, jealousy, or in the broadest sense immorality—the serial presents the Hope diamond as a symbol. The stone stands in for the theme, which the serial urges us to detect.

Such comparison is also encouraged by the framing of the four stories as retrospectively narrated by May Yohe. Yohe was an American singer and

13 In fact, later features offer similar montages, for example *THE THREE AGES* (1923), Buster Keaton's parody of *INTOLERANCE*, or Michael Curtiz' *NOAH'S ARK* (1928).

vaudeville actress who had been married to the British Lord Francis Hope (who inspired the serial's Lord Hale) and had owned the diamond until about twenty years before the release of *THE HOPE DIAMOND MYSTERY*. She took part in writing and promoting the serial (Fowler 2002: 244), and she appears in the beginning of its initial episode, which depicts her at a desk, composing her own story and that of the diamond.¹⁴ Later episodes end with title cards signed by Yohe, in which she urges viewers to return for the next installment.¹⁵ The serial thus connects its four stories not only by means of the diamond as both a recurring (though hardly ever visible) prop and a symbol for a larger theme, but also by suggesting that these stories were intentionally assembled and arranged by a narrative authority. The references to Yohe in the serial on the one hand foster comparison, on the other hand they point beyond the serial's diegesis to the larger discourse surrounding the Hope diamond.

In the early twentieth century, a number of myths and stories about the diamond circulated and were picked up by newspapers, which similarly cast the diamond as a demonic stone that elicits its respective owners' immoral tendencies. As a note in the *Exhibitor's Herald* from 26 February 1921 reminds the audiences: 'The Hope diamond is undoubtedly the most sinister jewel in the history of the world. It has an authentic history dating back to 1,400 years and it has a story of disaster and misfortune' (*Exhibitor's Herald*, 1921). Viewers thus not only compare the serial's four stories, but they may additionally contrast them with their own previous knowledge of the myth. The serialized reception experience, which extends the engagement with the story over several weeks, opens up timeframes between the installments during which the cross-reference to extra-filmic texts can take shape. In the intervals between episodes, viewers can reflect on and communally discuss both the serial's relation to the Hope diamond myth and the reverberations between its four story elements. Disruption and correlation thus interact in complex ways, as the serial's larger theme both results from disruption and connects the disrupted narrative parts, but also adds to the dismembering of a possible narrative integrity by enforcing a larger, extra-cinematic contextualization. The serial thus invites a mode of reading that rewards various efforts of comparison and cross-reference that explode the confines of both a narrative chronology and the filmic text.

14 Today, the Smithsonian Institution owns the Hope diamond, which is part of the National Gem and Mineral collection at the National Natural History Museum in Washington, D.C.

15 Yohe acts as a nondiegetic narrator, whereas 'her part' in the serial, re-named 'Lady Hale' in the British setting, is played by the actress Ethel Shannon.

Canjels similarly extends his argument about the seriality of *INTOLERANCE* to the segmentation of film serial narratives into multiple episodes. An individual episode's repetition of the previous week's cliffhanger, he argues, is comparable to the feature film's larger theme in so far as they both serve to reduce narrative disruption—especially so as Canjels writes about serials that, in contrast to *THE HOPE DIAMOND MYSTERY*, do not feature an overall myth or theme. In his words, 'a serial narrative does not function independently; its jarring beginning and ending were naturalized through its use of a repetitive episodic pattern that was known to the audience' (2011: 9). Indeed, for viewers who were familiar with the cliffhanger structure, the sudden ending of an episode most likely failed to cause a stir. Nevertheless, the way *THE HOPE DIAMOND MYSTERY* re-introduces its narrative premise at the beginning of individual episodes grants an insight into the serial's politics of disruption and continuation. Like most serials across the decades, *THE HOPE DIAMOND MYSTERY*'s plot recaps limit themselves to the narrative information that is necessary to understand the situation that it picks up from the previous installment's ending. After the setting relocates to Burma about halfway through episode four, for instance, the ensuing episode's recap only introduces audiences to the Burma story—withholding the fact that the ensuing story of the original diamond theft is told retrospectively by the mysterious servant Dakar ('The Jewel of Sita'). Instead of providing narrative information to familiarize viewers with the story, the recap serves to recreate a state of emotional investment. Rather than reminding us of what happened last week, the serial reminds us of what we felt by the end of the previous installment. Repetition thus helps to reduce both a narrative and an emotional disruption from episode to episode, whereas the serial's multiple other forms of reprise foster comparison outside of such a scheduled chronology, as the following passages will illustrate.

THE HOPE DIAMOND MYSTERY arranges its four stories and settings in clusters. Apart from a few minutes set in Burma in the initial episode, the serial's first episodes are set in London. In episode four, the setting switches to pseudo-historical Burma. A later cluster of episodes takes place in the contemporaneous United States, before the story finally relocates to a remote island. This grouping of episodes according to their setting enables the serial to retain a linear seriality between individual episodes, whereas the comparative readings that effect the thematic correlation between clusters of episodes establish broadly overarching relations and repercussions. The comparison of the different stories and the detection of the overall theme thus remains a privilege of loyal viewers who return to the cinemas for

most of the episodes.¹⁶ These latter viewers notice that the story circles around itself; that each cluster enacts very similar incidents. Later episodes in fact reenact scenes from earlier ones and thereby foster and reward the audiences' comparative efforts. Nevertheless, the reenactment of a sequence that already occurred earlier necessarily implies that the resolution of a particular narrative instance is clear from the get-go. As a result, the viewers' efforts at detection coincide with an aesthetics of the operational, where the viewing experience hinges on the unfolding of process rather than its eventual resolution. The pleasurable film experience then results from the activity and process of detection rather than from any consequential insight.

In the eighth-episode cliffhanger and in episode nine, for example, which are set in the contemporaneous United States, the villain Nang Fu (Harry Carter) enters the estate of the American merchant and approaches his secretary Mary (Grace Darmond) with the implied intent of either rape or murder, or both. In the nick of time, the criminologist John (George Chesebro) breaks the door and rescues her ('Yellow Whisperings', 'The Evil Eye'). This sequence reenacts an instance from the preceding episode, where, in sixteenth-century Burma, the wealthy townsman Ghung behaves similarly towards his fiancée by arrangement, the much younger Bibi. In this instance, it is the French merchant Travanier who kicks in the door and saves the fearful woman (episode 7, 'Flames of Despair'). Both of these instances conjure up a similar narrative paradigm, racist implication, and visual imagery, the correlation of which is fostered through identical actors taking the parts of Bibi/Mary, Ghung/Nang Fu, and Travanier/John. Although the narrative motivations differ—the story set in the United States, for instance, lacks the previous episode's arranged marriage—the latter scene takes up its predecessor's character constellation, situations, and emotional states.

In both scenes, the Hope diamond is only tangentially related to the portrayed action. Nevertheless, it is greed that in sixteenth-century Burma just as in the twentieth-century US co-occurs with self-ascribed male superiority and the ensuing victimization of the female lead. It is the recurrence of the situation that connects greed and immorality to the diamond that lends the serial its title and its weenie. In addition to thus reinforcing the overall theme, the reenactment of such micro-plotlines addresses the repetitiousness of serial narratives and its relative autonomy

16 A similar grouping of episodes took place with the re-release of Griffith's *INTOLERANCE* in 1919, when its four thematic elements were grouped and the Babylonian and the modern age story were released independently as two films called *THE FALL OF BABYLON* and *THE MOTHER AND THE LAW* (Canjels 2011: 22).

of stock plots from setting and *mise-en-scène*. *THE HOPE DIAMOND MYSTERY* admits to cinema's more general tendency to reenact generic storylines in varying settings, on which film serials in particular capitalize and which they lay bare by means of exaggeration. The eighth episode's reenactment of a previously shown scene thus combines a foregrounding of narrative operability—as the familiarity redirects attention from the scene's outcome to its staging—with a similarly operational presentation of filmic storytelling practices.

It is thus no coincidence that the serial exhibits repetition through the reenactment of the motif of the racialized rape threat, which recurs throughout the history of silent-era filmmaking and well beyond. In the earlier instance, the Burmese Ghung threatens Bibi, who is also from Burma but has been introduced as 'the fairest' woman in town (episode 7, 'Flames of Despair'). In the second instance, a malefactor who resembles a prototypical Chinese supervillain¹⁷ approaches the white secretary Mary. Whereas the most common invocations of the cross-racial rape threat concern African American men and white women, films of the 1910s and afterwards conjure up the same stereotype in relation to Native American, Chinese American, or Mexican American characters (Projansky 2001: 40). More generally, serials and features repeatedly cast white males as the saviors of white women in the hands of non-Caucasians.¹⁸ The repeated adoption of the motif in *THE HOPE DIAMOND MYSTERY* can thus—maybe even in defense of the serial—be read as pointing to cinema's frequent reinforcement of racial stereotypes and motifs.

A similar notion of reenactment informs the climactic ending of the serial's final episode, which takes up an instance from the seventh episode. In a scene that marks the end of the Burmese interlude, Ghung is stabbed by a dancer (Carmen Phillips) who is jealous of his sexual interest in Bibi ('Flames of Despair'). The final episode then relocates the scene to the remote island: now, Sidney Atherton (who earlier posed as Nang Fu) has hypnotized Mary to both render her sexually obedient and obtain the diamond from her. Jealously stalking the two, Atherton's wife Wanda eventually stabs her husband to death on the beach (episode 15, 'An Island of Destiny'). This

17 Of which the archetype is Fu Manchu (Mayer 2014). The fact that the villain Nang Fu in this serial is introduced as a white man dressing as an Asian—despite possibly addressing the practice to let white actors play Asian characters—is a necessary means to enable the final episodes set on an island. Nang Fu there appears in his undisguised form as Sidney Atherton, who hypnotizes Mary and courts her. The images of the two in close embrace might have been considered offensive at the time if Atherton had been Asian.

18 *THE ADVENTURES OF KATHLYN*, for instance, as Sabine Haenni has shown.



21. The dancer stabs Ghung while he is fighting Travancier (THE HOPE DIAMOND MYSTERY, episode 7, 'Flames of Despair').



22. Wanda stabs her husband Atherton while he courts Mary (THE HOPE DIAMOND MYSTERY, episode 15, 'An Island of Destiny').

scene again awards attentive viewing, this time by correlating an instance with one that occurred eight weeks earlier in the serial's run. Moreover, in killing its main villain twice, the serial addresses the commonality of a villain's death at the end of silent-era films.

Considered in concert, the reenactments in *THE HOPE DIAMOND MYSTERY* harken back to a racialized staging of violent hyper-masculinity and female victimization¹⁹ that seems to be concluded at the end of episode seven. Overall, the serial enacts the rape threat trope three times, activating the stereotype with a different ethnicity each time. In such instances, the serial capitalizes on stereotypes and narrative formula as a means to reduce narrative exposition in favor of affect in a way that resembles pornographic film styles. Reenactment, just as other forms of reprise like repetition or reiteration, heightens emotional investment through the excessive invocation of affective filmic moments. *THE HOPE DIAMOND MYSTERY* is blood-and-thunder melodrama, but its way of heightening pathos through narrative circularity resembles porn's strategy of provoking arousal more than any of the more 'classical' filmic strategies. The melodramatic mode, particularly as it is employed in Hollywood filmmaking, rests on a 'dialectic of pathos and action', in which pathos results from a prolongation of time, through extended displays of virtuous suffering and tableau shots, among other things (L. Williams 1998: 42, 59; cf. Kelleter, Mayer, & Krah 2007). Serials adapt the conventions of melodrama to their condensed, action-oriented format to an extent that induces Singer to argue that serials 'present moral polarization without pathos' (2001: 55).²⁰ Taking *THE PERILS OF PAULINE* (1914) and *THE HAZARDS OF HELEN* (1914-1917) as examples, he maintains that serials and action films more generally do victimize their protagonists, but only in order to show their 'bravery and resilience', and specifically not to evoke pity for a protagonist's selfless self-sacrifice in the face of moral injustice. Serials, he argues, neglect pathos and focus on action instead (pp. 55-56). However,

19 Sarah Projansky identifies female vulnerability as a stock element of American film: 'in such films with drugged, hypnotized, orphaned, and silenced women, innocence makes women vulnerable to rape; other films transform previously independent women into vulnerable women by subjecting them to rape or sexual violence' (2001: 32).

20 Although not neglecting pathos entirely, Higgins assigns sound serials a similar tendency towards action: 'If melodrama, as Linda Williams proposes, depends on the "dialectic of pathos and action", then sound serials are clearly unbalanced. Suffering, the violation of innocence, and the recognition of loss are, for Williams, inextricably linked with the thrill of action through which heroes struggle to regain and defend virtue. Sound serials, and cliffhangers in particular, rehearse the threat of physical suffering defeated by daring action, but they divorce the thrill from pathetic emotion' (2016: 64).

THE HOPE DIAMOND MYSTERY is overly melodramatic—not necessarily in comparison to features, but definitely when contrasted with other silent-era serials. Both serials and features evoke pathos, but they make use of different strategies to do so. Whereas features often create pathos through displays of virtue, individual instances in the serial quickly skip over portrayals of suffering. Across numerous episodes, however, the serial stresses pathos through reenactment.

The apparent neglect of a portrayal of pathos appears markedly in the first adaption of the rape threat narrative in episode seven, set in Burma. When Bibi is threatened with sexual assault by Ghung—her husband in an arranged marriage to which Bibi disagreed—medium close-ups of her face in anguish are outnumbered by shots portraying a parallel plotline of her approaching rescuer. Whereas the prolongation of climactic rescue sequences through parallel editing is endemic to the melodramatic mode, this particular scene offers a plethora of developments that co-occur with Bibi's predicament. These include one of Ghung's co-conspirator's attempt to steal back the bride price from Bibi's father, her lover Travanier's break-in into the house and engagement in a fight over the bride price, the death of Bibi's father, and Travanier's prolonged ascension of the stairs, before he finally busts through the door to save Bibi (episode 7, 'Flames of Despair'). Bibi's plight recedes into the background in favor of an accumulation of action, and the scene's pathos results from viewer response rather than being implemented on screen. The serial thus prolongs its protagonist's time of suffering, but it limits the visual display of her sobbing. More generally, once a character is in peril, film serials prolong suffering either by extending narrative time through parallel editing, or by relegating the rescue to the following episode. Either strategy prevents viewers from visually witnessing the suffering that we nevertheless know of.²¹ Whereas each individual of the serial's many climactic instances quickly skips over moments of pathos, the reenactments in THE HOPE DIAMOND MYSTERY reinforce female victimization and they heighten pathos by provoking pity for characters in peril. Pathos thus results from a circular reinforcement of affect. Similar to the plots of pornographic films, the evocation of affect works despite the viewers' knowledge of the narrative outcome. In fact, the anticipation of future narrative developments and affective states itself seems to heighten pathos. Therefore, in summary, reenactment helps implement the pathos that threatens to get lost in the wake of the serial's overall stressing of action.

21 Nevertheless, some serials display more pathos than others. For sound-era examples, see Higgins 2016: 64-65.

Corresponding to the presentational mode of storytelling of film serials, the reenacted instances heighten pathos while simultaneously laying bare the narrative strategies underneath. Through reenactment, the serial admits to its own recycling of stock situations, and it addresses the formulaic character of melodrama more generally. The interchangeable actualization of racial stereotypes in the multiple reenactments exhibit the variability of melodrama's prototype villains. As Williams reminds us, 'melodrama presents characters who embody psychic roles organized in Manichean conflicts between good and evil' (1998: 77). *THE HOPE DIAMOND MYSTERY* presents evil interchangeably as Caucasian, Burmese, or in yellowface.

The serial thus alerts viewers to the fact that 'the features of the villain are not fixed; one era's swarthy cape-enveloped villain is another era's smiling villain' (p. 77). *THE HOPE DIAMOND MYSTERY* not only invites us to enjoy melodrama and its affects, but it also encourages us to watch melodrama work. Because of its reenactments, the serial defies a contradistinction of immersion and a self-reflexive foregrounding of melodramatic strategy. Its corresponding insistence that within formulaic narratives, anything can happen *again* is underlined by the fact that none of the rescues or stabbings effectively end the narrative. Instead, the humble servant cum mysterious character Dakar obtains the diamond in the end and takes it back to its original position as the decoration of a religious idol (episode 15, 'An Island of Destiny'). The serial thus 'begins, and wants to end, in a space of innocence' (p. 65), in tune with the melodramatic mode.

THE HOPE DIAMOND MYSTERY, I argue, offers a particular mode of engagement in which reenactment is a key to the understanding of an underlying narrative scheme but also a means to heighten pathos while predominantly visualizing action. Just as Lord Hale understands Dakar's and Nang Fu's scheme when both try an identical trick on him, the spectators can understand the impact of the Hope diamond on its respective owners and their contemporaries only through reenactment. The viewers engage in efforts of comparison that allow them to identify the spell of the diamond, while reenactment feeds into their emotional investment at the same time. This is how *THE HOPE DIAMOND MYSTERY* invites acts of operational detection that are neither fully immersed nor based upon alienation. As the following pages will show, *OFFICER 444* similarly references and reiterates an overarching theme, but the serial employs reenactment to an extent that lays bare the materiality of film production.

'Fix Your Hat!': OFFICER 444's Ridiculous Repetitions

OFFICER 444²² is a 1926 police procedural that fuses its crime plot with comedy and slapstick. Ben Wilson both produced it and took on the leading role, co-starring with Neva Gerber. At the time, both of them were established stars of the film serial business. Wilson had appeared in *WHO WILL MARRY MARY?* in 1913, the sequel to what is considered the first American film serial: *WHAT HAPPENED TO MARY*. In 1917, he and Gerber acted together in *THE VOICE ON THE WIRE* (Universal), followed by at least three more²³ jointly acted serials before the release of *THE POWER GOD* (Davis, 1925), which I will examine more closely later in this chapter, and *OFFICER 444*.

At first sight, *OFFICER 444* barely resembles *THE HOPE DIAMOND MYSTERY*. Whereas the latter capitalizes on the affects of melodrama, *OFFICER 444* explores the affective potential of comedy. Nevertheless, both serials employ comparable strategies to evoke affect, they each require the viewers' efforts to compare and contemplate, and they invite them to engage in operational detection. The following pages will detail the strategies by which *OFFICER 444* both engages its audiences in an affective film experience and encourages operational detection. As I will show, both of these aspects of the film experience are based upon repetition, reiteration, and reenactment.

The ten chapters of *OFFICER 444* interconnect not only through weekly cliffhangers, but because of a thematic framing that is established with reference to a star figure in ways that resemble May Yohe's appearance as a storyteller in *THE HOPE DIAMOND MYSTERY*. Whereas in the latter case, Yohe's audience address underlines the myth of the diamond, *OFFICER 444* proclaims a self-ascribed documentary agenda of portraying modern, effective police work. A number of episodes begin with a title card reminding viewers that the police often protect scientific marvels from sinister crooks. A following title card then announces that

this serial's purpose is to present for public knowledge the "inside" facts in such a struggle, showing the machinery of the police in full swing against

22 Parts of my argument about *OFFICER 444* were developed further in a paper written collaboratively with Ruth Mayer, 'Modernity Management: 1920s Cinema, Mass Culture and the Film Serial' (Brasch & Mayer 2016).

23 *THE MYSTERY SHIP* (Universal, 1917), *THE TRAIL OF THE OCTOPUS* (Lynch, 1919), and *THE SCREAMING SHADOW* (Hallmark, 1920). Gerber also starred in the final serial that Wilson directed, *THE VOICE FROM THE SKY* (G.Y.B./ Hollywood Pictures, 1930), which is likely to have been the first serial with fully synchronized sound.

a sinister gang seeking the secret of an amazing chemical discovery, which, in the true scientist's hand, means Life—in the crook's Death... (e.g. episode 1, 'The Flying Squadron')

The serial emphasizes this didactic function through cameo appearances of August Vollmer, who at the time was the chief of police in Berkeley, California, where the serial is set. The serial positions Vollmer at the switchboards of the police machinery: Numerous episodes show him at his desk, sorting through mail, answering the phone, or discussing recent developments in the pursuit of the dubious criminal organization 'the ring' with members of the police force. In contrast to May Yohe in *THE HOPE DIAMOND MYSTERY*, Vollmer is not an extradiegetic narrator, but his cameo appearances are firmly integrated into the serial's narrative world. Nevertheless, his appearances do conjure up and reiterate a larger discourse. Although the serial's description of him as 'one of the world's foremost criminologists' may be somewhat hyperbolic, Vollmer was known in the United States for heading the movement of 'scientific policing', which aimed to enhance the credibility of police methods such as the tracing of fingerprints. He introduced new approaches to his Berkeley police squad, known as the 'college cops' (Cole 2001: 200). *OFFICER 444* thus places its story within a larger context of modern scientific police work, into which it promises its viewers a surplus of insight. Instead of explaining police procedures, the serial demonstrates them to its viewers, allowing them to watch investigation and pursuit in action, or 'in full swing'. By repeating this introductory announcement at the beginning of its first six episodes, *OFFICER 444* stresses its presentational address and simultaneously foregrounds narrative organization and storytelling as a process.

This agenda of demonstrating efficiently organized police work seems counterintuitive for a serial that presents anything but a carefully orchestrated narrative. The machinery of the police has gone haywire—it meanders frantically and follows no discernible logic. Neither the protagonist cop Officer 444 (Ben Wilson) nor the Flying Squadron of policemen, of which he is a part, ever devise successful stratagems. Neither do their opponents, the members of 'the ring'. The policemen and the criminals rather pursue each other in weekly back-and-forth movements, without any actual investigative work. Instead of a plot development and forward momentum, *OFFICER 444* presents a convoluted chaos in which characters frantically run about and provoke endless numbers of fistfights. The serial's witless investigative journalist and comic sidekick Snoopy (Harry McDonald) summarizes this lack of narrative organization when he tells a gas station clerk in the second

episode: 'Gimme a pint of gas—I've got a lot of running around to do!' ('Human Rats').²⁴

The serial compensates for its rather loose narrative organization by adhering to the strict formal structure of two-reel episodes and their weekly character introductions, chase sequences, and cliffhangers. The order of episodes is prescribed by the matching of cliffhangers and their resolutions rather than by narrative progress or development. However, the convoluted and chaotic make sense in connection to another discursive context that the serial references: comedy and slapstick. 'Officer 444' appears to have been the name of a vaudeville sketch that was played in various cities in the 1910s.²⁵ In the same decade, Essanay released the comedy short *A MISTAKEN CALLING* that features a policeman called Officer 444 (*Moving Picture World*). At a visual level, the serial bears a strong resemblance to the Keystone Kops, which were immensely popular in the 1910s. Whenever the Flying Squadron rushes to a site of crime or follows a lead, plenty of cops pile into one convertible car. The shots of the Flying Squadron in a car, and also later ones of the policemen in their headquarters, are near direct visual copies of scenes from Keystone's slapstick shorts. The serial seems to take seriously the similarly alliterated names of Vollmer's 'college cops' and the 'Keystone Kops' of comedy films. OFFICER 444 not only capitalizes on the humorous effect of such references, but it reenacts them with ironic twists that add another layer of signification. The cops' repeated rushes to the rescue in overcrowded patrol cars, for instance, culminate early on in an instance in which Snoopy falls off the car at a turn (episode 3, 'Trapped'). This scene transforms the Keystone-Kop reference into an instance of outbidding²⁶ that reenacts earlier instances within OFFICER 444 rather than reiterating the reference to other non-serial films.

The serial picks up on aspects of the successful silent-era culture of episodic slapstick shorts, but it additionally champions the weekly serial

24 This sentence initially seems to constitute a moment of 'foreshadowing' in Bordwell's sense; however, rather than pointing to a future element in the 'cause-effect logic of the film', Snoopy addresses the absence of such a logic in the serial (Bordwell et. al. 1985: 44).

25 *Variety* lists 'Officer 444' on the vaudeville bill at Cohen's in Poughkeepsie, NY, in the week of 4 January 1915 (*Variety*, 1915). The *New-York Tribune* lists it in the vaudeville program at Loew's American in 1918 (*New-York Tribune*, 1918), and it similarly appears in *Variety* that year (*Variety*, 1918).

26 Frank Kelleter and Andreas Jahn-Sudmann have identified outbidding as the tendency of serial narratives to surpass earlier episodes or other series, in their case particularly twenty-first-century television series, in terms of sexual explicitness or violence. Chapter four of this volume offers a more detailed take on outbidding in *THE EXPLOITS OF ELAINE*.



23. The Flying Squadron rushes to the crime scene in *OFFICER 444*, episode 3, 'Trapped' (released by Grapevine Video).



24. Film still of the Keystone Kops from *A HASH HOUSE FRAUD* (Keystone, 1915).

format. Another joke that is reenacted across multiple episodes concerns the police officers' uniforms: 'Fix your hat!' emerges as the most frequently repeated sentence in the serial. The cops even agree on a light signal for it (episode 2, 'Human Rats'). By the serial's third episode, the sentence has become so familiar that an instance in which officer Patrick Casey (Jack Mower) reminds the journalist to adjust his cap works without the corresponding intertitle ('Trapped'). In fact, 'fix your hat!' can be seen to describe the serial's paradox more generally: while the investigation and pursuit result in complete chaos, the Flying Squadron should at least keep a respectable appearance. By repeating its agenda to portray potent police work at the beginning of its episodes, OFFICER 444 similarly and figuratively 'fixes its hat'.

Despite its unique slapstick influence, OFFICER 444 shares the narrative formulae and storytelling conventions of numerous film serials from the time. Its generic framing narrative begins with the death of a genius inventor and the loss of a secret chemical formula. The Flying Squadron, the journalist Snoopy, and 444's love interest, the emergency hospital nurse Gloria (Neva Gerber), attempt to recover the formula and shatter the criminal organization 'the ring'. The ring, in turn, is led by a prototypical masked, hunchbacked, limping villain called 'the frog', the ruthlessly scheming femme fatale 'the vulture' (Ruth Royce), and the sinister physician Dr. Blakley (Al Furguson), who is part of a similarly untrustworthy organization of international (mad) scientists. Based on these parameters, the serial constructs weekly episodes that are connected in adherence to the organizational conventions of film-serial storytelling. Every episode repeats the cliffhanger from the preceding one, introduces the main characters, and lists relevant cornerstones of the narrative. OFFICER 444 thus reminds us over and over again that the 'frog' and his 'ring' are evil and that the scientific formula needs to be rescued from their hands. These repetitions introduce first-time viewers to the narrative, and they reinstate the affective tone for loyal patrons. Whereas cliffhanger endings use the storytelling and editing techniques of the melodramatic mode to build affect over several minutes, the subsequent episode must recall the same affective state in a few seconds, which it does by combining a repetition of the final frames of the cliffhanger with title cards that explain the main agents and plotlines.

Perhaps more than other serials, OFFICER 444 revisits the same cinematic spaces in Chinatown, the underground sewage system, Dr. Blakley's medical practice, the police station, and the emergency hospital. At the same time, the serial self-consciously reflects its repetitiousness in humorous ways. Such reflections occur in short instances within individual episodes. Episode four,

for instance, comments on the serial's frequent fistfights when, in a scene set in the police station, Officer 444 and his colleague Casey practice their fighting skills ('Gassed'). The same episode also employs reenactment in a way that self-reflexively exposes narrative formula. In contrast to *THE HOPE DIAMOND MYSTERY*, *OFFICER 444* does not relocate its reenacted scenes to another time and place; instead, similar or identical incidents happen multiple times to the same characters. In episode four, the protagonist policeman disguises himself as 'the frog' in an attempt to find Gloria, who was kidnapped in Chinatown. The criminals immediately recognize the imposter and 444 can forward the disguise to a naïve passerby, who consequently receives a beating. Later in the episode, 444 poses as Dr. Blakley to save Gloria from brain-altering medical treatment. However, the frog enters the operating room and exclaims that 'this man is not Dr. Blakley!', thus inaugurating the obligatory fight scene ('Gassed'). In addition to ridiculing the policeman's dilettante acts of imposture, the episode draws attention to the formulaic masquerades of serial villains. Just as *THE HOPE DIAMOND MYSTERY* informs us early on that Nang Fu is a white man posing as a prototype Asian villain, *OFFICER 444* introduces the frog as 'one of those creatures who so often stir our sympathies, when in reality his supposed affliction is but a false cloak of crime!', exposing the stereotypical appearance of its master criminal (episode 1, 'The Flying Squadron'). Whereas this earlier sequence exposes the frog's appearance as masquerade, the exchange of disguises in episode four elucidate that prototypical serial villains are not only stock characters within the melodramatic mode but also placeholders, empty shells that are simple to don, discard, exchange, and replace. When taking up the villain's disguise, 444 thus in a way undermines the serial formula, assuming and passing on its stock positions. *OFFICER 444* thereby exposes the transformation of the melodramatic mode into the formulaic grid of film serials.

444's infiltration of the villainous gang not only foregrounds formula, but it simultaneously disrupts melodrama's parallel-edited rescue 'in the nick of time'. When the policeman posing as Dr. Blakley stands before Gloria's operating table, surrounded by members of the ring, he clandestinely spills the essential liquid in order to save her from harm. Nevertheless, the scene is intercut with shots of the Flying Squadron's rush to the rescue (episode 4, 'Gassed'). In this scene, melodrama's classic narrative and editing technique successfully amplifies suspense despite the fact that 444 is on the scene and Gloria is safe already. Although as film viewers we are expecting the rescue 'in the nick of time' and often take it for granted (L. Williams 1998: 72), serials face the dilemma that a rescue in the nick of time is foreseeably inevitable. Viewers can rest assured that their heroes will survive simply because

further episodes are scheduled at the cinema.²⁷ OFFICER 444 structurally aligns itself with the audience in its admittance of this fact and, when we see the medical utensils approaching Gloria's face, the joke is on the Flying Squadron rushing to the rescue nevertheless. Whereas melodrama traditionally evokes pity by granting its viewers more knowledge than its characters, OFFICER 444 uses the same surplus of knowledge for comedy. The serial thus employs filmic strategies of the melodramatic mode to evoke affect, but instead of encouraging pathetic (or sympathetic) emotions, OFFICER 444 hijacks melodrama for a joke.

This approach to melodrama again reiterates elements of Keystone's comedy cop films of the previous decade. According to Rob King, the Keystone Kops first appeared in *THE MAN NEXT DOOR* (Keystone, 1913), which was also the first comedy that ridiculed the melodramatic convention of crosscutting shots of characters in peril with the approach of their rescuers. In the film, the cops' clumsy behavior rules out any efficient rush to the rescue and thus counteracts the temporal dramaturgy of parallel editing (King 2009: 44-46). This strategy became a standard in Keystone's comedies, as, according to King, 'of at least fifteen extant prints ending with a parallel-edited rescue released in 1913, eleven feature Keystone's roughhouse cops as the would-be rescuers' (p. 45). Like OFFICER 444 a decade later, Keystone's comedies parody melodrama's 'moral iconography' while simultaneously relying on 'the genre's formal capacities for suspense' (p. 60). The serial adopts a double-edged use of melodrama that King describes not as blunt satire but as 'pastiche, as a form of mimicry lacking parody's satiric edge: the melodramatic mode is mobilized less as a target of critique or distanced irony than through a comic self-consciousness that exploits and relies upon melodrama's framework of thrilling effects' (p. 61). The policemen of OFFICER 444's Flying Squadron are less clumsy than their transitional-era predecessors, and the joke of the fourth-episode rescue action results from Gloria's safety instead of from temporal retardation. What the serial retains is the self-conscious use of cinematic techniques to evoke affect. The result is an integration of self-reflexivity and immersion, that is, of the possibilities of a viewer's physical sense of being embodied, literally, in the cinema and his or her simultaneous prosthetic, embodied relation with the apparatus that enables film perception.

Despite all the similarities between OFFICER 444 and the Keystone Kop films, the serial's self-ascribed agenda of portraying efficient police work

27 Scott Higgins analyzes how *THE LONE RANGER* successfully incorporates a possible 'too late' in the sound era (2016: 67-68).

is at odds with its references to the shorts. The Keystone company stylized itself as a place of free play and experimentation, where making slapstick comedies was just as much fun as watching them (King 2009: 35-36). Yet Keystone also was a pioneer when it came to the Taylorization of the film production process, with departmentalized work units and continuity scripts that helped to monitor the work progress (p. 33). It was this combination of a 'carnavalesque affirmation of inefficiency and riotous playfulness' and an industrialized, rationalized production process that led a writer for *Motion Picture News* in 1914 to call Keystone a 'fun factory' (p. 37). OFFICER 444, and serials more generally, practiced the Taylorist division of labor to excess. Budgets were small and production time was limited, and the frequent returns to previous locations bear as much witness to this as the use of repeated or library footage. By referencing August Vollmer and the repeated promise to document efficiency, OFFICER 444 stresses its own mode of production. However, individual episodes hardly offer meaningful narrative progress and the serial's aim is, mostly, the suspension of its denouement. In a way, OFFICER 444 seems to juxtapose efficiency and slapstick in ways that enable a view at a fundamental paradox of film serials and American cinema more generally: in their reliance on repetition and reiteration, the most economically efficient productions are narratively speaking the least efficient ones. Rather than having been produced in one, OFFICER 444 itself is a 'fun factory': a narrative entertainment machine that chugs along and yet repeats the same task, which is both efficient yet endlessly prolonged.

OFFICER 444 lays bare this seemingly endless prolongation in a series of reenacted sequences that eventually dismantle the narrative project and expose the material base of filmmaking. In episodes three ('Rats'), four ('Gassed'), and five ('Missing'), co-conspirators of the frog intercept sensible information from Officer 444 and the journalist Snoopy when they call police headquarters from a shop near Dr. Blakley's medical practice. Each time around, a spying store employee warns the ring of the approaching police. In the first instance, Officer 444 arrives at the medical practice by himself and is being knocked unconscious by one of the frog's henchmen. The second time, the entire Flying Squadron appears but finds the medical practice empty—devoid of both people and furniture. Before the squadron's third excursion to Blakley's, the police captain expresses his frustration with Snoopy in an exclamation that applies similarly to the repetitious nature of police work and of the serial's plot: 'If you're kidding me this time, I'll have you shot before sunrise' (episode 4, 'Gassed'). Nonetheless, the Flying Squadron speeds to Blakley's practice once more. Having again been warned, the members of the criminal organization convert the medical practice into



25. The Flying Squadron arrives to find the medical practice empty (OFFICER 444, episode 4, 'Gassed,' released by Grapevine Video).

a shop for work overalls (episode 5, 'Missing'). Viewers thus literally watch the actors set the scene for the ensuing action, which involves the arrival of the policemen and the destruction of the medical practice/store/set during the ensuing mass brawl.

More bluntly than *THE EXPLOITS OF ELAINE*, as shown in the previous chapter, *OFFICER 444* at this point engages in what Andreas Jahn-Sudmann and Frank Kelleter call 'outbidding': a process of surpassing, in which each new iteration of the scenario aims to outdo its predecessor. The authors argue that series and serials—in their case, twenty-first-century television series—constantly aim to outbid each other and their own previous episodes and thus often threaten to become, for instance, overly violent or sexually explicit. In order to release the pressure thus built up and to avoid alienating audiences, serials at times include 'signals of irony' (Jahn-Sudmann & Kelleter 2012: 214). Maybe more than counteracting possible moral reservations, *OFFICER 444* resorts to irony through reenactment to steal the thunder of viewers who may criticize the serial for its overly repetitious organization. When the Flying Squadron shreds the fake shop and its backrooms to pieces, cops and villains seem to be fighting over the control of the material film set. Having won the physical argument, the policemen take the scattered

furniture along, returning the set to a stage of emptiness. The narrative turns into farce and meanwhile exposes the materiality of film production and its serial appropriation of space, as sets become exchangeable in an instant. By emptying the set, the policemen make room for new stories, despite the fact that the serial will nevertheless continue to reiterate and reenact the same formulaic abductions, rescue sequences, and brawls.

OFFICER 444 thus allows us to trace an infinite web of repetitions, reiterations, and reenactments at a formal level, both narratively and visually, and extraneous to this particular serial. On the one hand, repetition serves to heighten the affective engagement with the serial, especially across the breaks between episodes. On the other hand, reenacted elements foreground the storytelling process and urge viewers to draw the connections. The serial thus encourages operational detection, that is, an analysis of the processes of storytelling as it unfolds and meanders while simultaneously taking part in an affectively stimulating film experience. And whereas OFFICER 444 exposes the material basis of film production when it destroys the set, *THE POWER GOD* transposes a similar self-reflexivity to the level of lighting, as the following passages illustrate.

Tesla Tests and Thunderstorms in *THE POWER GOD*

A year prior to the release of OFFICER 444, Ben Wilson and Neva Gerber appeared together in *THE POWER GOD* (Davis, 1925). The serial's fifteen episodes combine a thrilling, pathos-laden story with comic interludes that pick up racial puns from the vaudeville tradition. Instead of being part of a team, the protagonist Jim (Ben Wilson) is a lone fighter, the assistant of an inventor who is murdered early on in the serial.²⁸ Throughout the episodes, Jim alternately protects or aims to retrieve the inventor's daughter Aileen (Neva Gerber) and the genius innovation, a machine that draws electric power from air. His opponents are a group of power magnates who aim to steal and suppress the invention to secure their own oil operations and a criminal gang that was originally hired by the businessmen but then decided it would profit more from stealing the invention for itself.

Like the earlier examples of *THE HOPE DIAMOND MYSTERY* and OFFICER 444, *THE POWER GOD* capitalizes on reiteration and reenactment to heighten emotional investment and to reinforce central issues of its plot. As the

28 The inventor in fact dies in a fistfight. Whereas both fistfights and murder occur often in serials, death as the result of a fistfight is rare.

following passages will show, later episodes remind us of or reenact earlier scenes and invite us to compare and contrast instances in the serial in a non-linear fashion. However, the serial lacks reference to an outside figure or 'star' to evoke extra-textual discourses and to ensure a connection between the episodes other than that of their weekly chronology. Instead, *THE POWER GOD* establishes electricity as its central concern, which informs both the serial's narrative and its visuals.

Before his death in the first episode, the inventor tests the power engine and demonstrates it to Jim and Aileen, and simultaneously to the film audience. The episode visualizes the engine's successful operation with Tesla coil special effects and sparks that emit from the mechanism ('The Ring of Fate'). The scene is set in the dark, and the reflection of flashes of light on Jim's and Aileen's faces create an aesthetic that is reminiscent of the famous 'creation scene' in *FRANKENSTEIN* (1931) or of what Ruth Mayer describes as 'the markedly aestheticized enactment of electricity' in *THE MASK OF FU MANCHU* (1932) (2014: 69)—all of which showcase Tesla coil effects.²⁹ *THE POWER GOD*'s inclusion of Tesla technology corresponds to its 'weenie' invention, because the idea of drawing electricity from air is comparable to Nikola Tesla's real-life attempts at the wireless transmission of electricity. Tesla terminated these attempts in 1917, when his famous Wardencliff tower that served to issue an electrical current was demolished. Using Tesla coil to illustrate the functioning of its power engine, *THE POWER GOD* reinstates an electric utopia that Tesla himself abandoned less than a decade earlier.

The envisioning of such a utopian ideal is well-grounded in the lived experience of audiences in the 1920s, when urban and suburban residential communities were electrified while most rural areas lacked access to power lines (Nye 1990: 141). While the dissemination of electricity that had begun in the 1880s neared its end in the mid-1920s (Whissel 2008: 118), the decade also marked electricity's transition towards corporate consolidation. Previously, private enterprises had ensured the power supply of downtown

29 The use of Tesla coil for cinematic special effects is typically attributed to special effects wizard Kenneth Strickfaden, who used Tesla coils for example in *FRANKENSTEIN* (1931) and *THE MASK OF FU MANCHU* (1932) but also in sound serials such as *THE VANISHING SHADOW* (1934), *THE LOST CITY* (1935), and *THE AMAZING EXPLOITS OF THE CLUTCHING HAND* (1936). Harry Goldman argues that Strickfaden was likely to be influenced by film serials that staged Tesla coil special effects, including *THE ROMANCE OF ELAINE* (1915), *THE BLACK BOX* (1915), *WOLVES OF KULTUR* (1918), *THE GREAT RADIUM MYSTERY* (1919), *HIDDEN DANGERS* (1920), and *THE POWER GOD*, which Goldman dates to 1926 (Goldman 2005: 78). In 1919, *Picture-Play Magazine* explained that 'Nikola Tesla is a moving-picture enthusiast, and especially dotes on serials. For the last three years, it seems, he has seen every episode of nearly every serial produced' (*Picture-Play Magazine*).

businesses and wealthy homes, municipal plants had provided electricity for streetlights, and companies that ran streetcars had brought power to amusement parks and to communities along their routes. In the 1920s and 1930s, by contrast, the supply of electricity was centralized in increasingly influential businesses (Nye 1990: 26). This shift provoked debates over public versus privatized electric supply and centralized versus widely diffused power generation (p. 138). Whereas electrification eventually played out according to the ideals of corporate capitalism, large parts of the population, according to David Nye, 'still harbored utopian expectations for a better, electrified tomorrow which would include all citizens, and most engineers retained some version of the dream of technocratic rationality' (p. 184).

THE POWER GOD engages in this discussion by introducing a fictional, functioning apparatus that could make electricity universally accessible and by staging a negotiation of its advantages and downsides. In its first episode, the serial highlights the revolutionary potential of a decentralized power supply that would threaten the rule of 'fuel and power barons', who 'tremble on their thrones' ('The Ring of Fate'). In its explanation that the master villain Dore (Al Ernest Garcia) aims to become the 'Power God', the serial equates a centralized electric supply with religious monotheism and political monarchy. The power engine, by contrast, embodies democracy and/or a self-subsistent lifestyle. The serial's juxtaposition of utopian dreams and capitalist intervention is played out particularly in relation to Jim's mother (Catherine Kent), who occupies a rural home 'across the lake' and is dependent on gas lighting (episode 3, 'The Living Dead'). Whereas this scene pinpoints a precarious lack of electricity, other instances in the serial stress the advantages of a truly mobile power supply for transportation, leisure, and business. When Jim and Aileen escape the criminals in a speedboat, for instance, they attach the power engine to the boat's motor and outpace their pursuers (episodes 9, 'Perilous Waters', and 10, 'The Bridge of Doom'). THE POWER GOD advertises such a decentralized, wireless power supply until the victory of the protagonists in the final episodes. However, in a curious narrative twist, Jim and Aileen destroy the power engine to avoid jeopardizing the jobs of people employed in the businesses that provide electricity (episode 15, 'The Wages of Sin'). The final episode thus aligns the serial's plot with the increasingly consolidated corporate model and simultaneously returns the story to the state of its initial beginnings. Corresponding to the narrative closure strategies of melodrama, episode fifteen reinstates the original equilibrium that was disrupted not by the inventor's death in episode one but rather by the demonstration of the power engine, which animated the story's central conflict.

Although the Tesla coil effects in *THE POWER GOD* are admittedly less spectacular than those of early 1930s features, their use nevertheless conveys something similar about the impact of the visualization of electricity on the cinema screen. Writing extensively about James Whale's *FRANKENSTEIN*, Shane Denson points out the presentational qualities of the moment in which Dr. Frankenstein successfully animates the monster. In this 'creation scene', the animation of the monster stands in for the equally electric animation of moving pictures. According to Denson, 'Frankenstein himself drives the point home: "Quite a good scene, isn't it?" What follows is an extended allegorization of cinematic creation' (2014a: 87).³⁰ While the creation scene in *FRANKENSTEIN* brings forth a monster, *THE POWER GOD*'s engine yields no visible product other than sparks of light. These sparks serve as visual illustrations of electricity as the serial's central yet intangible concern. And because such sparks are fleeting, the serial time and again reiterates and reenacts the visualization of its central concern.

The serial revisits the initial testing of the power engine twice: it reiterates its original testing in episode six ('House of Peril'), and it reenacts the test later on in the house of Jim's mother (episode 12, 'The Storm's Lash'). The sixth episode marks the ending of a sequence of negotiations of memory and repetition that informs the preceding four episodes. In the cliffhanger ending of the first episode, Aileen Sturgess is involved in a car accident with the villain Dore, after which she suffers from a loss of memory. Both she and the villain are brought to a nearby doctor who assumes they are a married couple. When the doctor explains that 'her trouble is amnesia. Sometimes memory is restored by repetition of an important event in the patient's life', Dore seizes an opportunity to become legal heir of the power engine and suggests that the two of them should 'repeat' their wedding (episode 2, 'Trapped'). He thus tricks Aileen into marriage, and attentive viewers spend the following episodes hoping for an actual repetition of a previous event in her life that could restore her memory. At the same time, the instance addresses the ritualization of events as, within the logic of the serial, there is no difference between repetition or originality when it comes to the wedding ritual, which either way establishes the reality of marriage. And again, the identification of the wedding as original rather than reenactment depends on Aileen's memory, the return of which similarly depends upon reenactment.

The serial postpones the moment of relief to the sixth episode, and in the meantime embarks on an emotional tour de force that begins with Aileen's

30 In this passage of his monograph, Denson references Michael Sevastakis and Marc Redfield.

placement in a sanatorium, which, we learn, serves as a storage facility for unwanted family members. In these episodes, *THE POWER GOD* outbids the victimization of the previous decade's serial queens, but it also calls to mind nineteenth-century discourses of female hysteria (cf. Singer 2001). In an attempt to rescue her, Jim is imprisoned in the sanatorium's holding cells—a situation that further adds to the dark tone of the story. At the same time, Jim's appearance offers narrative means for comic relief. The fourth-episode cliffhanger, for example, features the shadow of a gunman on the prison walls who, an episode later, reveals himself to be a caretaker pretend-playing the guitar on a broom (episode 4, 'Black Shadow' and episode 5, 'The Death Chamber'). However, despite lightening the mood of the story, this instance also pressurizes the problem of Jim's confinement as viewers realize that the protagonist is held captive in a psychiatric ward run by the insane. Another attempt at comic relief suffers from unusual morbidity and capitalizes on stock racist jokes. When the inmate of a neighboring cell passes away, Jim dons the corpse's burial shroud, is carried away in the casket and placed on a truck by two hired African American helpers. What follows is a routine of racist sketches in which Jim first scares off the helpers by leaving the coffin in the white shroud and posing as a ghost, and then takes their place in blackface (episode 5, 'The Death Chamber'). The serial thus aims to counter its dark tone in comic relief that nevertheless fails to lighten the mood. The result is an affective joyride in which plot developments seem to be continuous reactions to previous scenes rather than carefully planned events. The plot is propelled along and meanders, and immediate threats and problems obfuscate the broader quest to secure and patent the power engine.

The return to the engine test in the sixth episode, that is, to the 'creation scene' that animated the conflict in the first place, effects a narrative reboot that reins in the convoluted plot momentarily. Instead of framing the original engine test as a flashback, the episode—in line with the presentist storytelling of film serials more generally (see chapter three)—re-presents the earlier instance, it reiterates the serial's broader concern because of its relevance to the present scene. In fact, Jim's and Aileen's return to her father's house, in which they hope that 'scenes familiar to her since her childhood may restore her memory', becomes a practical pretense for a compilation of relevant plot information from previous episodes (episode 6, 'House of Peril'). Instead of providing the full backstory, however, the serial practices the reduction of information, rebooting the story while discarding unnecessary elements of the convoluted narrative. The return of Aileen's memory is then effected not through childhood memories—as film-serial characters typically lack personal histories—but rather through

the discovery of a newspaper article about the power engine that she read with Jim and her father in the initial episode. She re-reads the newspaper clipping and the serial repeats a shot—framed as her memory—of the three characters reading the newspaper in episode one. This visual repetition and diegetic reiteration are what allow her to remember. The scene thus effects a narrative reboot, after which the serial abandons its pendulum motion between thrill and comedy in favor of the former.

A real reenactment of the power engine test follows another six episodes later, in 'The Storm's Lash' (episode 12). Jim and Aileen get a hold of a duplicate of the power engine and test it in another 'creation scene' with Tesla coil effects, which, in accordance with the serial's utopian vision, takes place in Jim's mother's rural home. This reenactment similarly initiates a narrative reboot: being in possession of both a prototype engine and paper plans to build it, Jim and Aileen rush to the patent bureau in Washington. This second engine test resembles the initial one not only visually but also in terms of its contextualization within the narrative. The first episode's cliffhanger, which caused Aileen's accident and memory loss, was set during a thunderstorm. In the twelfth episode, the engine test is similarly followed by 'a sudden electrical storm' in the area. The serial thus reinforces the connection of electricity and air, which to an extent explains and justifies the serial's mysterious energy generator.³¹

Aesthetically, the thunderstorms chime in with the demonstrations of the power engines. Both tests are set in the dark, as Jim turns off the laboratory lights in the initial test and extinguishes the gaslight in his mother's parlor in the later instance. As a consequence, the electric sparks issued from the Tesla coil are the only remaining sources of light and their flashes reflect on the faces of the surrounding characters. Between these flickers, the cinema screen switches to a complete black, causing the audiences' perception of the film to take place in the form of individual flashes of lightning or lighting. Their faces similarly reflect the light issuing from the film screen, and the dark theater space lights up and turns dark in synchronization with the film. These instances foreground the projector as a light source in the film theater as well as electricity as film's animating force. Moreover, the dark frames between the flashes make apparent the viewers' dependency on film's electric source. *THE POWER GOD* engages its viewers in a game of 'now you see it, now you don't'—a mode of viewing that similarly applies to serial viewing practices more generally.

31 Incidentally, the 'creation scene' in Whale's *FRANKENSTEIN* (1931) equally coincides with, and is narratively framed as dependent upon, an occurring thunderstorm.

In film scholarship, the phrase 'Now you see it, now you don't' has been prominently employed by Tom Gunning to describe the temporality of the cinema of attractions. In his words, the sentence 'stresses both the spectator awareness of the act of seeing and the punctual succession of instants' (1993: 11). Taking a 1904 Biograph short depicting a tracking shot through a New York subway tunnel as an example, Gunning explains that the change of lit and dark spaces and the flickering caused by passing support beams in the tunnel results in a visual patterning that seems to constantly renew itself. A similar temporality informs other films of the attractions type, particularly those of onrushing trains or the 'peeping tom' shorts. All of these films are organized less in a narrative that links the past and the present and enables viewers to anticipate a narrative future, and more in brief, 'sudden bursts of presence' (p. 6). In contrast to the classical spectator's competent reading of narrative, Gunning argues, 'the viewer of the cinema of attractions plays a very different game of presence/absence, one strongly lacking predictability or a sense of mastery' (p. 11).

Subjected to the alternating presence and absence of serial episodes at their local cinemas, serial viewers always give up part of their sense of mastery in favor of the serialized film experience. *THE POWER GOD* foregrounds this loss of competence when it stages flickers of lightning in dark settings and thereby attributes mastery to the electric source of the power engine and to the film projector. At the same time, the serial works to counter this loss of control by stressing its diegetic character's control of light. The serial's episodes show an almost disturbing number of instances in which characters switch lights and lamps on and off. Almost every light is diegetically integrated and can be regulated by the characters peopling the screen. The serial thus grants its characters a kind of agency that the serial's viewers do not have. This way, the serial protagonists emerge as 'Power Gods' within the narrative. In the meantime, the serial counters the viewer's powerless position by granting them more information than its diegetic characters, in keeping with the melodramatic mode. Throughout the first six episodes, for example, viewers are aware that the villain Dore already has a wife. Other examples of the viewers' privileged position include episodes nine and ten, when Jim and Aileen escape with the power engine in a speed boat and viewers already know that the villain's henchmen are waiting for them on the shore ('Perilous Waters', 'The Bridge of Doom'). Or two episodes later, when Aileen is forced to sign over ownership of the power engine to the crook in exchange for Jim's freedom, who we know has escaped already (episode 11, 'Treachery'). The serial thus narratively

counteracts the fact that the logic of 'now you see it, now you don't' reminds viewers of their lack of control over the image.

Whereas Gunning locates the dialectic of presence and absence at the core of the cinema of attractions, Denson considers a similar structure pivotal to the immersive experience of classical Hollywood:

The concept of suture emphasizes the spectator's integration, primarily by means of continuity editing, into the diegetic world of film, the assumption of a subject-position in that world most literally realized in the "identification" with absent characters in shot/reverse-shots and point-of-view. Thus, a presumed presence-absence dialectic, which explains the "as-if" nature of (classical) cinema's reality illusion, is established as the heart of cinematic subjectivity. The underlying (and largely suppressed) interface of body and technology, on the other hand, is a matter of pure presence, a "positivist" phenomenon (in a Deleuzo-Guattarian sense). It is at this level of subjectivity that a pre-personal shock-effect occurs: it is here that cinema's technologies "cut" into the lived body, and only against this background that a sublimating suture can be effected. (2014: 92-93)

Thus, the shot/reverse-shots that effect suture and an immersive film experience are based upon a similar dialectic of presence and absence as the one informing early-twentieth-century attractions, in that both hinge on the alternation of 'now you see it, now you don't'. According to Denson, cinema's reality illusion—and with it the presence/absence-strategy—can only come into being because film viewers enter an embodied relationship with the technologies that enable film perception. Viewers enter an uninterrupted relationship with the screen and projector and, to oversimplify it, forget the presence of these technologies and concentrate on cinema's reality illusion instead. The thunderstorms and Tesla coil effects in *THE POWER GOD* transpose the dialectic of presence and absence from an abstracted visual level, in which viewers experience film technology as transparent, back to the image itself, and with it to the material apparatus of film. To employ Denson's terminology, 'the underlying interface of body and technology' is specifically not a 'matter of pure presence' anymore. Confronting its viewers with split-seconds of black images, *THE POWER GOD* employs a radicalized version of the presence/absence dialectic, which defies suture and instead points to the projection lights as cinema's enabling technology. Thus negating an idealized notion of suture, *THE POWER GOD* can freely play with the dialectic of presence and absence, because the serial form does not, or cannot, achieve suture in the first place, due to the dialectic

of presence and absence of their weekly release pattern and exhibition schedule. Like lightning, each episode bursts into presence. The in-medias-res beginning of most serial episodes does indeed appear as a sudden flash. Cliffhanger endings typically show their heroes and heroines jumping from an airplane, drowning in a lake, riding a car off a cliff, or being trapped in a complicated death contraption. Ensuing episodes then repeat the climactic final seconds and continue with the cliffhanger's resolution in a way that lets the break seem almost unintentional, with the repetition making up for the unfortunate interruption. Every week, viewers find their story just where it ended before the lights went on.

The use of Tesla coil in *THE POWER GOD* effects an aestheticized staging of electricity in a memorable moment that not only initiates the serial's central conflict and concern but also serves as an anchoring point for the narrative. However, the flickering lights of the effect and the ensuing thunderstorm highlight the disruptive bursts of presence and absence. Whereas the test of the power engine stages electricity in a contained, controlled environment, the following thunderstorm foregrounds the chaotic, disruptive character of electricity. The reenactment of the engine test in episode twelve is thus to a certain extent Janus-faced: it provides a narrative reboot, a secure position from which to reorganize the ensuing plotlines, but it is right away framed within the uncontrollable flicker of natural but nevertheless electric lightning. The return to the iconic moment is already subverted by its own aesthetic.

Reenactment in the Sound Era: RADIO PATROL

It was not only serials of the silent era that thrived on repetition and reenactment. The sound-era serial *RADIO PATROL* (Universal, 1937) particularly depends on reenactment to organize its narrative, focus its plot, and reduce the number of names on its list of murder suspects. The twelve-chapter serial tells the story of Officer Pat O'Hara (Grant Withers) who, with the help of his police squad the 'radio patrol', chases the murderer of an inventor who recently developed a formula for the manufacture of flexible, bulletproof steel. Together with the inventor's orphaned son Pinky Adams (Mickey Rentschler), officer O'Hara searches for the lost formula among both steel mill owners and supposed representatives of the Iranian government lodging in the city's Egyptian quarter. The serial establishes its central conflict in a key scene in episode one, in which the inventor is shot at his desk in his laboratory ('A Million Dollar Murder'). The relevance of this scene for

later episodes is comparable to the function of the power engine test in *THE POWER GOD*: its reenactments anchor the narrative and reestablish the serial's central problem, mystery, or quest. *RADIO PATROL* reenacts the original murder scene three times, in episodes seven, eleven, and in the final episode. Neither the original murder scene nor its reenactments enable the audience to identify the killer; however, episode one establishes multiple characters as suspects, and each reenactment reduces their number.

The first reenactment occurs in episode seven, after five episodes in which O'Hara, his sidekick officer Sam Maloney (Adrian Morris) and Pinky drive back and forth between police headquarters, the Egyptian Quarter, the city dump where Pinky lives in a shanty, and the offices of two steel mills. Whereas their investigation and pursuits eventuate plenty of thrills and sensations, their investigation fails to progress. They do, however, imprison Harry Selkirk (Max Hoffman Jr.), who stole the secret formula from the corpse but denies being the murderer. Instead, Selkirk explains to O'Hara: 'If I could get back into Adams' research laboratory and reenact the crime, I'm sure I could get the clue of the real murderer'. The result is a re-staging of the murder, in which Selkirk takes the dead man's place at the laboratory desk and O'Hara takes the position earlier occupied by Selkirk. The latter is shot dead right when he is about to identify the killer: 'O'Hara, I've got it! The shot that killed Adams came from...' (episode 7, 'Claws of Steel').

Whereas Selkirk is quite literally deleted from the suspect list, the narrative contextualization of the scene establishes three other suspects and thus effectively reboots the investigation. Instead of contemplating the reenactment, O'Hara immediately chases one of the steel mill workers through the factory, allowing the episode to conveniently recycle footage of machines and glowing, melted steel from the cliffhanger that followed the first murder in episode one. Whereas the reenactment thus benefits the investigation only marginally, it is economically convenient for the producers, and it provides the audience with a clue that emerges from their comparison of the original and the reenacted scenes.

The reenactment of the murder thus results in a second death, re-actualizing the original riddle and presenting a new one at the same time. The serial thereby establishes its past problem anew in the present, replacing the first murder and simultaneously stressing its relevance. The forward momentum of the serial, its achievement in the crime solution process, therefore lies not in a return to but in a reenactment of the original crime—progress through narrative loops, so to speak. Until episode seven, most of the serial's action hinges upon the pursuit of Selkirk. His passing reboots the narrative but once again leads to frantic chases and chaotic

pursuits. Although reenactment finally allows for some progress in the investigation, it also sparks new haywire action.

Before ending the serial with two further reenactments of this set-up, *RADIO PATROL* continues to eliminate murder suspects in accidents or shootings among the criminals, resulting in an overall body count of nine, which outdoes many other film serials. One of these deaths occurs in another reenacted scene from the serial's first episode, in which officers O'Hara and Maloney pursue an unknown character in a patrol car after the attempted robbery of the steel formula from the inventor's shanty at the city dump. The policemen speed down a road towards a railroad crossing when an approaching train blocks their pursuit (episode 1, 'A Million Dollar Murder'). Episode eight reenacts this instance in a sequence that recycles footage of the cars, the train, and the road from the earlier instance. This time, the officers tail the car of a private detective who, running a bit late in comparison to the first episode, dies when his car collides with the train. This instance combines reenactment with outbidding in terms of both violence and morbidity, the latter because O'Hara decides to pose as the deceased (episode 8, 'A Perfect Crime'). Like practices of outbidding more generally (cf. Jahn-Sudmann & Kelleter 2012), the reenactment of the instance combines an emotional or affective pressurization with signals of self-consciousness and a tendency towards irony. Reenactment both intensifies suspense and foregrounds narrative structuring, resulting in the simultaneity of self-awareness and invested engagement that informs the operational aesthetic. *RADIO PATROL* thus repeatedly points to the processuality of its neatly corresponding but nevertheless chaotically meandering causes and effects, and the serial's plot twists and circles back to the reenactments that anchor its processual frenzy.

The serial's final deaths result again from reenactments of the inventor's murder at his desk. In the eleventh episode, O'Hara's pursuit of the Iranian government agent known as Mr. Tahata ends in the laboratory, where Tahata claims innocence and—as in the earlier scene—is shot before he can identify the murderer (episode 11, 'The Hidden Menace'). This reenactment is substantially shorter than the earlier one, and it occurs accidentally rather than carefully planned. Nevertheless, it recalls and returns to the setting of the story's original problem. In fact, in establishing that Tahata did not plan to arrive at the laboratory at this moment, the reenactment of the scene establishes the possibility that the solution to the case lies within the laboratory space itself rather than in the search for possible murderers and motives.

Again corresponding to a logic of outbidding, the twelfth episode places two characters in succession in the deadly position in the research laboratory.

Zutta (Dick Botiller), a henchman of Tahata's,³² attempts to blackmail the steel-mill owner Wellington in the laboratory and is shot near the desk, this time with no possible murder suspect waiting nearby. Wellington hides the body and begins to readjust a hidden mechanism in the wall: a mechanical gun contraption that we now learn killed all four of the victims (episode 12, 'They Get Their Man'). The scene thus confirms the mechanical nature of the threat, which was already foreshadowed by the lack of suspects in the latest murder and the similarity of physical circumstances. The resolution of the case follows just a few moments later, when O'Hara returns to the laboratory and has Wellington at gunpoint, who then explains his contraption.³³ In a struggle with O'Hara, Wellington is killed by his own shooting mechanism (episode 12, 'They Get Their Man').

Whereas the first reenactment in episode seven effects a reboot of both the narrative and the investigation, the later laboratory shootings constitute repetitive instances that, as bodies pile up, intensify the problem to be solved. The serial itself addresses this intensification when early on in the final episode, O'Hara's superior threatens to take O'Hara off the case and revoke his recent promotion to the plainclothes squad because the case was still unsolved and the number of deaths had accumulated (episode 12, 'They Get Their Man'). The increase of murders and their recurrence in shorter intervals towards the serial's end point towards the relation of reenactment and the mechanical nature of the threat, establishing repetitious occurrences as intrinsically machinic. As if to counteract this threatening depiction of the mechanical, the final episode ends with a shot of the faultlessly functioning steam engine that Pinky built or repaired at the city dump, which exploded in the ninth-episode cliffhanger ('Plaything of Disaster'). Whereas the fatal impact of the automatic gun contraption is irreversible, the engine can, luckily, be fixed. The steam engine thus effects the final revision of an earlier scene, representing a return to normalcy in the end.

In summary, the reenacted instances in *RADIO PATROL* encourage viewers to understand the serial apart from the chronological screening of its episodes. Viewers correlate and compare instances across the serial's dozen episodes and thereby identify the serial's centralized threat as a machinic

32 Earlier in episode twelve, it was revealed that the man calling himself Tahata was really 'Warner the Great', a famous hypnotist who kept the real Mr. Tahata under his spell ('They Get Their Man'). The character who throughout the serial was thought to be Tahata's hypnotized henchman, Franklin, reveals himself to be the real Mr. Tahata, a representative of the Iranian government with no evil intent.

33 The set-up involves an invisible light beam that, once broken by someone standing next to the laboratory desk, triggers the shooting mechanism.

contraption. The reenactments uncover the machinic cause of the murders, and they simultaneously expose the film serial as a similarly repetitious machine. Instead of boring viewers, the frequent returns to the same spaces and plots propel the narrative and enable the eventual solution of the serial's central mystery. Viewers do not enjoy the serial despite its multiple forms of reprise with their obvious economic advantages to the film producers. On the contrary, repetitions and reenactments enable and encourage viewers to uncover the working of both the serial's diegetic death contraption and its narrative structure and organization, inviting and fostering acts of operational detection. As a result, *RADIO PATROL* offers its viewers a subject position that is neither fully immersed nor alienated and that diverts from the model of the classical Hollywood film.

Intermediate Afterword: The Serials' Self-Conscious Negation of Classicality

As the four examples above have shown, repetitions, reiterations, and reenactments invite a viewing practice that departs from a chronological following of events as they occur from episode to episode. Viewers draw parallels and cross-reference sequences across multiple episodes, which are at times screened weeks apart from each other. Individual scenes refer to a past moment in the serial and re-actualize it, locating the ongoing action—including its narrative past—firmly in the present tense. A return to earlier scenes of origination effectively and self-consciously anchors narratives that operate according to a principle in which causes and effects follow one another without leading anywhere. Whereas examples of the careful hiding of recycled footage abound in film serials, moments of reenactment depend on the viewer noticing repeat footage and identifying a scene as reenacted. After all, it is the repeated use of footage, sets, and plots that urges viewers to draw the connections, to compare, and to contrast. This activity of operational detection effects a co-occurrence of self-conscious and intensified storytelling, which encourages viewers to critically assess the serial's narrative formula while enjoying its rehearsal.

As pointed out earlier, this activity of operational detection is located halfway between alienation and full immersion, negating both conceptual extremes and constituting a midway alternative instead. And film serials are very much aware of their own unwillingness to construct verisimilar, immersive filmic environments. This awareness manifests itself in the first episodes of many serials, which are often longer than the ensuing ones and

offer narrative structures that resemble more narratively contained forms. Scott Higgins highlights the importance of a serial's initial episode in the sound era, when 'the first chapter was vital to the serial's market identity' (2016: 38). Until the mid-1940s, film serials commenced their narratives with longer 'pilot' episodes that lasted about 30 minutes as opposed to the standard 18 to 20 and that include more detailed plot expositions and costlier and more spectacular stunts. These expository episodes at times feature montage sequences that place their ensuing narrative in a larger historical, political, or otherwise discursive context. This broadness of scope, Higgins argues, resembles the opening acts of Hollywood features and stands in contrast to the repetitive, focused, and condensed narratives of a serial's remaining episodes (pp. 38-43).

These observations similarly hold true for a number of silent-era serials. Although their style and formula are less static than in the sound era, silent serials often begin with introductory episodes that differ markedly from the serial's following installments in terms of viewer address and their mode of storytelling. These episodes align themselves with self-contained narratives, only to discard this narrative mode as inappropriate for film serials. Subsequent episodes thus abandon the initial approach and instead embark on the seemingly open-ended rollercoaster rides that this chapter outlined. *THE PERILS OF PAULINE* (Pathe, 1914) for instance, begins, like many serials of the time, with the death of the heroine's father. The tragic tableau of characters behind the old man's deathbed strikes an emotional tone that none of the following episodes recreate. Additionally, the episode portrays the villainous figure of Koerner (Paul Panzer) as a conflicted character who is blackmailed by the wholeheartedly sinister crook Hicks into pursuing the death of Pauline (Pearl White). In the Manichean struggle of good versus evil enacted in the succeeding episodes, Koerner's initial inner conflict goes entirely unmentioned. The serial thus initially offers a plausible reason for Koerner's actions, providing what Bordwell terms 'realistic motivation' for this character's behavior, whereas ensuing episodes eschew any psychologizing and in fact display the villain's evil intentions to an extent that runs against the motivation originally provided (Bordwell et al. 1985: 19). The initial episode of *THE PERILS OF PAULINE* therefore exceeds the serial's following episodes in emotional depth, and its more complex psychology results in a markedly different film experience.

The film serials discussed in this chapter similarly offer more pathos and character motivation in their initial episodes than in succeeding ones. The introductory episode of *THE HOPE DIAMOND MYSTERY* prefigures parts of the story set in sixteenth-century Burma to motivate its narrative, and *THE*

POWER GOD begins with Aileen's father's rejection of Jim's proposal to marry his daughter and the father's tragic death. While these episodes establish emotional and causal plot motivation, later episodes do without grief and anger and instead present the serial's Manichean conflict as a given.

OFFICER 444 begins with a pilot episode that differs particularly radically from its ensuing episodes: it depicts the protagonist officer as the all-American hero who saves a child and a known criminal from a burning building after the firefighters have withdrawn. 444 is a highly individualized and self-dependent character, a popular hero called 'Uncle Bob' by the children in the street (episode 1, 'The Flying Squadron'). Especially the shots of the child wandering through the burning house enact the melodramatic fear of the 'too late' and eventually foster the affects that result from a rescue 'in the nick of time'—a strategy the film serial will confine to cliffhangers in all following installments. By episode two, 'Uncle Bob' will be '444', a number in the systemized machine of the police, a team player, one cogwheel in the larger mechanism. This shift epitomizes the serial's discarding of its early immersive appeal in favor of a presentational mode of address. However, this shift describes the change of an underlying norm rather than a turn from one extreme to another: Hollywood's norm of storytelling as described by Bordwell, Thompson, and Staiger, for instance, generally and generically includes 'laying bare the device', fostering an awareness of its principles of narrative and medial construction. However, the Hollywood feature 'does not bare its devices repeatedly and systematically' (Bordwell et al. 1985: 22-23).

It is just this notion of repetition and a systematic reflection of storytelling principles that characterizes the serials' presentationalism. The comparison between the serials and the 'classical' feature, which the serials themselves enacted when initially evoking and then discarding established norms, is thus based on the identification of the previous common exception as a rule, that is, on an inversion of the relationship between ongoing narrative strategy and momentary deviation. For serials as well as for early and transitional-era film in general, the possibility of an immersive engagement with film was a persistent undercurrent that informed filmic practices and aesthetics even in films that revoke immersion, as Denson argues (2014a: 63-66). Similarly, studio-era features seemed to accept what Jay David Bolter and Richard Grusin term 'immediacy' as a norm, although 'there are moments in which hypermediacy interrupts the aesthetic of transparency' (1999: 150-151). Serials thus inverted a figure-ground relationship, and they explicitly addressed the fact that they did. They retained this aversion and neglect throughout the silent era, repeatedly voicing their discontent decade after decade. Despite their openly staged neglect, it seems that serials could

not fully disassociate themselves from the contemporaneous mainstream. As a consequence, their presentational filmic narratives always existed at the nexus of immersion and self-reflexivity. As the following chapter will outline, it is this presentational style and complex subject position that enabled serials to navigate the multiplicity of media, particularly radio and television, in the sound era.

Bibliography

- A Mistaken Calling*. Dir. unknown. Perf. Eleanor Blanchard, Howard Missimer, John Stepling. Essanay, 1912.
- Bordwell, David, Janet Staiger, and Kristin Thompson. 1985. *The Classical Hollywood Cinema: Film Style and Mode of Production to 1960*. London: Routledge.
- Brasch, Ilka, and Ruth Mayer. 2016. "Modernity Management: 1920s Cinema, Mass Culture and the Film Serial." *Screen* 57 (3).
- Canjels, Rudmer. 2011. *Distributing Silent Film Serials: Local Practices, Changing Forms, Cultural Transformation*. Routledge Advances in Film Studies 7. New York: Routledge.
- Cole, Simon A. 2001. *Suspect Identities: A History of Fingerprinting and Criminal Identification*. Cambridge, MA: Harvard University Press.
- Denson, Shane. 2014. *Postnaturalism: Frankenstein, Film, and the Anthropotechnical Interface*. Bielefeld: transcript.
- Exhibitor's Herald*. 1921. "David P. Howells Obtains Right on Darmond Serial, 'Hope Diamond Mystery,'" February 26.
- Flash Gordon*. Dir. Frederick Stephani. Perf. Buster Crabbe, Charles M. Middleton, Jean Rogers. Universal, 1936.
- Fowler, Marian. 2002. *Hope: Adventures of a Diamond*. Sydney and London: Simon & Schuster.
- Frankenstein*. Dir. James Whale. Perf. Mae Clarke, Colin Clive, Boris Karloff. Universal, 1931.
- Goldman, Harry. 2005. *Kenneth Strickfaden, Dr. Frankenstein's Electrician*. Jefferson, MC: McFarland.
- Gunning, Tom. 1986. "The Cinema of Attraction: Early Film, Its Spectator and the Avant-Garde." *Wide Angle* 8 (3-4): 63-70.
- . 1993. "'Now You See It, Now You Don't': The Temporality of the Cinema of Attractions." *The Velvet Light Trap* 32 (2): 3-12.
- . 1994. "The Whole Town's Gawking: Early Cinema and the Visual Experience of Modernity." *The Yale Journal of Criticism* 7 (2): 189-201.
- . 2004. "Systematizing the Electric Message: Narrative Form, Gender, and Modernity in the Lonedale Operator." In *American Cinema's Transitional Era: Audiences, Institutions, Practices*, edited by Charlie Keil and Shelley Stamp, pp. 15-50. Berkeley: University of California Press.
- Haenni, Sabine. 2015. "Gender in the Jungle." Conference: Managing Mass Culture. April 25. Hannover.
- Hansen, Miriam. 1994. *Babel and Babylon: Spectatorship in American Silent Film*. Cambridge, MA: Harvard University Press.
- Hidden Dangers*. Dir. William Bertram. Perf. Jean Paige, Joe Ryan, George Stanley. Vitagraph, 1920.
- Higgins, Scott. 2016. *Matinee Melodrama: Play and the Art of Formula in the Sound Serial*. New Brunswick: Rutgers University Press.

- Intolerance*. Dir. D. W. Griffith. Perf. Lillian Gish, Mae Marsh, Constance Talmadge. D. W. Griffith/Triangle, 1916.
- Jahn-Sudmann, Andreas, and Frank Kelleter. 2012. "Die Dynamik Serieller Überbietung: Amerikanische Fernsehserien Und Das Konzept Des Quality-TV." In *Populäre Serialität: Narration – Evolution – Distinktion: Zum Seriellen Erzählen Seit Dem 19. Jahrhundert*, edited by Frank Kelleter, pp. 205-24. Bielefeld: transcript.
- Keil, Charlie. 2006. "Integrated Attractions: Style and Spectatorship in Transitional Cinema." In *The Cinema of Attractions Reloaded*, edited by Wanda Strauven, pp. 193-203. Amsterdam: Amsterdam University Press.
- Kelleter, Frank, Ruth Mayer, and Barbara Krahe, eds. 2007. *Melodrama! The Mode of Excess from Early America to Hollywood*. Heidelberg: Universitätsverlag Winter.
- King, Rob. 2009. *The Fun Factory: The Keystone Film Company and the Emergence of Mass Culture*. Berkeley: University of California Press.
- Loock, Kathleen. 2016. "Sound Memories: 'Talker Remakes,' Paratexts, and the Cinematic Past." In *The Politics of Ephemeral Digital Media: Permanence and Obsolescence in Paratexts*, edited by Sara Pesce and Paolo Noto, pp. 123-137. New York: Routledge.
- Mayer, Ruth. forthcoming. "In the Nick of Time? Detective Serials, Temporality, and Contingency Management, 1919-1926."
- . 2014. *Serial Fu Manchu: The Chinese Supervillain and the Spread of Yellow Peril Ideology*. Philadelphia: Temple University Press.
- Moving Picture World*. 1912. "A Mistaken Calling (Essanay)," October 19.
- 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.
- New York Tribune*. 1918. "In Vaudeville," March 10, 1918.
- Noah's Ark*. Dir. Michael Curtiz. Perf. Noah Beery, Dolores Costello, George O'Brien. Warner Bros., 1928.
- Nye, David E. 1990. *Electrifying America: Social Meanings of a New Technology, 1880-1940*. Cambridge, MA: The MIT Press.
- Officer 444*. Dir. Francis Ford. Perf. Al Ferguson, Neva Gerber, Ben Wilson. Ben Wilson/Goodwill, 1926.
- Picture-Play Magazine*. 1919. "Relished by the Best of Men," February.
- Poe, Edgar Allan. 1841. "The Murders in the Rue Morgue." In *The Works of Edgar Allan Poe, Vol. 1*, edited by John H. Ingram, pp. 404-41. London: A&C Black.
- Projansky, Sarah. 2001. *Watching Rape: Film and Television in Postfeminist Culture*. New York: New York University Press.
- Radio Patrol*. Dir. Ford Beebe and Cliff Smith. Perf. Catherine Hughes, Mickey Rentschler, Grant Withers. Universal, 1937.
- Schaschek, Sarah. 2013. *Pornography and Seriality: The Culture of Producing Pleasure*. London: Palgrave Macmillan.
- Singer, Ben. 2001. *Melodrama and Modernity: Early Sensational Cinema and Its Contexts*. New York: Columbia University Press.
- The Adventures of Kathlyn*. Dir. Francis J. Grandon. Perf. Charles Clary, Lafe McKee, Kathlyn Williams. Selig, 1913.
- The Amazing Exploits of the Clutching Hand*. Dir. Albert Herman. Perf. Rex Lease, Ruth Mix, Jack Mulhall. Weiss, 1936.
- The Black Box*. Dir. Otis Turner. Perf. Ann Little, Herbert Rawlinson, William Worthington. Universal, 1915.

- The Black Diamond Express*. Dir. James H. White. Edison, 1896.
- 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 Great Radium Mystery*. Dir. Robert Broadwell, Robert F. Hill. Perf. Cleo Madison, Bob Reeves, Eileen Sedgwick. Universal, 1919.
- The Hazards of Helen*. Dir. J.P. McGowan, James Davis. Perf. Helen Gibson, Helen Holmes. Kalem, 1914-1917.
- The Hope Diamond Mystery*. Dir. Stuart Paton. Perf. George Chesebro, Grace Darmond, Boris Karloff. Kosmik, 1920.
- The Lonedale Operator*. Dir. D. W. Griffith. Perf. Verner Clarges, Guy Hedlund, Blanche Sweet. Biograph, 1911.
- The Lone Ranger*. Dir. William Witney, John English. Perf. Lee Powell, Hal Taliaferro, Chief Thundercloud. Republic, 1938.
- The Lost City*. Dir. Harry Revier. Perf. William 'Stage' Boyd, Claudia Dell, Kane Richmond. Krellberg, 1935.
- The Mask of Fu Manchu*. Dir. Charles Brabin. Perf. Boris Karloff, Myrna Loy, Lewis Stone. Cosmopolitan/MGM, 1932.
- The Million Dollar Mystery*. Dir. Howell Hansel. Perf. Florence La Badie, James Cruze, Marguerite Snow. Thanouser, 1914.
- The Mystery Ship*. Dir. Harry Harvey, Henry McRae. Perf. Neva Gerber, Ben F. Wilson, Duke Worne. Universal, 1917.
- The New Exploits of Elaine*. Dir. Louis J. Gasnier, Leopold Wharton, Theodore Wharton. Perf. Arnold Daly, Creighton Hale, Pearl White. Pathe, 1915.
- The Perils of Pauline*. Dir. Louis J. Gasnier and Donald MacKenzie. Perf. Paul Panzer, Pearl White, Crane Wilbur. Eclectic/Pathe, 1914.
- The Perils of Nyoka*. Dir. William Witney. Perf. Kay Aldridge, Lorna Gray, Clayton Moore. Republic, 1942.
- The Power God*. Dir. Francis Ford. Perf. Al Ernest Garcia, Neva Gerber, Ben Wilson. Ben Wilson/Goodwill, 1925.
- The Romance of Elaine*. Dir. George B. Seitz, Leopold Wharton, Theodore Wharton. Perf. Arnold Daly, Creighton Hale, Pearl White. Pathe, 1915.
- The Screaming Shadow*. Dir. Ben F. Wilson, Duke Worne. Perf. Neva Gerber, Ben F. Wilson. Hallmark, 1920.
- The Trail of the Octopus*. Dir. Duke Worne. Perf. William Dyer, Neva Gerber, Ben F. Wilson. Hallmark, 1919.
- The Vanishing Shadow*. Dir. Lew Landers. Perf. James Durkin, Ada Ince, Onslow Stevens. Universal, 1934.
- The Voice from the Sky*. Dir. Ben F. Wilson. Perf. Neva Gerber, Wally Wales, Robert Walker. Hollywood, 1930.
- The Voice on the Wire*. Dir. Stuart Paton. Perf. Neva Gerber, Joseph W. Girard, Ben F. Wilson. Universal, 1917.
- Three Ages*. Dir. Buster Keaton. Perf. Wallace Beery, Buster Keaton, Margaret Leahy. Metro Pictures, 1923.
- Variety*. 1915. "Bills Next Week (January 4)," January 1.
- . 1918. "Bills Next Week (March 11)," March 8.
- What Happened to Mary*. Dir. Charles Brabin and Ashley Miller. Perf. Mary Fuller, Marc McDermott, Charles Ogle. Edison, 1912.

- Whissel, Kristen. 2008. *Picturing American Modernity: Traffic, Technology, and the Silent Cinema*. Durham and London: Duke University Press.
- Who Will Marry Mary?* Dir. unknown. Perf. Mary Fuller, Ben. F. Wilson, Richard Tucker. Edison/General, 1913.
- Williams, Linda. 1991. "Film Bodies: Gender, Genre, and Excess." *Film Quarterly* 44 (4): 2-13.
- . 1998. "Melodrama Revised." In *Refiguring American Film Genres: History and Theory*, edited by Nick Browne, pp. 42-88. Berkeley and Los Angeles: University of California Press.
- Wolves of Kultur*. Dir. Joseph A. Golden. Perf. Leah Baird, Sheldon Lewis, Charles Hutchinson. Western Photoplays, 1918.

6. Sound Serials: Media Contingency in the 1930s

Abstract

Chapter 6 traces the impact of radio and television on the serials' mode of address, as the golden era of serials in the mid-1930s and early 1940s coincided with the heyday of radio and the discursive consolidation of television as a broadcast medium in the United States. Film serials embraced the narrative forms and modes of address of radio and television and simultaneously reactivated possibilities offered by these media that were discursively negated at the time, for instance the use of television for point-to-point communication. In showcasing these options, serials not only reinstated full contingency at the historical moment of its curtailing, they also extended their own array of options of storytelling, managing a variety of anecdotes and adopted forms to exhibit and juxtapose multiple modes of address.

Keywords: film serials, history of television, history of radio, Gene Autry, transmedia, convergence culture

In the 1930s, serials found themselves entangled in a network of multifarious established and emerging media to an unprecedented extent. Radio had become an established mass medium, sound film was fully consolidated, newspaper comic strips were experiencing their heyday, and television was looming large on the horizon. In fact, the 'golden era' of film serials, which Higgins locates between 1936-1946 (2016: 98), coincides with the heyday of radio from 1937-1946 (Hilmes 1997: 184) as well as with the conceptual consolidation—although not yet the dissemination—of television in the mid-1930s (Sewell 2014: 44). At the time, serials picked up on characters and narratives from the popular daily 'funnies', which often already sported their own radio serials. Many serials referenced a specific source text in another medium, for instance *ACE DRUMMOND* (Universal, 1936) and *RADIO*

PATROL (Universal, 1937), both of which begin each episode with a plot recap that visually resembles a comic strip. Additionally, a vast number of serials portray the multiplicity of media technologies that existed or were imagined at the time. Especially radio and television contraptions appear in multifarious forms. As chapter three has shown, the presentational address of serials accommodates their embracing of cross-media content and their showcasing of communication technologies. This mode of address, however, remains by no means fixed across the decades. Rather than examining the relations between the incarnations of a story in comics, radio, and film serials—which would also warrant interesting analyses—I will focus on the film serials themselves and on their negotiations of radio and television in order to show how the presentational mode of address allowed for a negotiation of media change and was itself transformed as a result. Instead of aiming to represent radio and television as conceptually consolidated media, film serials presented and demonstrated varying options of what radio and television could be.

Film serials expose radio and television as discursively constructed rather than technologically determined. In this context, it is important to recall Niklas Luhmann's distinction between medium and form. As Luhmann and scholars following in his footsteps have shown, a medium is an amalgamation of options, some of which temporarily converge into more concrete forms (Luhmann 1997: 198; cf. Krämer 1998: 560). Medium and form determine each other in the sense that the medium enables the existence of individual forms, but the medium itself can also only be apprehended through these forms (Esposito 2004: 11-12). Sound film, for instance, is a medium that is embedded in cinema as an institution, and film serials are forms among others, such as classical Hollywood films, comedy shorts, or newsreels.¹ Sound film as a medium can only be apprehended in the form of individual films. More generally, media themselves are invisible, but they enable the actualization of forms, which in turn perpetually renew the contingent options that make up the medium. In short, 'medium and form reciprocally determine each other' (Krämer 1998: 560, my translation). Importantly, every medium has the capacity to allow for a variety of forms. As Elena Esposito highlights, 'media are only potentialities, and their fundamental function is to make contingent something that was formerly

1 I am particularly considering sound film as the medium, because if a medium, according to Luhmann, describes a number of contingencies, the contingency of sound film is different from the contingency of silent film, first and foremost because the former includes all the options offered by synchronized sound technologies.

indispensable' (2004: 12).² In this context, the seeming consolidation of media in the 1930s was really a reduction of options, as discursive practices including legislation, censorship, and progressivist attempts at reform established some forms as a norm and marginalized others. Although they were similarly impacted by these discursively constructed restrictions, film serials, themselves a marginalized form, were discernibly reluctant to participate in the reduction of possibilities, but they reactivated options for a variety of media instead. Serials took seriously the idea that film, radio, and television are not rival media aiming to replace one another but clusters of contingencies that mutually impact each other—both as abstract ideas and in their existing forms. By visualizing and juxtaposing anecdotal examples of possible appropriations of technology, for instance amateur radio broadcasting and point-to-point radio communication, film serials reactivated a contingency that was obscured in the wake of media consolidation and the definition of certain forms as a norm. Serials formulated their own, alternative imaginations of contemporary media technologies and their uses and thereby made the contingent nature of a seemingly consolidated media landscape visible.

The consolidation or discursive reduction of forms, content, and the possible uses of radio and television resulted from negotiations among technicians, journalists, legislators, and other agents within a contested field of power relations (Hilmes 1997: xvi-xvii; Sewell 2014: 8-12; cf. Telotte 1999: 3). In Michele Hilmes' view, radio discourse was a 'conflicting, tension-ridden site of the ruthless exercise of cultural hegemony, often demonstrating in its very effort to control the power and diversity of the alternative popular constructions that oppose and resist it' (1997: xvii). Television very much shared radio's discourse, as its 'seemingly stable cultural construction was in fact the product of a great deal of discursive work that remodeled conceptions of the medium's nature and uses to suit the demands of the moment, ultimately conforming television to the norms of sound broadcasting' (Sewell 2014: 9). As poverty-row productions, film serials posed no threat to cultural hegemony, which allowed them to innocuously re-open the discursive field. They anecdotally portrayed a variety of alternative uses of radio and television technologies, and they juxtaposed them in fictional settings that escaped the power struggles dominating the earlier discursive consolidation of these media. These cinematic creations of radio and television in turn impacted the serials' understanding of what film itself is or could be.

2 Luhmann himself writes that forms can be considered selections within the realm of a medium (in German: 'Formen als Selektion im Bereich eines Mediums') (1997: 89).

Film serials thus bear evidence of the impact that media change can have on individual forms, such as the film serial, and on the filmic medium more generally. Reflecting on media change in his introduction to *Convergence Culture*, Henry Jenkins debunks the myth that new media threaten established ones: 'printed words did not kill spoken words. Cinema did not kill theater. Television did not kill radio. Each old medium was forced to coexist with the emerging media. [...]. Old media are not being replaced. Rather, their functions and status are shifted by the introduction of new technologies' (2006: 14). The economic organization of the entertainment business itself supports a model of media change according to which coexistent media refashion themselves instead of replacing each other. In the 1930s and afterwards, seemingly rivaling media were already pooled in larger business operations, which did not generate their profits predominantly from film production. As Paul Young explains,

the belief that, during times such as the inception of broadcast TV, the film industry feared media competitors would destroy the cinema, stems from the misguided assumption that the main business of Hollywood studios was and is the production of films, when exhibition, distribution [...], and cross-marketing (of tie-in toys and the like) have historically represented Hollywood's bottom line. (2006: xvii)³

Nevertheless, the businesses running studio-era Hollywood were networks composed of individual agents, whose occupations were restricted to one of a business's multiple branches. However much the integration of multiple media into unified corporations diminished the threats that radio, film, and television posed to each other, people engaged in film production as well as local cinema owners feared the eventual migration of audiences. In 1925, for instance, when film serials attracted fewer viewers than during their first heyday in the 1910s, an editorial in the *Exhibitor's Trade Review* held radio responsible for increasingly unstable box-office returns and argued that film serials could regularize attendance just like serial novels ensured a continuous popularity of story magazines (*Exhibitor's Trade Review*, 1925c). As filmmakers responded to such or similar legitimate or

3 Young adds that Janet Wasko, Michele Hilmes, and Christopher Anderson debunked the myth that radio killed film (2006: xvii-xviii). Wasko outlines the business cooperation that informed the dissemination and commercialization of early sound film, radio, and television (1994: 8-14). For a consideration of the relations between Hollywood filmmaking and radio, also see Hilmes, 1990.

misperceived confrontations, coexisting media reciprocally fostered each other's transformation.

Film serials renegotiated their mode of address in the 1930s according to the real and imagined audience addresses of radio and television. As I will show, serials openly negotiated the affordances of their coexisting media and they juxtaposed their respective modes of address. Young points to such different modes of address and argues that

radio, TV, and digital media texts have depended on models of address and reception that differ in at least three profound ways from the classical cinematic model: (1) the possibility of media-enabled social exchange; (2) "live" transmission; and (3) private consumption in the home. [...] Hollywood's on-screen fantasies about these media during their incipient phases return obsessively to these distinctions between film and home-media reception with equal parts denial of their pleasures and envy at the cinema's technological incapacity to replicate them. (2006: xxiii)

Film serials, I argue, displayed a similar fascination with the modes of address of other media, but their non-compliance with the rulebook of classical Hollywood cinema enabled them to redefine their own modes of address accordingly. Instead of practicing denial and envy, film serials took up techniques of storytelling and visual imagery from other media and they diegetically incorporated other media in order to capitalize on their modes of address. To return once more to the distinction of media and forms, film serials portrayed radio, for instance, as a medium through its forms, such as a musical feature or sentences communicated through radio. In such instances, film serials themselves acted as media that combined the forms of another medium such as radio (cf. Esposito 2004: 11).⁴ They engaged in a negotiation of different media and their forms and

4 Film serials can act as media because film itself is a loose medium. Esposito describes this complication as the recursive character of the medium/form distinction: "The looser the medium, the more abstract the forms impressed in it can be. This abstractness can be amplified by the recursivity of the distinction medium/form; the elements constituting the medium can be themselves forms impressed in a different medium, and the forms can act as media for the imposition of other forms. The sentences of spoken language, for instance, can be the elements used in writing (another medium) to produce different combinations (forms)" (2004: 11). Importantly, the distinction between medium and form is always ascribed by an observer. Thus, 'what is a medium from one perspective can always become a form when viewed from another perspective' (Krämer 1998: 560, my translation).

simultaneously exhibited and transformed themselves both as a medium and as a form.⁵

Due to the comparative bluntness of their presentational mode of storytelling, serials of the 1930s not only transformed their mode of address in a negotiation of radio and television, but they simultaneously staged this negotiation. As the first part of this chapter will demonstrate, Mascot's 1935 serial *THE PHANTOM EMPIRE* pits the multiple modes of address enabled by film and radio against each other, and it foregrounds the interconnections between businesses engaging in the production of media content. Moreover, by combining anecdotes of numerous forms in one film serial and thereby placing them in one shared context, *THE PHANTOM EMPIRE* offers a glimpse at how media convergence could work outside of the confines of the film screen. In other terms, this particular serial outlines aspects of what Henry Jenkins has famously identified as media convergence. For Jenkins, convergence serves as an umbrella term that describes the circulation of the same or related content across multiple media, which consumers access through the various technologies that have emerged in the digital era, from cell phones to computers and video game consoles. These digital means of dissemination, moreover, enable active viewers to communicate with other fans on online platforms that producers of media content can similarly access. As a result, audiences exercise an unprecedented influence on media content, from which producers can profit (Jenkins 2006: 3, 15-16; see also Jenkins, Ford, & Green 2013). Obviously, the analog media culture of the 1930s offered fewer means of dissemination and only limited channels for fan communication. Nevertheless, media content did travel from newspapers to cinema to radio at the time. Despite lacking the means to voice their responses in online forums, consumers were 'encouraged to seek out new information and make connections among dispersed media content' (Jenkins 2006: 3). My use of Jenkins' terminology will be restricted to the flow of content across media platforms and the readers' activity of correlating a story's or a brands' multiple variants. *THE PHANTOM EMPIRE* envisions and demonstrates visually and narratively how 'in the world of media convergence, every story gets told, every brand gets sold, and every consumer gets courted across multiple media platforms' (p. 3). The serial

5 Thus, in a sense, film serials are practicing hypermediacy as defined by Bolter and Grusin: 'In digital technology, as often in the earlier history of Western representation, hypermediacy expresses itself as multiplicity. [...] In every manifestation, hypermediacy makes us aware of the medium or media and (in sometimes subtle and sometimes obvious ways) reminds us of our desire for immediacy' (1999: 33-34).

exemplifies that, via the travelling of narrative content from one medium to another, seemingly competing media could interact in a larger, shared popular-cultural field. In a sense, the serial recreates on screen what Jenkins refers to as ‘flow’:

by convergence, I mean the flow of content across multiple media platforms, the cooperation between multiple media industries, and the migratory behavior of media audiences who will go almost anywhere in search of the kinds of entertainment experiences they want. Convergence is a word that manages to describe technological, industrial, cultural, and social changes. (pp. 2–3)

As I will show, *THE PHANTOM EMPIRE* on the one hand addressed the integration of multiple media into larger firms through the star figure of Gene Autry and on the other hand combined elements of radio, television, and cinema on screen.

In a second step, beginning with *THE PHANTOM EMPIRE* but extending my argument to other sound serials, I will show how film serials reimagined radio and television in terms of earlier ideas of their usage as communications technologies rather than as unidirectional mass media. In fact, serials repeatedly foregrounded, questioned, and at times reaffirmed radio, television, and cinema’s own unidirectional address. Serials reactivated the contingent spectrum of forms and they exercised a negotiation of multiple appropriations of these technologies and of their modes of address. These negotiations predominantly took place in relation to liveness as one quality that sound film, in contrast to radio and television, could not offer at the time. As I will show, serials adopted the notion of liveness by acting as media and taking up live forms from other media, that is, they showcased liveness rather than being live themselves.

THE PHANTOM EMPIRE and Media Convergence

THE PHANTOM EMPIRE is a 1935 science-fiction-Western-musical⁶ by Mascot, which according to Scott Higgins ‘is part of a rich tradition that thrived at the very margins of studio-era Hollywood: a tradition of creative

6 *THE PHANTOM EMPIRE* is a particularly colorful case of genre-mixing. Nevertheless, the combination of genre markers, especially from disaster and horror film, the Western, and the musical is typical of late silent- and early sound-era science fiction film (Telotte 1999: 16). In

ridiculousness, visual brio, and distinctively outlandish storytelling' (2016: 2). Indeed, the serial's own pressbook describes it as 'the weirdest story ever told'.⁷ It concerns radio star Gene Autry (in person), who lives on 'Radio Ranch', from where he airs a daily radio show with the help of his band and two children, Frankie and Betsy Baxter (Frankie Darro and Betsy King Ross). Twenty thousand feet underneath their ranch thrives a secret, technologically advanced society led by Queen Tika (Dorothy Christie), which is protected on the surface level by a mounted group called the 'thunder riders'. Queen Tika orders the thunder riders to dispose of Autry because his presence on the ranch invites too many 'surface people' to the area, who might find the secret entrance to Murania, the underground city. Meanwhile, a group of scientists also aims to murder Autry in order to find Murania and harvest its natural resources without interference. Consequently, the serial presents a wild goose chase for Autry, whose sole ambition again and again is to return to Radio Ranch in time for his radio broadcast.

THE PHANTOM EMPIRE's negotiation of radio takes place against the backdrop of an economic context in which film studios increasingly became one branch of large corporations. Crossing media boundaries, Autry embodies the connection of multiple media and their businesses at the time. His status as recording, radio, and film star, and the inclusion of his cowboy songs in the serial highlighted the consolidation of businesses that enabled the production of THE PHANTOM EMPIRE. Autry had emerged as a recording artist, singing cowboy songs for phonograph records that were marketed through mail-order catalogues, particularly *Sears*, to primarily rural homes (Stanfield 2002: 61). At a time when the flourishing of public broadcasting threatened the record business, record companies recruited talents like Autry to record songs for rural markets (pp. 52-53; cf. Lenthall 2007: 11-12). Autry migrated to radio in 1928, when his morning show *Conqueror*

addition to THE PHANTOM EMPIRE, ACE DRUMMOND (Universal, 1936) also features a singing protagonist.

7 In fact, 'the weirdest stories ever told' is a slogan that appeared on the covers of some issues of the pulp magazine *Dime Mystery* in the mid-1930s (Jones 1975: 15). Beginning in the 1920s, the attribute 'weird' was used for fiction with plots of outlandish horror that appeared for instance in the pulp magazine *Weird Tales*, which Everett and Shanks describe as 'nonrealist', 'extra-mainstream', 'speculative fiction' (Everett & Shanks 2015: ix; see also Sorensen). Films of a similar quality were termed 'weirdies' and featured, as Henry Myers wrote in 1945, 'supposedly preternatural terrors such as were-wolves and vampires, and supposedly pseudo-scientific terrors such as mad scientists and inventors'. Particularly during the Depression, he argues, 'weirdies' caused both horror and laughter among audiences (Myers 1945: 20). Thanks to Frank Krutnik for pointing out the meaning of weirdness in this context to me.

Record Time premiered on Sears' radio station WLS (*World's Largest Store*), a station similarly geared towards rural Mid-Westerners and Southerners. Additionally, he had a featured spot on *The National Barn Dance*, a variety show performed in front of a live audience and broadcast through the radio channel. In 1932, NBC picked it up and aired it nationally on Saturday nights (Stanfield 2002: 66-69).⁸

When *THE PHANTOM EMPIRE* was released, Autry had a record contract with the American Record Company, a firm owned by Herbert J. Yates, who designed Autry's career in recording, film, and radio. In 1935, Yates combined the independent studios Mascot, Liberty, Majestic, Chesterfield, and Monogram into Republic Pictures, thus also taking over Gene Autry's film contract from Mascot.⁹ As Peter Stanfield summarizes, 'Autry, then, was a key link in a chain that held Yates's various media investments together. Therefore, it is not surprising that Autry's film "character" is often acutely self-reflexive, often appearing within the diegesis as a recording and radio star' (2002: 84). *THE PHANTOM EMPIRE* highlighted the advantages of a consolidation of various media for the fans, offering moving images of an idol they knew from radio. The serial's audience was composed of viewers who may also have tuned in to Autry's radio appearances, listened to his phonograph records, or ordered products that Autry advertised in the *Sears* catalog. Audiences were thus able to choose the media platform on which to experience the entertainment he offered. However, by casting the broadcast from Radio Ranch as hand-made by amateurs in America's cowboy heartland, *THE PHANTOM EMPIRE* not only reduced a possible threat posed by scientific advancement (cf. Miller 2009: 72), it also obscured the more pragmatic sources of mass media production. Moreover, the serial obfuscated the commercial interest behind its production—at a time when large amounts of radio content, especially daytime serials but also nighttime variety shows, were in fact produced by advertising agencies who bought programming time for specific advertisers (Hilmes 1997: 118-21).

This obfuscation took place at a curious time: one year prior to the release of *THE PHANTOM EMPIRE*, the 1934 Communications Act terminated a reform movement that had emerged in opposition to radio's exclusively commercial use, to its economic and ideological concretion, and to monopolization. The medium's commercialization had been affirmed in the Radio Act of 1927, in which the government had regulated the allocation of frequencies and had

8 NBC's Blue Network was affiliated with WLS.

9 Autry was to appear in a number of Republic Westerns afterwards, but he did not make any film serials for Republic.

officially endorsed a commercial, advertisement-based broadcasting system. It was in the wake of the Radio Act that the first national broadcasting stations were formed: NBC and CBS (Lenthall 2007: 11-12; McChesney 1993: 5). Between these legislations there was a seven-year period of both successful national radio shows and reform attempts. *THE PHANTOM EMPIRE* thus envisioned a consolidation of media businesses that just recently had been heavily contested. This historical context in part explains the serial's paradoxical combination of an open embrace of media consolidation and the success of national radio that Autry symbolizes and its simultaneous presentation of Autry's diegetic radio show as a DIY production from the prairie.

In the early 1930s, business consolidation was fostered by overlaps in the technologies behind individual branches of mass media: the record business, radio, and sound film were all reproducing sound in one way or another (Sklar 1994: 156).¹⁰ In fact, Republic was a small company in comparison to the vertically integrated major studios (see chapter 3 of this volume). Nevertheless, *THE PHANTOM EMPIRE*'s showcasing of Autry points to a larger trend of American film studios to merge companies into larger corporations. This process of unification and the resulting shift in the media landscape resembles, though on a smaller scale, aspects of what Jenkins describes as media convergence in the digital era. He explains that since the end of the twentieth century, narrative content has traveled easily and economically from the cinema screen to computer gaming because both are based on digital technologies to create special effects and high resolution (Jenkins 2006: 104). The first decade of sound film production saw a comparable appropriation of sound recording technology in various media and a resulting consolidation of business efforts (Uricchio 2008: 289; Wasko 1994: 8-14).

As mentioned earlier, the story world of *THE PHANTOM EMPIRE* is limited to this particular film serial.¹¹ On screen, however, the serial demonstrates

10 In order to access sound technologies, film studios teamed up with companies outside the film industry. They engaged in larger financial enterprises than before, buying other companies or being bought. Robert Sklar takes Warner Bros. and RKO as examples: 'The talkie revolution immediately forced the moguls into a new realm of industrial and financial enterprise. Sound, first of all, came from outside the industry: Warner Bros. got its Vitaphone sound system from Western Electric, a subsidiary of American Telephone and Telegraph. Radio Corporation of America put a sound system on the market and took over control of a studio and an exhibition company, merging them into a new firm, RKO' (1994: 156). The result was the emergence of 'giant communications corporations' (p. 157).

11 *THE PHANTOM EMPIRE* did offer a comic strip, which exhibitors could order from the studio and give to their local newspapers. Exemplary comic panels were printed in the pressbook; the entire strip contained six strips of four panels each.

how its narrative could cross over into radio by dividing the action into the portrayed world of radio production on the one hand, and a play-within-a-play in Autry's diegetic radio show on the other. The camera-eye penetrates both of these spaces, showing Autry's performed songs and his radio show's narrative serial as live-action events. The serial embraces the presentational address of earlier silent- and sound-era serials, which tend to display their narratives rather than immerse their viewers, but it adds a layer of media self-reflexivity by assembling a collage of anecdotes that relentlessly cross the threshold between the 'real' story and the diegetic radio show. Characters and anecdotal plot elements frequently travel from one narrative layer to another, blurring the lines and highlighting the existence of those lines at the same time—for instance when Tom Baxter, Autry's business partner on Radio Ranch, is shot in the live-action radio serial but, as it turns out, has truly been fatally wounded (episode 2, 'The Thunder Riders'). Similarly, the ranch children's mounted adventure club appears both in the radio serial and on Radio Ranch. *THE PHANTOM EMPIRE* thus places its narrative on the threshold between its depictions in the film serial and in the radio serial told within its diegetic radio show. Instead of presenting us with a narrative world that develops across numerous media platforms—as would be typical of media convergence—*THE PHANTOM EMPIRE* takes a meta-perspective and portrays convergence culture while its own story world is confined to its twelve episodes on the film screen. The serial assembles narrative elements and modes of address from radio and, later on, television and transforms them into anecdotes that can be assembled and juxtaposed on screen. The serial thereby displays how narration works both in the film serial and on radio, and it demonstrates how these media can or could work in concert.

The serial's narrative exemplifies the flow of content across media platforms, for example, when Queen Tika follows Autry's broadcast on her omnipresent surveillance television, on which she continues to monitor the proceedings on Radio Ranch after the radio show's air time—in fact adding another medial layer to the mix. The children Frankie and Betsy propose another form of media engagement: they invite the implied radio listeners to visit the ranch and to join their thunder riders club, and they suggest they should make their own thunder rider outfits. In this instance, *THE PHANTOM EMPIRE* mirrors a form of participatory reception that the film serial similarly encourages its non-diegetic audience to adopt. Its pressbook encourages local theaters to form clubs, to distribute paper thunder riders' masks, and to show slides before each week's screenings with a special message from the club president, Frankie Darro. At the time, such clubs often formed around particular serials, and they were part of a culture in

which children reenacted their favorite plots in their free time (Higgins 2016). Such clubs confirm that participatory culture 'has its roots in practices that have occurred just below the radar of the media industry throughout the twentieth century' (Jenkins 2006: 133). In the present context, *THE PHANTOM EMPIRE* quite explicitly uses stunt actress Betsy King Ross as a means to extend this invitation to play to girls in the audience.¹²

The formation of a thunder riders club among *THE PHANTOM EMPIRE*'s child viewers unleashes the story from its spatial confinement in the cinema and from the temporal constraints of its weekly screening schedule. Belonging to the club and wearing the thunder riders' mask for play extends the children's engagement with the serial throughout the week and allows the serial to become part of a club member's life-world outside of the local film theater (cf. chapter 3 of this volume). In its pressbook suggestion to form thunder riders' clubs, the serial's marketing performs an aspect of what *THE PHANTOM EMPIRE* envisions on a broader scale: a story that unfolds around the viewer, during the week, enwrapping audiences in their daily lives instead of solely immersing them once every seven days. In offering related brand content across multiple media platforms, media convergence not only ensures that a producer can reach consumers no matter what their momentary medium of choice may be. In addition, the viewers' awareness that a particular content or franchise is available on numerous platforms suggests that they are surrounded by it. Instead of going out of their way to find a story, the story already is where viewers are. As content unfolds in multiple media at the same time, it moreover seems to exist presently and continuously, readily available whenever consumers decide to access it. It is this sense of liveness, of the unfolding of a story the end of which is not yet determined, that *THE PHANTOM EMPIRE* gestures towards—with Autry's migration between media, with the serial's diegetic portrayal of convergence, but also in its staging of radio production on film, which enables viewers to watch the radio play being produced as if they were in the studio audience at *The National Barn Dance* in Chicago.

THE PHANTOM EMPIRE continuously negotiates radio and, as I will show, television as well as its own medium, particularly with reference to sound. The serial refuses to allow its mediality or 1930s mass culture to recede into the background. Whereas this presentational mode of storytelling is common among film serials, it also frequently surfaces in other filmic

12 Nevertheless, *THE PHANTOM EMPIRE* seems not exclusively geared towards children, especially since Gene Autry was popular among women who were the core audience of his WLS morning show *Conqueror Record Time* (Stanfield 2002: 73).

forms, for instance series Westerns. Instead of focusing on characterization and the creation of an enclosed story world, ‘the series western celebrated performance as an act of value in and of itself’ (Stanfield 2002: 100). In this context, Stanfield assigns films featuring Autry a special status in contrast to other films with singing cowboys:

Rather than integrating musical performance seamlessly—as spontaneous singalong around the campfire, as unobserved and private moment, or as serenade to a sweetheart on a ranch house porch—Autry’s films frame it explicitly as musical performance. [...] musical performance in singing westerns is a commonplace act that calls attention to the social bond between the entertainer and his audience. [...] The strategies that Autry’s films use to secure this contract are diverse: trading on the public performance opportunities of the traveling show or the barn dance; dismantling the distance between professional music artist and amateur film character in the “spontaneous” performance in bunkhouse or parlor; and using recording/radio technologies as narrative conceits that collapse, rather than uphold, audience distinctions between film character, radio performer, and recording artist. (p. 102)

Stanfield bases these observations on the Republic features in which Autry appeared immediately after *THE PHANTOM EMPIRE*. Without aiming to suggest that the series Western’s performative strategy originated in film serials, Stanfield’s analysis attests to the fact that studio-era Hollywood offered multiple modes of address, both in independent productions as well as in films from the majors—musicals, for instance. The form of the film serial lends itself particularly well to a presentational mode of address and a performative appeal, because the breaks and disruptions of a serials’ installments as well as their incorporations of technological attractions and stunts already forfeit the more immersive experiences offered by more readily representational film. Serials could thus easily accommodate the mode of address that accompanied Autry from his radio show and *The National Barn Dance*¹³ to *THE PHANTOM EMPIRE* and eventually to the features he made at Republic.

13 *The National Barn Dance* was a show performed for a live audience in Chicago and broadcast for rural audiences throughout the Midwest and parts of the South. It focused on country music (itself a cultural blend of European American and African American styles, including ragtime and blues, but self-stylizing as rural or urban white music) and themes, but also added other styles, such as polka, Hawaiian guitar music, and ballroom dance orchestration. It combined music with comedy, sometimes with drama or children’s stories (which Malcolm Claire performed in

THE PHANTOM EMPIRE takes the presentational variety format to an extreme, in that many of the serial's cast members are themselves attractions. In addition to the musical performances by Autry and his band, the serial features the comedy acts of Oscar (Lester 'Smiley' Burnett) and Pete (William Moore). Smiley Burnett was a comedian and a musician, who picked up on blackface minstrelsy, jazz, black and white rural music styles, and often appeared in drag acts—which he also does in THE PHANTOM EMPIRE (Stanfield 2002: 116-19).¹⁴ Joke sequences with Oscar and Pete appear in both the broadcast from Radio Ranch and in the serial's general story, extending the variety format from the diegetic broadcast to the serial itself (episode 2, 'The Thunder Riders', and episode 4, 'Phantom Broadcast'). The child protagonists in the serial are played by Frankie Darro and Betsy King Ross (as Frankie and Betsy Baxter). At the time, Darro was a successful actor for both serials and major studio features, and King Ross was a famed child stunt rider (*Silver Screen*). Together, the two supply much of the serial's stunt action. All of these actors appear in the serial's diegetic broadcast that, in combining a drama serial, comedy acts, and music, brackets the most prominent radio forms of the time. In the mid-1930s, drama and comedy were the most frequently broadcast forms, replacing the music-based programs of the preceding decade. Among the predominant nighttime entertainments were live variety shows, 'a format that combined either one male host or a male-female team with an ensemble of supporting characters, music (usually with an in-house orchestra or singing group), guest stars, comic dialogue, and comedy/drama sketches, with varying degrees of emphasis on these components according to the talents of the host(s)' (Hilmes 1997: 183). Autry's diegetic two-p.m. broadcast combined the most popular radio forms of the time, presenting a fictional, daytime version of the variety show.¹⁵

blackface), narrated by a show host (Berry 2008: 4-13). The show combines a visual appeal for the studio audience with an address to the radio listeners. A record of a 1942 rebroadcast for the WWII service men is available on youtube; rare video footage from *The National Barn Dance* is included in the 2011 PBS documentary *The Hayloft Gang: The Story of The National Barn Dance*.

14 Autry embodies cultural borrowing and montage just as much as the film serial does, particularly THE PHANTOM EMPIRE. Autry's engagement in cultural borrowing in a sense culminates in the fourth and in the final episodes of THE PHANTOM EMPIRE, when he performs a song yodeling. Tyrolean troupes touring in the United States had brought yodeling to vaudeville in the nineteenth century, from which it was adapted to college glee clubs and blackface minstrelsy. By the 1920s, it had changed in tone by the incorporation of blue notes, and was thus called 'blue yodeling'. Gene Autry picked up on this style in his music recordings of the late 1920s (Stanfield 2002: 63-65).

15 Radio's variety format is itself borrowed from vaudeville and silent cinema. One of the earliest 'radio personalities' was showman Samuel 'Roxy' Rothafel, who was the manager of

Radio and Film Sound

THE PHANTOM EMPIRE's incorporation of a diegetic radio show effects a tour de force across multiple modes of address and devices of storytelling. Many of these already appear in the serial's initial minutes. The first episode begins *in medias res*, with a supposed 'raid' taking place in front of Radio Ranch. Autry and his band, on horseback, plunder a wagon full of musical instruments. Picking up the equipment, they set up before a microphone and Autry declares to an implied radio audience that they are 'making another raid on your time', which introduces the diegetic broadcast. For comic effect, this turn of events retrospectively identifies the supposed narrative exposition of the serial's action plot as the beginning of Autry's radio show. His turn to the microphone abruptly terminates the representational mode of storytelling and forces viewers to reconsider their earlier assumptions about the plot. The radio broadcast thus initiated includes—in chronological order—Autry and his band performing a song called 'Uncle Noah's Ark', Frankie and Betsy's invitation of the children in the audience to join the 'National Thunder Riders Club' and visit Radio Ranch, Frankie's and Betsy's narration of the founding moment of the club, Autry's offer to send out sewing patterns for thunder rider costumes to interested juvenile radio listeners, and a narrative radio serial beginning with yesterday's recap and ending in a cliffhanger (episode 1, 'The Singing Cowboy').¹⁶

In these initial eight minutes, the episode shifts through multiple modes of address and pits these against each other. Each of the discernible elements functions as an anecdote with its own mode of narration and viewer address. The succession of anecdotes forces viewers to continuously reconsider their hypotheses about and relationship to the ongoing story, and thereby inadvertently points to the ruptures between the anecdotes. The song and various direct addresses of the radio audience, filmed mostly with a steady frame that foregrounds the radio microphone, are radically presentational and non-immersive. When Betsy and Frankie narrate the founding moment of their thunder riders club, they first appear at the microphone and then a dissolve leads to a flashback sequence that depicts the action as narrated

Capital Theater in New York City where he showed feature films but also directed a vaudeville program. Starting in 1922, his radio show aired live from the theater and was first named *The Capitol Theater Gang*, later *Roxy and his Gang* (Hilmes 1997: 60-63).

¹⁶ To clarify, this montage of elements does not directly resemble *The National Barn Dance*, which would have focused much more on musical acts and did not include, as far as I know, a narrative serial or a children's club. However, information on the *NBD*'s program is comparatively scarce.



26. Autry sings 'Uncle Noah's Ark' for the radio broadcast (*THE PHANTOM EMPIRE*, episode 1, 'The Singing Cowboy').

by the kids. When their voiceover stops, a roughly thirty-second stretch of representational filmic narration follows, in which Queen Tika's mounted troops are in pursuit of the children, whose subsequent escape features elaborate horse stunts. Frankie then ends the flashback as he faces the camera and explains: 'and that's how we came to call our club the thunder riders' (episode 1, 'The Singing Cowboy'). In these instances, the viewer address gradually changes from a narrative radio show, via voice-over explanation, to immersive storytelling, which ends abruptly when Frankie turns to the camera. In this instance, the serial points to the similarities and differences of radio and cinematic storytelling and their respective modes of address, and it highlights the possibility of merging them by means of voice-overs, in which the film's frames function as illustrations of the radio story. In such moments, the serial in fact reverses the historical timeline of film development, for whereas cinema in the late 1920s added recorded sound to its previously 'silent' images, the images corresponding to *THE PHANTOM EMPIRE*'s diegetic radio show appear to accompany the sounds of radio. Simultaneously, the serial, by recourse to radio, recreates the sense of liveness that in the silent era resulted from the live musical accompaniment in local theaters. Whereas sound film as a fully recorded medium loses this

sense of liveness, the broadcast from Radio Ranch highlights the live aspect of radio and recreates it, diegetically, on screen.

Although radio was technologically capable of playing recorded material, which early broadcasters frequently had done, by the 1930s quality radio—especially the variety show—was considered a live form. This association of radio with liveness results mostly from 1920s legislation. In 1922, the allocation policies for radio licensing divided stations into two groups: amateurs and broadcasters. The former were now forbidden to air information or entertainment, including weather and market reports, news, speeches, concerts, and particularly music—a restriction that catered to self-proclaimed advocates of ‘high culture’ and their criticism of the amateur broadcasters’ tendency to play jazz records. As the newly licensed commercial stations similarly neglected their supposed agenda of cultural uplift, a further category of so-called ‘Class B’ stations was introduced. These stations were prohibited to play phonograph records or use player pianos, restricting them essentially to live entertainment (Hilmes 1997: 48-50). The fact that ‘Class B’ stations were the most successful broadcasters fed into the increasing public opinion that ‘live is better than recorded’. By the time the ban on playing recorded material was dropped in the early 1930s, these stations had firmly established their dominant positions (p. 50). Throughout this period, in the late 1920s and early 1930s, radio was offering increasingly less music and more comedy and drama, which was typically supplied by agencies who represented individual advertisers. In the late 1920s, these agencies pushed for the allowance of recorded shows, called ‘transcriptions’, because by shipping programs on phonograph records they could avoid network costs and were able to broadcast shows through multiple regional stations to rural audiences (p. 113, 119).¹⁷ Nevertheless, the advertising agencies also profited from the networks’ access to a nationwide audience, and their productions kept ‘live network transmission the dominant radio form in the United States’ throughout the 1930s (p. 127).

Released in 1935, *THE PHANTOM EMPIRE* references radio exclusively as a live medium. The serial does so by borrowing its variety format from nighttime radio shows that were typically aired live and integrating its drama and comedy serial into that framework. The dramaturgy of the serial’s plot hinges on this idea of liveness, as Autry’s need to return to Radio Ranch for his two o’clock broadcast constitutes a central anchoring point in each episode. It enables a melodramatic negotiation of ‘in the nick of time’

17 The popular comedy sketch series *Amos ‘n’ Andy*, for instance, was recorded since 1928 (Hilmes 1997: 86).

versus a possible 'too late', and it simultaneously foregrounds the presentist approach to storytelling that casts everything as taking place 'now'.

The sense of liveness created in *THE PHANTOM EMPIRE* also results from an openly showcased use of sound, as the serial simultaneously visualizes the creation of radio sounds usually produced without filmic documentation and the audio special effects of film that mid-1930s motion pictures also did not habitually capture on screen. *THE PHANTOM EMPIRE* foregrounds sound in ways that studio-era features often abandoned in favor of an enthusiastic embrace of film sound's capacity to increase the 'realism' of cinematic representation (Spadoni 2007: 6). By contrast, the introductory sequence of *THE PHANTOM EMPIRE* quite directly expresses its agenda of showing how radio shows are created: Frankie Baxter invites his radio audience and—via a direct address resulting from him continuously facing the camera—the film audience to visit Radio Ranch and 'see a radio broadcast put on like it should be. Ridin', ropin', real horses, real guns, real cowboys' (episode 1, 'The Singing Cowboy'). Whereas the diegetic radio listeners come in person, the film audience 'visits' the ranch by watching the film.

The ranch setting is a fictional production site for an equally fictional radio broadcast. However, these initial minutes indeed showcase more legitimate aspects of sound production. When Autry's band performs 'Uncle Noah's Ark', a recurring refrain in the song consists of a changing array of animal sounds.¹⁸ The accompanying frames first show band members create the animal sounds, with the exception of one duck in the beginning. Towards the end of the song, the frames show the animals matching each sound. The film thereby exemplifies how humans dub animal sounds on radio and, possibly, on film. A similar staging of sound production occurs later in the broadcast. When the thunder riders rush to the rescue in the diegetic radio serial, the film shows a stage hand shaking a thunder sheet, that is, a scrap of thin metal mounted on a wooden frame that is used to create the sound of rolling thunder. This shot similarly depicts sound production, and it highlights film's capacity to suggest certain sounds by connecting them to an image. The film thus pinpoints the deceptive possibilities of sound production and the suggestive power of montage. Thunder sheets were by no means new at the time, but were an established percussive instrument used in theater as well as for the accompaniment of silent films. A 1910 column in *The Film Index* provides a list of 'the most important traps and effects' for the 'smaller exhibitors that are willing to spend a little money', which

18 The incorporation of animal sounds into music was a stock part of sentimental Western music and by no means unique to Gene Autry (cf. Stanfield 2002: 59).

includes the thunder sheet among twenty-seven other items. The column's author Clyde Martin stresses that these items should be used behind the screen, out of view.¹⁹ By placing sound production at the center of attention, *THE PHANTOM EMPIRE* pinpoints the mechanical aspect of filmmaking and thus feeds into the film's operational aesthetic, and it highlights that the mechanics behind the sounds of radio and film are related. Moreover, it demystifies the previously invisible aspects of sound production, which corresponds to Frankie's promise to show a 'real' broadcast production. The serial thus proposes an operational realism instead of a representational one. And in the process, it relocates radio and film sound, which might air from anywhere and be recorded anywhere, in America's heartland and thereby casts modernity's technological feats as the hands-on labor of cowboys.

Another demonstration of sound production follows in episode four, 'Phantom Broadcast', in which the location from which Autry airs his broadcasts changes from the courtyard of Radio Ranch to Frankie's secret laboratory. Previously, the evil capitalist archaeologists trying to remove Autry from the ranch in order to profit from its underground radium deposits framed Autry for the murder of his business partner, the father of Frankie and Betsy. Wanted by the sheriff, the country star is unable to appear for his show and Frankie suggests broadcasting from his hayloft laboratory instead. As Autry performs his song, Frankie and Betsy supply the sound effects in a scene that demonstrates the use of coconut halves to imitate the sound of hooves and the benefits of a duck call. Meanwhile, Autry's band, who has been anxiously waiting for his return in time for his broadcast, listens in with surprise as they hear his remote contribution to the show. This turn of events profoundly changes the relation between performer and audience as well as the nature of the broadcast. Whereas earlier broadcasts were directed at an implied community of listeners, the band and crew on Radio Ranch now function as an audience that is visually depicted on screen, whereas Autry's fictitious larger audience moves out of focus.

Meanwhile, the ruthless archaeologists track the origin of Autry's broadcast by following the wire to the barn. This tracking mirrors Frankie's initial discovery of the underground world of Murania by means of his self-built 'direction finder'—a mechanism to locate the origin of radio transmission—that is reintroduced in this episode. The aim to trace the origin of a broadcast, in connection with Frankie's partially self-built mobile

19 Although admitting that 'the use of a thunder sheet is very seldom called for', Martin details how to use it most effectively—in concert with a roll on the crash cymbal to highlight lightning during a thunderstorm (Martin).

equipment and his interest in tinkering with radio transmission, evokes a discourse about amateur broadcasting that existed prominently after World War I and into the 1920s. Whereas commercial radio is directed towards an implied community of listeners, amateurs often aimed to identify their communication partners, although these two sides constitute no strict binary opposition. As early as 1906, when anecdotal evidence suggests one of history's many 'firsts'—in this case the Christmas Eve transmission of a combination of speech and music to ships on sea near Massachusetts—radio was envisioned as enabling both point-to-point communication as well as broadcasts to a wider audience (Hilmes 1997: 34-37). The beginning of the first World War then placed the control of airwaves into the hands of the Navy and, eventually, of a small number of businesses.²⁰ By this time, amateur broadcasters had organized themselves into nationwide clubs, with their own visions for the future of the medium (p. 38). Although government representatives advocated for the amateurs at the 1922 radio conference and recommended that airspace be cleared for them, the new organization of the conference simultaneously removed the amateur organizations from the more important debates. Additionally, government agencies were unable to prevent monopoly formation, which suppressed amateur activity, despite controlling the allocation of airwaves, because the wiring of local stations into national networks depended on the land lines that were owned by the American Telephone and Telegraph Company (Hilmes 1990: 16-18). And whereas AT&T allowed the smaller CBS to air nationally alongside AT&T's own NBC stations out of a fear of antimonopoly legislation (Hilmes 1990: 20), amateurs were now pushed 'to the margins of the field they had once dominated', that is, general broadcasting (Hilmes 1997: 41).²¹

Before being largely silenced, amateurs had frequently engaged in 'DXing' or 'fishing in the ether': they tracked the locations of radios that picked up their signals, aiming for the most distant connections possible. Amateur broadcasters did so by repeating their call letters and locations, plus additional technical specificities, and waiting for signal recipients to answer. *QST*, the journal of the American Radio Relay League, featured a

20 Before WWI, radio was the technology of inventors and entrepreneurs. During the war, the Navy took over the regulation of frequency assignments, pooled patents, and developed the technology. In 1919, the Radio Corporation of America was founded, essentially a merger of corporate business and federal government interests who determined the radio regulations at the time and ended low-key entrepreneurship (Hilmes 1990: 12-15).

21 For the sake of clarity, these remarks simplify the distinction of commercial station and amateurs, considering amateurs as those organized in the amateur clubs. Nevertheless, many amateurs also worked technical jobs, for example for AT&T.

prominent section titled ‘How Far Can You Hear?’ to track and compare these distances via the data sent in by their readers (Hilmes 1997: 42-43).²² In *THE PHANTOM EMPIRE*, Frankie shows a similar interest in finding out where a signal originates and, since the Muranians encode their messages so that to Frankie they simply sound like static, he builds the ‘direction finder’ to satisfy his curiosity. The archaeologists similarly trace a broadcast, though in a more simplistic manner, when they track a wire to find Frankie’s secret laboratory. Whereas Frankie’s interest is innocent and juvenile, the archaeologists have less noble pursuits in mind in their aim to find Autry. Thus, instead of pitting amateur broadcasts against a commercial use of radio, the serial pits both of them against the commercial interests behind the archaeologists’ search for natural resources. In fact, in the hayloft barn, amateur radio transmission comes to the rescue of Autry’s public broadcast.

THE PHANTOM EMPIRE thus models its multiple constructions of what radio is or could be based on contemporaneous and past appropriations of the medium. However, the serial’s idea of amateur broadcasting itself refers back to a stereotype of amateur broadcasters rather than to actual historical precedence. Political regulators as well as a more general public, through newspaper reports, constructed a discursive image of amateur broadcasters as young, white, middle-class boys—despite the presence of female, black, and working-class broadcasters. These boys were either considered young heroes who used their scientific skills rescuing ships at sea or helping with the war effort, or they were scorned for disrupting transmissions, causing interference, or distributing false information. When amateurs were in fact mature adults efficiently organized in associations who lobbied against commercial interests at radio conferences, public discourse framed them as chaotic boys running havoc on the ether. This stereotype was only practical for corporations who aimed to exploit radio commercially, who now appeared as the earnest and rational agency willing to regulate the airwaves. According to Michele Hilmes, the exclusion of the amateurs ‘from the dominant representation points to the need to “control” this phenomenon discursively in a way that least threatened established social hierarchies. Radio communication, by means of this construction and not by accurate reflection of real conditions, became understood as “naturally” the province of white middle-class boys’ (Hilmes 1997: 38-41). In the character of Frankie Baxter,

22 According to Hilmes, these amateurs got bored and therefore started playing instruments or recorded music. They began to air regularly, and *QST* printed the schedules for these part-amateur, part-commercial shows. As legislation differentiated the two more clearly, *QST* went back to covering only amateur activity (Hilmes 1997: 40-50).

THE PHANTOM EMPIRE literalizes this stereotype of a white middle-class boy who plays with radio transmission. On the one hand, this characterization works just as well as it did fifteen years earlier: Frankie's playful activities on the ether present no threat to Autry's more earnest commercial broadcast, and he is the boy hero as his efforts help to identify the underground city of Murania. In fact, Frankie's insistence that his laboratory is secret comes across as boyish foolery because there seems to be no imminent threat and Autry, as the surrogate father figure, can enter the secret laboratory without further ado. Nevertheless, by reintroducing the figure of the amateur radio operator, THE PHANTOM EMPIRE reactivates a historical road not taken; it creates an anecdote²³ that itself performs an act of media archaeology (cf. Huhtamo & Parikka 2011). The serial reinstates an alternative appropriation of radio technology that was ruled out in the wake of radio's commercial streamlining. Pointing to this alternative use of radio technology, the serial challenges the model of a commercial, national medium of mass address with which viewers in the mid-1930s were most familiar.

Television

Whereas Gene Autry and Frankie Baxter embody the commercial broadcaster and the radio amateur, respectively, Queen Tika and her underground kingdom of Murania use media for defense purposes. Murania's control room includes radio technology but it more particularly foregrounds television as a means to coordinate the operations of the underground kingdom's military operations. Although Tika gives orders to her army of thunder riders via portable radios that connect to their watches, her more frequent means of communication and surveillance is television. Her control room, the technological heart of Murania, boasts a large, round, table-top television screen by means of which Tika monitors her empire and the surface world, with no need for a camera device on site. In 1935, that is, before television sets were widely distributed for domestic use, THE PHANTOM EMPIRE showcased the televisual technology in the military context that throughout history has repeatedly furthered the development of media technologies.

The spread of television as a mass medium began in the mid-1930s, following radio with considerable delay (Uricchio 2008: 294). However, the

23 This appropriation of radio technology is an anecdote, as this kind of point-to-point communication and testing of radio mechanisms similarly occurs in other serials, for instance in ACE DRUMMOND.

large-scale dissemination of television sets throughout the United States ensued only after World War II. As Cynthia Miller points out, *THE PHANTOM EMPIRE* featured television at a time when only about four hundred television sets existed throughout the United States, four years before the 1939 New York World's Fair that inaugurated commercial TV broadcasting (2009: 67). Nevertheless, the medium's discursive construction and its future constitution were fixed well before, but the Great Depression and the war delayed the spread of the material apparatuses (Castleman & Podrazik 2003: 8, 15-21). *THE PHANTOM EMPIRE* appeared at a time that, according to Philip Sewell, marked the end of the negotiation of television's technological and cultural character. From 1935 until the advent of digital technologies, television was 'electronically scanned and analog encoded', and it was understood as airing unidirectional broadcasts from centralized broadcasting stations, with adherence to visual standards borrowed from cinema (Sewell 2014: 44). The preceding years, especially 1928-1933, constituted a 'moment of foreclosure of possible futures for television, defining certain uses, content, and social relations as not television' (p. 19). Television thus conceptually consolidated as a mass medium a full decade before large parts of the population accessed it.²⁴

This solidification entailed the ruling out of technological functions that had been connected to the idea of the televisual since the 1870s. Newspaper and magazine articles from the nineteenth and early twentieth centuries conceptualized television interchangeably in relation to the telephone, to radio, and to film. In William Uricchio's terms, television was a medium that 'was variously understood as domestic like radio, public like film, or person-to-person like the telephone; that was live and recorded, high definition (more than two thousand lines) and low, large screen and small' (2008: 289). Rather than coinciding with the moment of invention or inception, the release of *THE PHANTOM EMPIRE* co-occurs with the abandonment of a variety of tentative inventions, technological discourses, and futuristic dreams. Similar to its depiction of radio, the serial revisits multiple options of the televisual just as they were beginning to stop being options. At the same time, *THE PHANTOM EMPIRE* embraces qualities of the televisual that would continue to be part of the medium's discursive construction—most importantly television's capacity to transmit live images.

24 According to Philip Sewell, the delay in the commercialization was endorsed by electronics manufacturers and broadcasters such as RCA, NBC, and eventually RKO and GE because they profited from radio and considered TV a threat; because they feared that a prematurely sold, inferior television would cause a public distaste for the medium; and because they were waiting to have their own technologies patented (2014: 37).



27. Queen Tika's television screen showing a surface world street during rush hour (*THE PHANTOM EMPIRE*, episode 1, 'The Singing Cowboy').

The underground kingdom of Murania is home to an advanced society that relegates physical labor to robots and practices complete withdrawal from the 'surface world' in the face of its violence, speed, and mechanized chaos. By means of her television technology, Queen Tika ensures the strict and orderly organization of the Muranian empire and its inhabitants by conducting surveillance of Murania and the surface world, which the serial stresses in its insistence that she does not depend on reports from her army of thunder riders. Murania's technological control room is a multi-story factory hall full of gears and levers that—like the underground queendom as a whole—resembles the aesthetics of Fritz Lang's *METROPOLIS* (1927).

In the first episode, an operator starts the unnamed televisual apparatus with its horizontal table-top screen. Initially, Queen Tika sees a shot of a street scene with cars, street trolleys, and pedestrians, and she explains that 'the surface people are always in a hurry'. Additional footage provides further proof that the world is 'a madhouse', showing sequences from a horse race, a boxing match (Queen Tika titles it 'death, suffering'), and a car accident occurring on a race track (Tika says 'speed, accidents'; episode 1, 'The Singing Cowboy'). Tika's voiceover descriptions of the televisual images may present

a joke that foregrounds the fact that the isolated, secluded existence of the Muranians results from their misinterpretation of the action in the surface world. Nevertheless, the moving images shown on her television do portray accident and chaos. However much the serial advertises Murania as an advanced society, Tika experiences urban modernity and its entertainment industries very much in terms of shock and the threat of 'hyperstimulus' and 'neurasthenia' that constituted the modernity discourse of previous decades (cf. Singer 2001: 59-100).

On a self-reflexive level, this instance exposes the serial's use of library footage and its capacity to change that footage by means of editing and the addition or alteration of sound. Simultaneously, the sequence exemplifies the freedom to switch radio or TV channels. In fact, Tika's thunder riders wear 'television dials' around their wrists, and the serial's pressbook offered a cardboard version of these for distribution in local cinemas. Children in the audience could thus pretend to switch the television channels or to place a call.²⁵ Paradoxically, the sequence in the first episode highlights the possibility of changing channels in the context of Tika's discontent with its downside, that is, with the failure to find the right channel. Unhappy with the pictures she sees, the queen asks the operator: 'Do I have to witness this insane material because you are unable to find the garden of life?' The image then quickly switches to her requested setting, the surface entrance to Murania, and, with reference to sound technologies, Tika requests 'Sound! I want to hear them' (episode 1, 'The Singing Cowboy'). This sudden discontent with the silent image casts film sound as something audiences asked for, as a completion of cinema's reality illusion.

Queen Tika employs television in a variety of situations that chart multiple visions of what television could be or could have been. Some of these emerge from the diegetic technologies themselves and from the ways in which characters use them, others result from editing. In addition to the surveillance television, Murania's control room features a second television set that is used for direct communication with the guards at the secret entrance to the underground empire. Due to the upright position of the screen, this second TV resembles both a non-diegetic TV set and television apparatuses as they appear in other film serials.²⁶

25 The warrior's wrist bands are only shown once in the serial, and the warriors rather use them for radio communication. In fact, the ad in the pressbook calls them 'television dials', although its headline refers to 'radio wrist bands'.

26 For instance, in *THE AMAZING EXPLOITS OF THE CLUTCHING HAND* (Weiss, 1936), *DRUMS OF FU MANCHU* (Republic, 1940), or in *SPY SMASHER* (Republic, 1942).

Nevertheless, as we learn later on, the larger surveillance television can also be used for communication. In episode six, 'Disaster from the Skies', Autry is on the run from Tika's helpers in the underground kingdom after he was captured and received a death sentence. He sneaks into the control room and holds the engineer at gunpoint, forcing him to contact Frankie and Betsy on the television. The children are in Frankie's hayloft laboratory, intercepting encrypted radio messages from Murania. Autry can see them on the television screen, but the children fail to understand his words. The reason, however, is not the unidirectional nature of television but the fact that Murania's 'wireless telephone' encrypts communication by means of its 'word scrambler' technology, which makes spoken words sound like static. Autry eventually unplugs and re-plugs various chords until the children can hear him on their radio.

This sequence casts television as an audiovisual technology that interconnects with the wireless telephone in Murania's control room.²⁷ The control room thus contains a literal television 'set' (cf. Sewell 2014: 41), a modular apparatus that consists of a connected array of radio, telephone, and screen technologies. Such an idea of composite technologies informed TV discourses until the late 1920s. Discussing the coverage of television in *Radio News*, Sewell points out that as late as 1927, many writers imagined TV 'as a device that would be separate from the sound unit, as a component rather than an integrated audiovisual box' (p. 41). *THE PHANTOM EMPIRE* adopts this notion of a modular constitution of television in its narrative when Autry uses the Muranian television to contact Frankie's radio and thereby casts the TV screen as an addition to the radio apparatus. Moreover, the serial portrays the separation of TV's visual and sound components in its set design when it locates the sound equipment, including the 'word scrambler', against a wall in the control room, whereas the television screen is located at its center.

A similar integration of multiple notions of the televisual results from the serial's editing. In the second episode, Queen Tika again skips through various channels when she monitors the surface world, this time showing tanks at war, Wall Street, and police motorcycles. She orders the operator to 'bring in Radio Ranch, the childish amusement played for surface man', just in time for the serial in Autry's daily broadcast. Tika tunes in to daytime drama at a time when such radio serials for female audiences drew substantial listeners, but were also scorned for their sensationalism and immorality (Hilmes 1997: 124). In this instance, the serial connects the otherwise icy, composed, but nevertheless sympathetic leader to a

27 'Wireless' in this scene means that it does not require a mouthpiece.

stereotype of femininity and afternoon entertainment.²⁸ Nevertheless, Tika also scorns the show, resulting in a pun on cultural hierarchies and criticism of radio programming.

As the diegetic broadcast begins, the camera zooms in on Radio Ranch, allowing the audience to watch Autry's story unfold without the added circular frame of Tika's TV screen. When the father of Frankie and Betsy dies in what was intended to be a staged shooting for the radio serial, we witness Autry's escape (he is framed for the murder), thus transitioning from the play-within-the-play to the action in the surface world before returning—zoom out—to Queen Tika's viewing position at her television screen. Through Tika's surveillance perspective, the serial seamlessly proceeds from the play-within-the-play to the overall plot of the serial. The resulting effacement of a distinction between fiction and fact within the filmic world mirrors television's connection of fictional entertainment and live 'reality', for instance in news formats, a combination that already informed radio programming.²⁹ Moreover, because this instance relocates the diegetic radio drama to the television screen, *THE PHANTOM EMPIRE* connects the serialized commercial radio program to the newer mass medium. It describes the travelling of forms between media, bearing witness to the conceptual consolidation of television in terms of 'radio broadcasting, from which it carried over not only its economic, regulatory, and institutional structures but also its familiar program forms, even to specific shows and personalities' (Hilmes 1997: xiv-xv). Therefore, in between its staging of television as a means of communication and surveillance, *THE PHANTOM EMPIRE* also acknowledges television's soon-to-be-fact status as a conveyor of mass entertainment.

The serial's gesture towards commercial television does not, however, assign a hierarchy of television over radio. Instead of forecasting a replacement of radio by TV, Tika's visual tuning-in to the radio station inaugurates a moment of simulcasting, that is, of the transmittance of video images to

28 A few sequences in the serial point to a rather overt reflection of gender stereotypes. In the first episode, Betsy insists that girls are invited to join their thunder riders club as much as boys are—against Frankie's initial reservations ('The Singing Cowboy'). In episode nine, Frankie and Betsy are brought to Murania and meet Queen Tika, who says 'so, you are the sprout from which surface people spring' and Betsy explains 'I'm a girl' before Frankie adds 'and I'm no sprout!' ('Prisoner of the Ray'). The inclusion of Betsy in the cast was probably a means to attract girls to watch the often boy-oriented sound serials.

29 Such a blurring of lines between fact and fiction was famously taken to an extreme three years later, when Orson Welles' 'The War of the Worlds' aired on CBS' *The Mercury Theater on the Air* in 1938. In *THE PHANTOM EMPIRE*, however, this blurring of lines takes place within the diegetic world of the serial.

accompany a radio broadcast. In the early 1930s, commercially successful television was imagined as tapping into rather than competing with popular radio shows. Focusing on the Chicago-based experimental television channel W9XAP, Sewell explains that it provided a sight broadcast corresponding to the sounds of WMAQ, the commercial radio station of the *Chicago Daily News*. The project eventually ended because the Federal Radio Commission refused to license commercial TV at the time, allowing W9XAP to exclusively air video for WMAQ's sustaining programs, which had a much smaller following (Sewell 2014: 42-43). *THE PHANTOM EMPIRE* points to this idea of a convergence of television and radio broadcasting when Tika tunes in to Autry's show. Therefore, rather than arriving at a definitive construction of a televisual apparatus, *THE PHANTOM EMPIRE* highlights the interconnection of technologies and the multiple and shifty options of their use, considering media as modular rather than self-contained. By then omitting editorial clues that would reveal the distinction between Autry's broadcast and his pursuit on the prairie, the episode integrates the surveillance function of Tika's TV within this array of televisual use options. In line with its reinstatement of the contingent uses of radio, *THE PHANTOM EMPIRE* pinpoints the various options offered by television at a moment in history in which this contingency was being curtailed. The serial identifies media archaeological roads not taken, precisely when the definition of television in terms of a 'better' radio gradually suppressed other models of the medium's use (Uricchio 2008: 300).

According to Sewell, the impact of scientific management in the 1920s and early 1930s contributed to the definition of television as a consumer good (2014: 24). Leaving the field of technological progress only to scientifically trained personnel, scientific management 'ultimately narrowed the range of technical practices' (p. 26). At the time, imagery and writing in the *Scientific American* implied 'that there is a singular correct answer to the "problem of television", and this notion would become crucial in regulatory demands for standardization. Thus, television would be the logical and unique end of the correct application of scientific theory and engineering practice' (p. 26). In this view, management is first and foremost the mastering of contingency and the reduction of options. Film serials, by contrast, revel in the exposition of options. Before the sound era, serials had already engaged in the management of modernity's increasing contingency by aligning options side-by-side, by juxtaposing them without a tendency to reduce (cf. Brasch & Mayer 2016). *THE PHANTOM EMPIRE* applies this mode of storytelling to its self-reflexive engagement with media change. When public discourse had more or less agreed on a particular view and future of television, the serial

turns back and realigns the possible notions of television and radio as they could have come into place. The serial manages these notions by arranging and contrasting them without placing one hierarchically above the other, refusing to take part in the ruling out of options and possibilities. This is not nostalgia for lost prospects or discourses. The serial rather realigns all options in the present, casting them as non-extinct rather than bygone—engaging in perpetual management rather than an eventual reduction of contingency. The one hierarchy that does result from this alignment of options is one that places the film serial itself above all other media and forms, as the one medium that can embrace and assemble the other media uses, forms, and modes of address. The serial struggles, however, with an integration of the other media's capacity to transmit live content.

Liveness and *THE PHANTOM EMPIRE*'s Construction of Cinema

As I have shown, *THE PHANTOM EMPIRE* arrives at discursive constructions of radio and television that actualize the array of their possible uses rather than understanding them solely as unidirectional media of mass address. In its portrayal of a number of radio and televisual forms, the serial ascertains its own capacity to take up the contingent forms of these media. When Queen Tika tunes in to Autry's radio show and watches his broadcast through her surveillance television, for instance, the resulting simulcast is a connection of two technologies enabling an audiovisual experience that film serials offer as well. The serial thus acts as a medium that can accommodate and combine the forms of other media, and it thereby increases its own array of options. The following passages first show how the serial's appropriation of options of other media also lays bare which options the serial as a medium fails to offer. In a second step, I will return to a consideration of the film serial as a form and I will trace the implications of its tendency to actualize multiple contingencies—that is, to act as a medium—for its status as one form of the medium of sound film.

As addressed earlier, some of the contingent options of media emerge discursively as markers of quality, and for radio and television, liveness appears to be such a marker. However, liveness is one option within the metaphorical pools of possibilities labeled 'television' and 'radio' that does not appear in the pool of 'sound film'. And yet *THE PHANTOM EMPIRE* highlights liveness in a way that exhibits its own lack of the trait, seemingly aiming to extend its own horizon of contingent options beyond those offered by sound film. Mascot's serial particularly foregrounds television's capacity to transmit live

images when it employs a live broadcast to resolve its murder plot. Since episode two, Autry had been wanted for the murder of his partner on the ranch, Frankie's and Betsy's father. However, the singing cowboy as well as the audience are aware that the greedy scientist Prof. Beetson is accountable for the murder. In the serial's final episode, Autry confronts Beetson with the accusation, who readily admits to the murder and claims that he could not be proven guilty anyhow. Autry responds saying 'I think you're wrong there, partner. That is, if Frankie learned anything about television down in Murania' (episode 12, 'The End of Murania'). The camera zooms out and reveals the cinematic image to be in fact diegetically mediated by television, and both the children and the Sheriff are watching Beetson's confession (in the prairie, with no cameras around) on a screen in Frankie's hayloft laboratory. The editing of this sequence again demonstrates the serial's ability to subsume the televisual image, the latter of which is simultaneously cast as omnipresent and as live, as opposed to recorded. When the camera zooms out, viewers realize that we witnessed not only the recorded instance in the film serial, but the live television transmission together with Frankie, Betsy, and the Sheriff. By means of television, the final episode retrospectively attributes to its own mediated image a character of quasi-liveness despite its status as recorded film. In other words, *THE PHANTOM EMPIRE* seeks to recreate a sense of liveness as much as its medium and form of 'canned' film allows.

The discourse on television continued to debate a differentiation between live and recorded material, in which liveness remained a quality marker even when it was technologically possible to broadcast recorded programs. In a 1927 article in *Radio Broadcast*, Carl Dreher proposed that we differentiate between permanently recorded media aiming to overcome time and media of simultaneity that defeat distinctions of space (Sewell 2014: 34-35). Similarly, Hugo Gernsback, editor of *Radio News* in the mid-1920s, insisted on the distinction of television and 'radio movies', the latter describing the transmittance of pre-recorded and scanned film, which Gernsback aimed to exclude from the televisual discourse (p. 23).³⁰ This focus on live transmission bears evidence of aims to locate the new medium in relation to radio but also to delineate it from film, its moving image predecessor. Rather than emerging as an alternative and possible replacement of cinema, critics such as Gernsback tended towards a definition of television that would highlight its advantages over cinema's higher resolution pictures. According

30 For a more detailed take on Gernsback's influence in the development of radio, see Massie and Perry (2002).

to Sewell, 'by the 1920s, in the United States, film had staked out its identity and the relative high ground in an aesthetic media hierarchy. Consequently, arguments about good television would be skewed toward liveness and ability to capture the real rather than beautiful or poetic expression' (p. 34). However, the supposed high-cultural status of cinema never included film serials, which existed on the low-brow fringes of studio-era film production. As television staked its ground in contrast to the existing norms of cinema, it highlighted features that film serials similarly aimed to incorporate. In *THE PHANTOM EMPIRE*, these notions of liveness and a non-representational realism appear when Frankie addresses his radio and film audience and promises to show 'a radio broadcast put on like it should be. Ridin', ropin', real horses, real guns, real cowboys' (episode 1, 'The Singing Cowboy').

However, television's celebration of liveness is not solely a reaction to its inability to rival the quality of cinematic moving images. In fact, the notion of liveness had been a part of the television discourse even before the dissemination of film in the late nineteenth century. As Uricchio explains,

inspired by the telephone, early notions of the televisual assumed that moving pictures would be seen simultaneously with their production, that is, that the medium would serve as something like an *electronic* camera obscura, or telescope, bringing spatially distant services into direct visual proximity with the viewer. From 1876 onward, a well-developed notion of television as a 'live' moving-picture medium offered a counterpart to the 'stored' moving images seen, for example, with Reynaud's projecting praxinoscope, Edison's kinetoscope, and eventually, in 1895, with what we today celebrate as projected moving pictures. (2008: 288)

In the nineteenth century, television was imagined as a live medium and the emergence of film was in these regards disappointing. In fact, Uricchio argues that films of the medium's first decade—street scenes, or shots filmed from the fronts of moving trains, for instance—worked with a self-ascribed claim of liveness, as 'the films' arrangements of time and space potentially simulated a televisual viewing experience in the same manner that the panorama simulated the experience of the panopticon' (p. 296). The terminology used to describe early film forms and technologies similarly references markers of liveness, as the terms 'actuality' but also 'bioscope' or 'vitagraph' illustrate (pp. 296-297). According to Uricchio, around 1903 cinema saw the transition from actualities to recorded drama, from 'seemingly live to the emphatically stored' (p. 296). The self-ascribed live form nevertheless continued to exist, overtly in newsreels or sing-alongs, but

also in the self-ascribed liveness of film serials. *THE PHANTOM EMPIRE* addresses its audience in a presentational mode that, by subsuming radio's and television's forms, mimics a live performance.

Recording, both in radio and on television, is never an option in *THE PHANTOM EMPIRE*. As a quality program, the two p.m. broadcast from Radio Ranch naturally airs live. Whereas the serial negates radio's capacity to air recorded material and thus transcend time, it stresses radio's surpassing of space when Autry contributes to his show from Frankie's laboratory (episode 4, 'Phantom Broadcast') or from an airplane (episode 8, 'Jaws of Jeopardy'). Both times, Autry tunes in in real-time, because the recording of his songs would sidestep the deadline dramaturgy that accounts for the suspenseful climax. The serial thus foregrounds liveness in addition to the presentism already apparent in film serials in general, which always include qualities of simultaneity and presence because of the accommodation of recurring installments into the viewers' weekly routines, and because of their film style and cinematography, which highlight presence and simultaneity in parallel editing, fast-paced action, and storytelling in the present tense.³¹ The presentation of live forms within the film serial underlines this presentist mode of storytelling, which aligns everything taking place within the narrative world as taking place 'now'. Paradoxically, *THE PHANTOM EMPIRE* accentuates direct address and a focus on simultaneity by emphasizing these qualities with reference to radio and TV, while simultaneously acknowledging that these 'new media' can accommodate live action much better than the film serial could.

As it has been addressed, media only become visible through their forms, which are concretizations of a choice of options from the larger contingency offered by the medium. By taking up and arranging forms that are borrowed from radio and television, film serials act as media and increase their own contingency. However, the differentiation of medium and form is a working distinction in so far as both medium and form are temporary and arbitrary attributions. That is, we can assign either status to the film serial for the matter of analysis (cf. Krämer 1998: 560-561). Thus, although serials act as media, they are also quite consciously a form within the medium of sound film. And as forms, serials are not live but recorded, even if the fact of

31 Note that recaps seemingly tell us 'what happened last week' and cliffhanger endings often highlight 'what will happen next week?' as a question instead of admitting to the fact that it is rather about 'what the film tells you next week, but what has already been shot and canned'. For a more detailed take on the presentist and presentational qualities of film serials, see chapter three of this volume.

their recording aims to surpass space (shipping the film to theaters across the nation) rather than time (recording for the archive). However, in the particular case of *THE PHANTOM EMPIRE*, the shift from serial-as-medium to serial-as-form is not only an analytical ascription; the serial itself performs this shift. Whenever the serial introduces a borrowed form, that is, when we hear Autry's radio show or when we watch the proceedings through Queen Tika's television, *THE PHANTOM EMPIRE* acts as a medium. In the remaining, more immediately mediated scenes, the serial acts as a form. The former allows us to abstract the film serial (medium) from the radio broadcast or surveillance television image (as forms); the latter enables the abstraction of sound film (medium) from the film serial (form).

In Luhmann's theory, medium and form reciprocally effect and determine each other. The individual options of a medium couple and decouple—that is, forms concretize and disintegrate, and media are momentarily bound and released again. This process, in which the differentiation of medium and form continuously reproduces itself, takes place over time and it circulates (Luhmann 1997: 199). Sybille Krämer highlights this process when she stresses that Luhmann's theory casts form as a 'time-consuming execution', an 'operation situated in time and space', which is 'performative', 'temporary, unstable', and 'fleeting' (1998: 559, 565-566; my translation). By casting the film serial interchangeably as a medium and as a form, *THE PHANTOM EMPIRE* effectively showcases this continuous reciprocity on screen. It thus makes visible the operations that shape the film serial as medium and as form, that is, it portrays its own continuous becoming. In a sense, the experience of watching this reciprocity unfold over time on screen is the operational aesthetic in its purest form: the appreciation of process as portrayed not by means of a medium, but the process of the medium itself. Luhmann compares the reciprocity of medium and form to a von Neumann probe: a machine that autonomously produces replicas of itself (p. 199). The serial is a self-propelling, self-perpetuating machine, and it allows us to watch it work.

A similarly self-reflexive approach to storytelling informs the serial's ending. *THE PHANTOM EMPIRE*'s final-episode climax culminates in the eventual destruction of the underground kingdom of Murania. In a civil war between Queen Tika and Muranian revolutionary forces, the 'disintegrating ray' destroys the underground empire that it was designed to protect. Cinematographically, the destruction of Murania is effected by means of exposing large print stills of the Muranian set to heat until the chemical emulsion melts and bleeds downwards (Miller 2009: 68). The result is the obliteration not only of the Muranian Empire in the serial but of the

film's material substance. Despite its pragmatic reliance on film stock, the serial-as-a-medium thus casts its material substance as one contingent option among many. Importantly, the serial does not end at this point. Instead, Prof. Beetson's televised confession follows afterwards, enabled by a piece of equipment that Frankie saved from Murania, which allows him to complete his self-built television on Radio Ranch (episode 12, 'The End of Murania'). The serial thus destroys the vulnerable, tangible materiality of film, but it nevertheless continues to exist, with a scene that capitalizes on the liveness of television.

Esposito describes the relation of medium and form—like Luhmann and Krämer—in terms of oral and written language. Written language detaches communication and its observation: 'The observer is distinguished from the object of observation, which enables new forms of reflexivity—including the potential to observe oneself as an observer and to communicate about communication' (Esposito 2004: 13). According to this logic, film serials can reflect on and observe liveness particularly because they are not a live form themselves. In this way, when *THE PHANTOM EMPIRE* capitalizes on the forms of radio and television, it always simultaneously benefits from its own cinematic medium that enables the serial to bracket all of these other forms. The film serial as a recorded form that acts as a medium emerges as a manager of other forms, which enables the serial to juxtapose and engage reflexively with the forms of the American media landscape of the 1930s and 1940s. In this context, *THE PHANTOM EMPIRE*'s continuation of its story after it showcased the physical destruction of film on film highlights its self-reflexive tendency and it demonstrates the film serial's paradoxical ability to record liveness.

Beyond *THE PHANTOM EMPIRE*: Redirecting Filmic Storytelling via Radio and TV

Although *THE PHANTOM EMPIRE*'s joyride across various forms stands unrivaled in the history of film serials, other serials also embraced the multiplicity of media and forms of their time. They, too, act as media that display and manage contingency. As the following passages will show, serials such as *THE VANISHING LEGION* (Mascot, 1931), *ACE DRUMMOND* (Universal, 1936), and *RADIO PATROL* (Universal, 1937) not only portray various applications of radio technology, they also use radio to manage or rein in their chaotically meandering plots. Similarly, *THE AMAZING EXPLOITS OF THE CLUTCHING HAND* (Weiss, 1936) and *SPY SMASHER* (Republic, 1942)

showcase television in ways that at times jump-start an otherwise stagnating narrative. These serials showcase radio and television as a means to exercise the control and surveillance of policemen, villains, and city spaces more generally, and they negotiate the advantages and possible threats of such technological dragnets.

THE VANISHING LEGION, ACE DRUMMOND, and RADIO PATROL manage multiple forms or use options of radio, but within these stories, radio also serves to manage motifs, stock plots and characters, and similar short elements. The pool of options from which serials compose individual episodes includes not only the forms of other media but also more concrete story elements. The remainder of this chapter will consider both the forms of radio and TV and individual motifs, stock plots and characters, and re-appropriable incidents or props as anecdotes. These anecdotes are unpolished and unrefined in the sense that they do not have an identifiable beginning or end. They are not complete in and of themselves, and although they can be readily integrated into a serial, they are never sutured seamlessly into an ongoing film. Anecdotes always stand out, they can always be identified as something that occurs similarly in other episodes, other serials, or other stories. Just as THE PHANTOM EMPIRE's Radio Ranch drama serial is a form that is taken from radio, ACE DRUMMOND's yellowface villain is taken from pulp fiction and similarly occurs in a multitude of films and serials: both of them stand out as borrowed.³²

The first three serials that serve as examples make use of radio to install diegetic managers within their stories, that is, an agent who directs plot developments and organizes anecdotal elements as the serial proceeds. Afterwards, a closer look at THE AMAZING EXPLOITS OF THE CLUTCHING HAND and SPY SMASHER, both of which showcase multiple appropriations of television, will reveal how technological advancement threatens to enable complete surveillance. While making use of television to organize their plots and connect individual anecdotes, these serials also lay bare an increasing mid-twentieth-century unease in the face of a possible governmental appropriation of these technologies for control and, in the case of SPY SMASHER, the rise of fascism.

Universal's 1937 serial RADIO PATROL begins with a sequence that outlines the advantages of radio connectivity. After a series of shots and superimposed newspaper headlines that show a frantic and inefficient police force, a local official suggests the establishment of a 'radio squad', that is, a squad of police

32 The introduction of this volume offers a more detailed definition of anecdotes; for a description of the importance and effect of repetition and reiteration in film serials, see chapter five.

cars connected by two-way radios that combine into a 'patrol system that blankets the city, night and day' (episode 1, 'A Million Dollar Murder'). The following episodes set out to demonstrate the efficient use of the radios, which allow police headquarters to disperse information among all cars, but which also enable individual policemen to call for assistance. Episode three, for example, skips a chance for an obligatory car chase when the protagonist officer Pat O'Hara (Grant Withers) broadcasts the license number of a suspect's car to the entire squad ('Flaming Death'). In the following episode, O'Hara calls for assistance before entering the master villain's hideout, and police headquarters uses the radio system to locate the serial's female and kid sidekicks (Kay Hughes as Molly Selkirk and Mickey Rentschler as Pinky Adams) after they borrow O'Hara's squad car (episode 4, 'The Human Clue'). Radio technology puts police cars on the map, allowing headquarters to monitor their whereabouts and send assistance if necessary.

Conversely, radio dragnets can also serve to coordinate the criminal activities of a master villain and his gang. *THE VANISHING LEGION* (Mascot, 1931), for instance, narrates the hunt for a villain called 'the Voice', who organizes his group of criminals by means of small pocket radios and thereby avoids appearing in person until he is identified in the final episode.³³ Pocket radios, stationary radio receivers, and telephones combine into an information network that the Voice uses to give orders to his henchmen—and specifically not, as we learn in the penultimate episode, to hear their reports. Like Queen Tika in *THE PHANTOM EMPIRE*, the Voice does not depend on reports because he is omniscient (episode 11, 'Capsule of Oblivion'). Thus, whereas the police squad employs a democratic version of two-way radio communication in *RADIO PATROL*, the master villain of *THE VANISHING LEGION* insists on the unidirectional character of his transmissions or literal 'narrowcasts'.

ACE DRUMMOND (Universal, 1936), by contrast, juxtaposes these two uses of radio in a struggle over its application in aviation. The serial's eponymous protagonist (John King) is called to a Mongolian airport under construction to fight a master criminal called 'the Dragon' in his attempts to thwart the airport's development. Whereas the airfield crew needs radio to communicate with approaching aircrafts, the Dragon transmits high voltage to kill the pilots. Additionally, the Dragon controls his followers in ways that resemble *THE VANISHING LEGION*'s chief malefactor: he transmits orders to his men via radio-wired 'prayer wheels', spinning fans, rotating airplane propellers, and a turning water wheel. Drummond's aim throughout the

33 'The Voice' does appear once, as a shadow, in episode five, 'The Trackless Trail'.

serial is to end the Dragon's one-way transmissions of spoken word and high voltage in order to secure the radio network for airport communication.

All three of these serials expose concerted networks of radio communication as highly vulnerable, and neither hero nor villain ever fully controls them.³⁴ The serials emphasize this vulnerability in scenes in which a character takes advantage of the nonvisual radio apparatus and impersonates the master villain. Each serial appropriates this anecdote in a short micro-plot that spans one or two episodes. The leading lady (Edwina Booth as Caroline Hall) of *THE VANISHING LEGION*, for example, poses as the master villain the Voice without any of his henchmen being able to tell the difference. Two years into the production of sound serials, this instance casts technologically transmitted voices as interchangeable, which may also be understood as a comment on the quality of early sound in a film that was still advertised as an 'all-talking serial'.³⁵ Similar anecdotes of technologically enabled impersonation recur in other serials. *ACE DRUMMOND* appropriates the motif in episode eleven, when a minor character pretends to be the Dragon, who at this point in the story controls the radio communication on and around the Mongolian airfield.³⁶ The attempt fails: the Dragon first exposes the impersonator in a widely disseminated radio message, and when the latter escapes in a small plane, the master villain murders him by transmitting high voltage through the aircraft radio (episode 11, 'The Dragon Commands').

RADIO PATROL reenacts a similar anecdote twice, but in line with the serial's stressing of radio-enabled police efficiency, the impersonations take place over the phone. First, a murder suspect pretends to be the dubious steel mill owner Harrison (Gordon Hart) and the deceit remains undetected (episode 6, 'The House of Terror'). Two episodes later, police detective O'Hara calls the same steel mill owner, now posing as a private

34 *RADIO PATROL*, for instance, presents a variety of interceptions beginning in episode six, when both the criminal agents based in the Egyptian quarter and the workers at Harrison's steel mill listen in on police communication (episode 6, 'The House of Terror'; episode 7, 'Claws of Steel'). In later episodes, the criminal parties also wire-tap each other, without either of them using radio communication: Harrison's men listen in on the Cairo Café in the Egyptian quarter via telephone (episode 9, 'Plaything of Disaster'), and the Iranian representative Mr. Tahata (Frank Lackteen) listens in on Harrison's calls by placing one of his tools, disguised as a cigarette vendor, near a telephone pole, tapping the wire (episode 10, 'A Bargain with Death').

35 According to the pressbook for *THE VANISHING LEGION*. Another reference to sound appears in episode six, when a car driver cannot understand Happy Cardigan (Harry Carey) because the car's engine is too loud ('The Radio Riddle').

36 This control is foregrounded when Drummond disposes of his airplane's radio technology before take-off to ensure an unharmed flight in the same episode (episode 11, 'The Dragon Commands').

detective in Harrison's employ. This time, Harrison suspects and remarks: 'Your voice sounds different'.³⁷ However, Harrison's suspicion has no overt narrative effect because the police officer manages to convince him of his assumed identity. Yet the instance exposes the serial's repeated use of the anecdote. This self-reflexive recognition may even point to its outdatedness, as the first sound films were by this time almost a decade old and the initial technological difficulties had mostly been resolved.

Such correspondences within individual serials and across numerous serials result from but also expose their nature as montages of anecdotes. None of these serials copy from or imitate each other. Instead, they all draw ideas from and contribute to the formation of a larger popular-cultural sourcebook, transforming narrative elements into distinguishable anecdotes that recur repeatedly and varyingly across large numbers of serials. This use of anecdotes is a strategy to effect seriality's more general correlation of repetition and variation (cf. Eco 1985; Kelleter 2012a). At the same time, the repeated occurrence of an element within serials disables its seamless integration into the narrative and exposes its anecdotal character. In short, repetition and anecdotes reciprocally determine each other's existence. The repeated appropriation of the same anecdote in *RADIO PATROL*, for instance, effects the serial's self-conscious acknowledgment of repetition when the steel mill owner suspects being tricked and simultaneously establishes the moment as anecdotal. In fact, *RADIO PATROL* also expresses an awareness of the repetition of anecdotes across different serials when Officer O'Hara, in response to realizing that a radio dispatch from police headquarters must have been intercepted, predicts that 'someday they're gonna code our broadcasts' (episode 5, 'The Flash of Doom'). Up to this point in the serial, radio dispatches had never been intercepted, yet the threat is familiar enough from other serials or films for O'Hara's reaction to seem adequate.

In their refusal to fully integrate into a narrative, anecdotes point to the conditions of storytelling. The serials' use of a large quantity of anecdotal elements in fact feeds into their presentational narratives and mode of address. Serials capitalize on a process that Ruth Mayer describes for the cross-media recurrence of Fu Manchu, the prototypical Asian arch villain who sparked the appearance of later criminal figures such as the Dragon: recurring 'figures, character constellations, and themes'—and, I would add, anecdotes more generally—'allow for a focus on the "ornamentation of the sets", the circumstances and conditions of narration and representation,

37 This instance of reenactment is similar to the first episode of the 1921 serial *THE HOPE DIAMOND MYSTERY*, which is detailed in chapter five of this volume.

which otherwise tend to be neglected in favor of the plot's "foreground" action' (2014: 97). In other words, anecdotes shift the audience's attention from the 'what' to the 'how' of cinematic narration, to the particularities of framing, editing, mise-en-scène, and to a film's operational aesthetic. As the preceding examples illustrated, the juxtaposition of established and alternative uses of media often takes place through a serial's appropriation of anecdotal elements, such as the presence of radio-empowered master villains or stories of intercepted messages and radio-enabled imposture.

Such a correlation—that is, a scene in which a serial adapts an anecdotal micro-plot and demonstrates multiple forms of radio—occurs prominently in *ACE DRUMMOND*. In episode four, Ace Drummond and his sidekick Jerry (Noah Beery Jr.) confiscate one of the villain's radio-wired prayer wheels and take it back to the airfield. In this scene, the serial actualizes a plot that occurs similarly in *THE VANISHING LEGION*, for instance, when the county sheriff takes possession of a small pocket radio and tunes in to the dispatches of 'the Voice (episode 4, 'The Radio Riddle').³⁸ *ACE DRUMMOND*, however, presents a rather open version of the idea, as the protagonists remain in possession of the prayer wheel and the Dragon only notices the loss and terminates his dispatches eight episodes later (episodes 4 and 12, 'The Radio Riddle' and 'The Squadron of Death'). In the meantime, Drummond, his love interest Peggy (Jean Rogers), the airport mechanic Jerry, and the kid sidekick Billy (Jackie Morrow) test the prayer wheel in a lengthy passage that details the functions of the mechanism.

In the sequence in which the protagonists test the prayer wheel, *ACE DRUMMOND* revels in the appeals of its featured fictional technology (episode 4, 'The Radio Riddle'). The prayer wheels, through which the master villain often transmits his orders, benefit from a combination of visual spectacle and narrative/technological process. Prayer wheels are both technological marvels and lavish ornaments, 'blurring the distinction between magic and technology, orientalism and modernity' (Mayer 2014: 98). Placing these

38 In this scene in *THE VANISHING LEGION*, the villain issues the remote-controlled explosion of the pocket radio, thus taking up a story element that *ACE DRUMMOND*, with its radio-transmitted murders, reiterates throughout the serial. Generally, the villains of these two serials are very similar, which also surfaces in the similarly formulaic endings of their dispatches: whereas *the Voice* ends each transmission saying 'the Voice has spoken', the Dragon adds 'the Dragon commands' to each of his messages. Both of these phrases are stylized versions of the similarly formulaic radio communication standards in military and civilian air traffic. The importance of such 'aviation phrases', as the pressbook for *ACE DRUMMOND* calls them, surfaces in the pressbook's suggestion to place a model airplane with a hidden microphone in the lobby and to have an announcer repeat phrases such as 'Calling Ace Drummond' or 'Visibility: Good'.

contraptions at the center of its narrative and of episode four in particular, *ACE DRUMMOND* 'spin[s] off speculations on the techniques and technologies of communication', as Mayer describes it for techno-orientalist serials and features of the 1930s in general and *Fu Manchu* narratives in particular (p. 97). Like the surrounding anecdote, the design of the prayer wheel borrows elements that circulate extensively in other serials, films, or cultural texts more generally. For *ACE DRUMMOND*, the prayer wheel becomes an attraction which, according to the serial's pressbook, should function as a centerpiece of local cinema lobby decorations. The pressbook includes a drawn model of the prayer wheel and it encourages local theater managers to build one, install a two-way microphone, and connect it to their office to enable communication with visitors in the lobby. Such a set-up would have allowed local patrons to study the apparatus like Drummond and his companion do in the serial. The pressbook's suggestion thus underlines the prayer wheel's status as a prominent attraction in the serial and would have enabled film viewers to reenact versions of the prayer wheel test in the serial, transforming the filmic anecdote into a cultural motif to be appropriated outside of the cinema.

The test of the prayer wheel in *ACE DRUMMOND* displays the forms and functions of radio and deconstructs its mythic character in the serial. The full implication of this test comes to the fore when we not only think of serials as assembling and managing anecdotes, but if we apply an anecdotal approach to their analysis. As the following pages will outline, the prayer wheel test in *ACE DRUMMOND* resembles an 1877 newspaper report of a demonstration of Bell's telephone in its transmission of words and music.³⁹ The remarkably similar accounts establish the test sequence itself as an anecdote. The correlation of the scene from the film serial and the nineteenth-century newspaper article shows how such tests not only introduce and explain a new technology but similarly explicate all its possible uses instead of highlighting one application of a technology in particular.

The scene in which *ACE DRUMMOND*'s protagonists test the prayer wheel compares the capacities of the unidirectional radio contraption to the two-way communication enabled by telephony. Jerry highlights the prayer wheel's unidirectional transmissions early on, when he describes it as 'some kind of radio receiving system' (episode 4, 'The Radio Riddle'). When Drummond then attempts to transmit a message from the airport radio station to Jerry

39 The introduction provides a more detailed description of the anecdotal approach and its place in New Historicist literary or cultural theory. For further information, also see Gallagher & Greenblatt (2000) and Maza (2004).

at the prayer wheel, Peggy and Billy hold phone contact so that Peggy, sitting with Jerry, can report to Billy whether the radio transmission came through. Having thus established the prayer wheel as unidirectional as opposed to radio as used in air traffic, Drummond demonstrates the possible uses of one-way transmissions: he counts to four and then sings his trademark tune 'Give me a Ship and a Song', which he performs repeatedly throughout the serial (episode 4, 'The Radio Riddle'). Far from being simply another occasion for the reenactment of Drummond's musical feature, the sequence reestablishes radio's entertainment function, pointing to a positive side to the technology that the villain hijacks so unscrupulously.

This depiction of the parallel use of radio and the telephone seems to recreate nineteenth-century exhibitions and demonstrations of the latter, a novelty in the 1870s. When Alexander Graham Bell presented his telephone to a live audience in 1877 in Salem, Massachusetts, he called his assistant in Boston, who transmitted Morse code played on an organ, played a song, and ended with a short speech directed at the Salem audience (*Scientific American*, 1877).⁴⁰ Bell thus placed the telephone in the context of and in comparison to other media of the time, notably the telegraph, but also the phonograph as referenced by the transmission of music. In 1936, when *ACE DRUMMOND* unintentionally enacts a comparable instance on the film screen, the telephone was fully established as a means of person-to-person communication—even in film serials that otherwise retrospectively open discourses of media and technology use.

ACE DRUMMOND presents a radio test that seems curiously modeled on nineteenth-century telephone demonstrations, exemplifying radio's capacity to transmit spoken language and an entertaining musical performance. In both instances, the demonstration of communication technologies distinguishes the newer technology from its predecessors—telegraphy in Bell's case, telephony in *ACE DRUMMOND*—and it demonstrates the possible functions of that newer technology, of transmitting for instance code, messages, or entertainment. Now, whereas telephony was truly novel in 1877, radios were widely disseminated before the release of *ACE DRUMMOND*, and radio use, as noted earlier, was a discursively fixed category. However, staging the radio test enables the serial to recall the contingent variety of radio uses as if radio was a novelty. *ACE DRUMMOND* thus actualizes a creative use of radio in its present moment in America in the mid-1930s.

40 This anecdote of the presentation of Bell's telephone is detailed and considered in connection with the operational aesthetic in the nineteenth century in chapter two of this volume.

Such a reintroduction of alternative uses of media does have a political connotation, especially in the 1930s and 1940s. Mayer assigns to these decades both a 'fascination with Chinese things' and 'an almost obsessive interest in what one could call the functionalization of these things for the purposes of control' (2014: 97). Thus, the prayer wheel in *ACE DRUMMOND* is not accidentally both a techno-orientalist object of interest and the villain's means to transmit commands and organize the operations of a larger criminal gang. The Dragon's successful control of his henchmen hinges on the containment of his audience: his explicitly unidirectional narrowcasts target a very specific, limited group of listeners. He essentially employs radio as a point-to-multipoint technology, in the sense that his communication reaches more than one listener, but it is not an open, mass-address broadcast. It is this vulnerable middle stage that numerous serial villains like the Dragon or the Voice depend upon and defend.

The villains not only assume this commandeering function within the diegesis, they similarly organize the narrative itself. Often, transmissions from the Voice in *THE VANISHING LEGION*, information from police headquarters in *RADIO PATROL*, or the commands of the Dragon open new strands of action. Whenever the narrative seems to have hit a dead end, a radio transmission points to a new angle, a new scheme, a new way to intervene. Radio technology, it seems, works in concert with the film's camera-eye, allowing police chiefs or master villains to share a visual perspective with the audience and often exceed their knowledge. As unseen governing agents who manage the narrative by providing clues for further action, serial villains are on par with a film's director, that is, they mirror a director's function within the narrative. This director position within the narrative enables the serial to literally come into being as it unfolds on screen, and it allows viewers to witness the creative orchestration of multiple narrative strands and anecdotal elements into a concerted collage over time. In this sense, radio technology opens up a position of power that can be taken up by either governmental agencies or criminal masterminds. This insight curiously informs the ending of *ACE DRUMMOND*, in which the protagonist's sidekick Jerry first kills the Dragon with the latter's own destructive radio technology and then applies a sledgehammer to the villain's radio system (episode 13, 'The World's Akin'). Killing the master villain is not enough; the technology that enables his power in the first place needs to go as well. This double destruction reveals that the technology itself is just as much a threat as the master villain. Moreover, such a destruction necessarily terminates the serial, as killing the diegetic director and his means to direct disables the actualization of further narrative strands.

In the second half of the decade and into the 1940s, this governing function of the villain gained intensity. Equipping their master villains with television contraptions, *THE AMAZING EXPLOITS OF THE CLUTCHING HAND* (Weiss, 1936) and *SPY SMASHER* (Republic, 1942) not only update their narratives to the new or prospect mass medium, they also forcefully demonstrate the threats of these media and their surveillance function when overseen by the wrong authority. *THE AMAZING EXPLOITS OF THE CLUTCHING HAND* (Weiss, 1936) updates the scientific and technological prowess of its protagonist detective Craig Kennedy (Jack Mulhall) and his opponent, the Clutching Hand, both of whom already peopled one of the first popular serials, Pathe's *THE EXPLOITS OF ELAINE* in 1915. The sound serial takes up the already iconic, fist-clenching criminal and places him at a televisual control switchboard as the manager of a gang whose members can be called up on an oversize screen individually or in different combinations, each according to their individual identification numbers.

Like the Asian arch-villain of *ACE DRUMMOND*, the Clutching Hand determines the mostly unidirectional use of a medium that is capable of reciprocal communication, and he asserts his discursive and technological power over the medium in actualizations of established anecdotes. In an example that combines what could be called the 'controlled-speech anecdote' and the 'impostor anecdote', one of the Clutching Hand's henchmen uses the television to report the existence of an impostor, but the villain criticizes his inferior's blunt call, telling him to wait until he is being called (episode 6, 'Steps of Doom'). Nevertheless, talking to a larger group of gang members in later episodes, the master villain does require them to voice their understanding of his instructions—affirming his sense of a highly controlled but nevertheless two-way communication system for a limited range of viewers (episodes 11, 'The Ship of Peril'; and 13, 'The Mystic Menace'). Throughout the serial, the Clutching Hand decides who is allowed to speak, which he makes clear earlier in the serial when he refers to a captive (Robert Frazer) who appears on the TV screen, explaining that 'he can hear, he can see, but he cannot talk. As long as I will it, he will remain in that condition' (episode 4, 'The Phantom Car'). Therefore, while taking up anecdotes that other serials similarly use, *THE CLUTCHING HAND* foregrounds the authoritative rule of its master crook, in speech, visually through his grand television screen, and in the convergence of multiple technologies. The villain's control room enables a connection of fully compatible technologies, such as television and a regular telephone (episode 3, 'House of Mystery'). The connection of technologies allows him to transcend spaces, which the serial exemplifies when the Clutching Hand steers a remote-controlled car via a moving symbol on a

map that curiously resembles twenty-first-century GPS navigation systems. He lures his pursuers—that is, Detective Kennedy and his sidekick—into a barn and issues its similarly remotely triggered explosion (episodes 4, ‘The Phantom Car’; and episode 5, ‘The Double Trap’). Throughout its run, the serial combines fictional and nonfictional uses of media and means of media convergence, a showcasing of technological contingency and multiple, typically fruitless attempts at regulation.

The serial’s ending, that is, Detective Kennedy’s eventual identification of the villain’s identity, results from Kennedy’s appropriation of television to transcend time instead of space, as the villain does. Whereas the Clutching Hand’s television set enables communication with henchmen in different places, Kennedy operates a ‘viscatone’ in his laboratory: a surveillance television with a recording function. Repeated instances of its use demonstrate its ability to both display action going on elsewhere in real-time and to record moving images for later viewings (episodes 6, ‘Steps of Doom’; and 10, ‘A Desperate Chance’). Despite the viscatone’s recording function, Kennedy employs photography to capture a screen image and resolve the serial’s central mystery. In the final episode, the villain’s captive Mr. Gironda appears on screen and Kennedy quickly takes a photograph, develops it in his laboratory, and through its study realizes that Gironda and the Clutching Hand are one and the same person (episode 15, ‘The Lone Hand’).⁴¹ In an instance that casts liveness as a problem rather than as an advantage, Kennedy employs photography to overcome the fleeting nature of the televisual transmission. The serial thus in a sense plays out its fight of good versus evil in terms of the contrast of the material presence of the televisual apparatus and its nevertheless placeless, fleeting transmissions (cf. Denson & Mayer 2012a: 92). The live character of television that was pivotal to the identification of the murderer in *THE PHANTOM EMPIRE* now appears as a threat, and recording becomes the means to seize the master criminal.⁴² In both serials, however, power depends on the mastery of the full range of modernity’s media.

In a later serial, Republic’s *SPY SMASHER* (1942), the master villain’s function as a director both of a villainous gang and of the serial’s narrative has

41 The cause of the villain’s actions thus turns out to be a combination of greed and insanity. This split-personality theme similarly occurs in *THE EXPLOITS OF ELAINE* (Pathe, 1915), where the ‘Clutching Hand’ turns out to be Elaine’s fiancé who appeared throughout most of the earlier episodes. The notion of capturing a televisual image by means of photography reappears curiously in the 1965 film *FANTÔMAS SE DÉCHAÎNE* (Denson & Mayer 2012a: 95).

42 *THE CLUTCHING HAND* highlights the necessity of recording technologies to collect traces in crime detection in ways that resemble a similar focus on recording in *THE EXPLOITS OF ELAINE*, as described in chapter four of this volume.

a more overtly political connotation. Whereas earlier serials describe a fear of interconnected and hijacked technologies in the hands of criminals, later serials reframe this worry as a fear of totalitarian regimes. *SPY SMASHER*'s hidden criminal 'the Mask' (Hans Schumm) is a Nazi on American soil who controls a communication system that hides behind the façade of the 'Trans-Ocean Television Corporation'. In fact, however, the TV station is a complex surveillance system that connects a switchboard in a TV tower, a submarine, and radio-equipped cars (episodes 5, 'Descending Doom'; and 7, 'Secret Weapon'). Instead of resulting from an inferred convergence with film's camera-eye, the Mask uses an actual diegetic camera to spy on Admiral Corby (Sam Flint), the army contact of *SPY SMASHER*'s eponymous caped superhero (Kane Richmond). Two journalists of the Trans-Ocean Television Corporation repeatedly record interviews with Corby and intercept sensitive information simply by leaving the camera on when they are asked to leave the room, enabling the Mask to follow a live broadcast of Admiral Corby's meetings and phone calls (episodes 2, 'Human Target'; 7, 'Secret Weapon'; and 10, '2700° Fahrenheit').

As I have shown, previously released serials highlighted radio's and television's broader ranges of contingency and cast their downsides as a result of the media having been hijacked by sinister forces. In a sense, serials thereby adopt an argument that Bertolt Brecht criticized as early as 1927, when he said that defenders of radio justified its blameworthy results by stressing its full range of use options and thereby cloaking its contemporaneous actualizations (Cohen, Coyle, & Lewty 2009: 5). Instead of simply arguing that radio's and television's forms could outweigh the negative effects of their current applications, serials stage an actualization of those other options. *SPY SMASHER* now reverses that argument when it actualizes a darker vision of television, in which technological contingency continues to exist beneath the façade of a discursively fixed, commercial, unidirectional broadcasting system. In this scenario, multiple forms and options of use are a threat rather than a blessing. Accordingly, *Spy Smasher* operates specifically not by opposing technology with technology and by reinstating television's morally favorable use but as a lone fighter who is neither dependent on radio or television nor part of the army or any other organization.⁴³ The caped superhero can therefore track and fight the Mask

43 Curiously, though released in 1942, *SPY SMASHER* insists that its superhero is not part of the army and can thus act freely, which the army cannot because the United States was not at war with Germany (episode 6, 'The Invisible Witness'). At the time, Marvel's comic heroes had been fighting the Nazis since 1940, and in 1943, Columbia's *Batman* fought Nazis in a film

in ways that Admiral Corby cannot, but he lacks a group of comrades, and his access to technology is restricted to the land-line telephone in his apartment.⁴⁴ The hero thus depends on physical combat, but he is also safe from all technological means of spying. As a result, the vast communications system fails to save the masked villain, but its weaknesses remain unexplored. In opposition to the defeat of the master villain and the destruction of his radio technology in *ACE DRUMMOND*, *Spy Smasher* defeats the Mask but not his media. The serial simply exhibits technology, demonstrates its functions, and exposes its powers, but it kills off its master operator without destroying the media enabling his operations. The serial exhibits contingency, but it leaves technology's potentially threatening implications in place, creating an implicit job vacancy for other villains to take the Mask's place.

In summary, the 'golden era' of film serials not only coincided with the heyday of radio and the conceptualization of television in terms of a similar broadcast model, serials themselves embraced the resulting multiplicity of forms and modes of viewer or listener address. On the one hand, serials took part in the larger transformation of popular culture that informed the 1930s and 1940s. On the other hand, serials reflected the ongoing changes from silent to sound film, from recorded forms to the option of liveness, from image-based media to radio's nonvisual forms. Particularly a cultural montage like *THE PHANTOM EMPIRE* addressed and capitalized on these shifts, not only by taking up radio and television's forms but also in their coterminous showcasing of the cooperation and integration of various businesses into larger firms and the possibility of media convergence. Moreover, by appropriating not only current forms but previously discarded appropriations of radio and TV, serials exposed the forms of these media as discursive constructs.

Serials were both entangled in this context of media change and they emerged as its managers—in integrating the forms and modes of address of multiple media, serials self-identified as superordinate media that offer viewers a chance to compare and contrast multiple forms within one engaging and thrilling film experience. As a consequence, the serials' own mode of address was continuously being renegotiated. Some serials, as I have shown, employed the police force or a master villain as a diegetic manager

serial (Biesen 2005: 4). Shot just when the US entered the war, *SPY SMASHER*'s stance on the war is surprisingly cautious.

44 His only companion, a Frenchman, sacrifices his life for *Spy Smasher* in episode six, which Higgins takes as an example of the tendency of film serials to quickly pass over emotionality in favor of action (episode 6, 'The Invisible Witness'; Higgins 2016: 65).

as a means to integrate the multiple forms and the multiple anecdotes of which individual serials are composed. However, the repetition of both forms and anecdotes assured that they could be identified as forms and anecdotes—serials never sutured or glossed over the ruptures between their multifarious elements. The result is a presentational staging of cultural contingency that cast the cinematic medium as one possible option among many, which forecast the film serial's status as an 'other' within cinema as an institution, which could migrate elsewhere whenever the chance presented itself. It is this curious disassociation from their own institutional context that informed the migration and concurrent demise of film serials at a time when television was successfully disseminated across the United States.

Bibliography

- Ace Drummond*. Dir. Ford Beebe and Clifford Smith. Perf. Noah Beery Jr., John King, Jean Rogers. Universal, 1936.
- Ace Drummond* (Universal, 1936). Pressbook. New York Public Library for the Performing Arts, Dorothy and Lewis. B. Cullman Center.
- Amos 'n' Andy*. Perf. Charles Correll, Freeman Gosden. WMAQ, 1928-1943.
- Berry, Chad. 2008. "Introduction: Assessing the National Barn Dance." In *The Hayloft Gang: The Story of the National Barn Dance*, edited by Chad Berry, pp. 1-18. Urbana and Chicago: University of Illinois Press.
- Biesen, Sheri Chinen. 2005. *Blackout: World War II and the Origins of Film Noir*. Baltimore: The Johns Hopkins University Press.
- Bolter, Jay David, and Richard Grusin. 1999. *Remediation: Understanding New Media*. Cambridge, MA: The MIT Press.
- Brasch, Ilka, and Ruth Mayer. 2016. "Modernity Management: 1920s Cinema, Mass Culture and the Film Serial." *Screen* 57 (3).
- Castleman, Harry, and Walter J. Podrazik. 2003. *Watching TV: Six Decades of American Television*. 2nd ed. Syracuse: Syracuse University Press.
- Cohen, Debra Rae, Michael Coyle, and Jane Lewty. 2009. "Introduction: Signing On." In *Broadcasting Modernism*, edited by Debra Rae Cohen, Michael Coyle, and Jane Lewty, pp. 1-7. Gainesville, FL: University Press of Florida.
- Denson, Shane, and Ruth Mayer. 2012. "Bildstörung: Serielle Figuren Und Der Fernseher." *Zeitschrift Für Medienwissenschaften* 7 (2): 90-102.
- Drums of Fu Manchu*. Dir. William Witney, John English. Perf. Henry Brandon, Robert Kellard, William Royle. Republic, 1940.
- Eco, Umberto. 1985. "Innovation and Repetition: Between Modern and Post-Modern Aesthetics." *Daedalus* 114 (4): 161-84.
- Esposito, Elena. 2004. "The Arts of Contingency." *Critical Inquiry* 31 (1): 7-25.
- Everett, Justin, and Jeffrey H. Shanks. 2015. "Introduction: Weird Tales – Discourse Community and Genre Nexus." In *The Unique Legacy of Weird Tales: The Evolution of Modern Fantasy and Horror*, pp. ix-xix. Lanham, MD, and New York: Rowman & Littlefield.

- Exhibitor's Trade Review*. 1925. "Serial Pictures Will Help to Stabilize Your Attendance – Give Them a Chance," February 14.
- Fantômas se déchaîne*. Dir. André Hunebelle, Haroun Tazieff. Perf. Mylène Demongeot, Louis de Funès, Jean Marais. Gaumont, 1965.
- Gallagher, Catherine, and Stephen Greenblatt. 2000. *Practicing New Historicism*. Chicago and London: University of Chicago Press.
- Higgins, Scott. 2016. *Matinee Melodrama: Play and the Art of Formula in the Sound Serial*. New Brunswick: Rutgers University Press.
- Hilmes, Michele. 1990. *Hollywood and Broadcasting: From Radio to Cable*. Urbana and Chicago: University of Illinois Press.
- . 1997. *Radio Voices: American Broadcasting, 1922-1952*. Minneapolis: University of Minnesota Press.
- 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.
- Jenkins, Henry. 2006. *Convergence Culture: Where Old and New Media Collide*. New York: New York University Press.
- Jenkins, Henry, Sam Ford, and Joshua Green. 2013. *Spreadable Media: Creating Value and Meaning in a Networked Culture*. New York: New York University Press.
- Jones, Robert Kenneth. 1975. *The Shudder Pulps: A History of the Weird Menace Magazines of the 1930s*. West Linn, OR: FAX Collector's Editions.
- Kelleter, Frank. 2012. "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.
- Krämer, Sybille. 1998. "Form Als Vollzug Oder: Was Gewinnen Wir Mit Niklas Luhmanns Unterscheidung von Medium Und Form?" *Journal for History of Law (Rechtshistorisches Journal)* 17: 558-73.
- Lenthall, Bruce. 2007. *Radio's America: The Great Depression and the Rise of Modern Mass Culture*. Chicago: University of Chicago Press.
- Luhmann, Niklas. 1997. *Die Gesellschaft Der Gesellschaft*. Frankfurt am Main: Suhrkamp.
- Martin, Clyde. 1910. "Playing the Pictures." *The Film Index*, December 10.
- Massie, Keith, and Stephen D. Perry. 2002. "Hugo Gernsback and Radio Magazines: An Influential Intersection in Broadcast History." *Journal of Radio Studies* 9 (2): 264-81.
- Mayer, Ruth. 2014. *Serial Fu Manchu: The Chinese Supervillain and the Spread of Yellow Peril Ideology*. Philadelphia: Temple University Press.
- 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.
- McChesney, Robert W. 1993. *Telecommunications, Mass Media, and Democracy: The Battle for the Control of U.S. Broadcasting, 1928-1935*. Oxford: Oxford University Press.
- Metropolis*. Dir. Fritz Lang. Perf. Alfred Abel, Gustav Fröhlich, Brigitte Helm. UFA, 1927.
- 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.
- Myers, Henry. 1945. "Weird and Wonderful." *The Screen Writer*, July.
- Radio Patrol*. Dir. Ford Beebe and Cliff Smith. Perf. Catherine Hughes, Mickey Rentschler, Grant Withers. Universal, 1937.
- Radio Patrol*. (Universal, 1937). Pressbook. New York Public Library for the Performing Arts, Dorothy and Lewis. B. Cullman Center.

- Roxy and his Gang*. CBS, 1922-1925.
- Scientific American*. 1877. "More Telephone Triumphs," March 3.
- Sewell, Philip W. 2014. *Television in the Age of Radio: Modernity, Imagination, and the Making of a Medium*. New Brunswick: Rutgers University Press.
- Silver Screen*. 1937. "Off-Stage Shots," February.
- Singer, Ben. 2001. *Melodrama and Modernity: Early Sensational Cinema and Its Contexts*. New York: Columbia University Press.
- Sklar, Robert. 1994. *Movie-Made America: A Cultural History of American Movies*. New York: Vintage Books.
- Sorensen, Leif. n.d. "Weird Tales: The Unique Magazine." The Pulp Magazines Project. Accessed October 21, 2016.
- Spadoni, Robert. 2007. *Uncanny Bodies: The Coming of Sound Film and the Origins of the Horror Genre*. Los Angeles: University of California Press.
- Spy Smasher*. Dir. William Witney. Perf. Marguerite Chapman, Sam Flint, Kane Richmond. Republic, 1942.
- Stanfield, Peter. 2002. *Horse Opera: The Strange History of the 1930s Singing Cowboy*. Chicago: University of Illinois Press.
- Telotte, J. P. 1999. *A Distant Technology: Science Fiction Film and the Machine Age*. Hanover, NH: Wesleyan University Press.
- The Amazing Exploits of the Clutching Hand*. Dir. Albert Herman. Perf. Rex Lease, Ruth Mix, Jack Mulhall. Weiss, 1936.
- 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 Mercury Theater on the Air*. Host and Dir. Orson Welles. Perf. Orson Welles, changing cast. CBS, 1938.
- The Phantom Empire*. Dir. Otto Brower and Breezy Eason. Perf. Gene Autry, Frankie Darro, Betsy King Ross. Mascot, 1935.
- The Vanishing Legion*. Dir. Ford Beebe and B. Reeves Eason. Perf. Edwina Booth, Harry Carey, Frankie Darro. Mascot, 1931.
- Uricchio, William. 2008. "Television's First Seventy-Five Years: The Interpretive Flexibility of a Medium in Transition." In *The Oxford Handbook of Film and Media Studies*, edited by Robert Kolker, pp. 286-305. Oxford: Oxford University Press.
- Wasko, Janet. 1994. *Hollywood in the Information Age: Beyond the Silver Screen*. Cambridge: Polity.
- Young, Paul. 2006. *The Cinema Dreams Its Rivals: Media Fantasy Films from Radio to the Internet*. Minneapolis: University of Minnesota Press.

7. Conclusion: Telefilm, Cross-Media Migration, and the Demise of the Film Serial

Abstract

The conclusion offers an outlook past the 1940s. It places film serials in the context of the shifting cinema landscape in the 1940s and 1950s and the rise of television. The chapter compares the viewer address of film serials to television's programming in terms of a 'segmented flow' and argues that film serials imagined and practiced a televisual mediality before the advent of TV. Serials and television thus became convergent media, which counters the prevalent notion that television killed film serials. The chapter 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.

Keywords: television programming, televisual flow, post-WWII film history, independent film production

The present moment is an arbitrary one to end a study of film serials. Although the heyday of their production is well in the past, serials that were thought to be lost continue to reappear in archives or in private collections. Online fan groups like the serialsquadron.com offer increasing numbers of serials on DVD. Other enthusiasts make them available on youtube or upload them to archive.org, and scholars like Richard Koszarski are making an effort to locate 'new' film serials. In the final months of writing, for instance, Pathe's *THE HOUSE OF HATE* (1918) was located in Russia, digitalized, and translated back into English. Sixty years after the termination of film serial production, the number of available serials of both the silent and the sound

eras is steadily increasing, forcing me to end this study *in medias res*. This is not the only reason why plenty of serials have been bypassed in this study. A few were outside the scopes of the focus on crime stories; others were left out because I concentrated on American serials. More generally, even the library of film serials available today exceeds any single book-length investigation. Serials that particularly warrant further analysis include *THE FLAME FIGHTER* (Rayart, 1925) and *THE TIGER'S SHADOW* (Pathe, 1928), of which numerous episodes are available at UCLA's Film and Television Archive, and *THE CHINATOWN MYSTERY* (Trem Carr, 1928), which has been fully restored at George Eastman House but is not available for home viewing. These serials could further enrich our understanding of film serial production and style in the 1920s and help work towards a more complete understanding of American film immediately before the Great Depression. Additionally, some sound-era serials that are available on DVD need to be considered, such as *HOLT OF THE SECRET SERVICE* (Columbia, 1941), which differs from other serials in its more definitive adult appeal. These and other serials all warrant their own close readings, but they could also enrich studies that take a look at a variety of filmic forms or cultural texts without limiting themselves to serials.

Instead of embracing the full scope of available film serials, the preceding pages have neglected quantity in favor of depth of analysis. I have anecdotally zoomed in on specific serials, episodes, scenes, and their release contexts in order to outline their distinct mode of storytelling and mode of address. As I have detailed, film serials reach out to their viewers both through their demonstrative, presentational address and by encountering viewers in their daily lives, in newspaper novels and magazine stories, in comic strips, in radio programs, through 'street ballyhoo', and in other ad campaigns seeking to transform cinema lobbies and the main streets of rural towns according to a particular serial's narrative world.

Many film serial plots are about masked villains to be identified, criminal gangs to be dismantled, murders to be retaliated, scientific codes to be retrieved, and genius inventions to be protected. Therefore, even when they do not self-identify as detectives, heroes of film serials more often than not set out to recover and correlate, to trace and to bring to justice the evil and greedy lawyers, scientists, archaeologists, or otherwise dubious characters undermining society. This focus on crime, mystery, and acts of uncovering harkens back to an interest in detective plots and in new technologies that markedly informed American popular culture from the 1840s onwards. Many serials are fascinated with factual or imagined technological contraptions, and they often foreground and demonstrate the machinic quality of film

itself, that is, its technological orchestration of correspondences between images, objects, and spaces. This showcasing of cinematic creation effects a presentational mode of address that demonstrates processes of and approaches to storytelling while itself telling a story. In short, a film serial narrative simultaneously serves as an example and as its explanation.

The multifaceted operational aesthetic of film serials combines elements that surface in the nineteenth century in evaluations of publicly displayed technologies and curious objects, in the questioning of possibly deceptive journalism, but also in the descriptions of cause and effect in magazine explanations of technical mechanisms or in the analytic storytelling of detective fiction. However, as I have shown, instead of solely inviting viewers to retrospectively marvel at a given detective's genius, serials are radically presentist: they establish each step in the narrative as taking place now and the overall hunt for the master villain as not yet terminated. They offer up each anecdotal story element as one piece in a yet unfulfilled chain of cause and effect that viewers watch as it propels along. The episodes deliver clues to the case, whether relevant or not, to the viewers, who emerge as detectives who correlate information and establish connections as the narrative unfolds. In opposition to carefully constructed detective stories, film serial narratives do not choose a straight path from problem to resolution from all the routes the story could possibly take. Instead of practicing reduction and narrative integration, serials embrace a great variety of contingent story elements to an extent that exceeds that of many other cultural products, such as detective stories in print and on film. Importantly, as I hope I have shown, the distinct characteristics and mode of address of the film serial was not a short-lived detour in Hollywood history. Instead, film serials arose alongside the feature film, from the same breeding ground of transitional-era filmmaking, and both forms coexisted for more than forty years. The significance of this alternative mode of filmmaking, however, only surfaces from an analysis and a historiography that takes into account both silent- and sound-era serials, suspending the division of the study of film serials into two separate realms of film scholarship.

Film serials are part of a broader field of popular-cultural production and consumption that includes Hollywood's release of B-fare, shorts, and animated films, but also radio programs, serials and comics in newspapers and in their Sunday supplements, and the narratives in pulp magazines and low-cost novels. When commercial television began to bring moving image entertainment to American living rooms in the 1940s and 1950s, the broadcasted programs soon adapted material from this multifaceted popular-cultural field. Therefore, rather than exclusively considering film

serials as part of American silent- and studio-era film production, the following pages place the demise of film serial production within the context of a televisual mode of viewer address. I will briefly outline the conflicted relationships of film studios with the production of television programs at a time when television shifted from airing live content to recorded material. Drawing on studies of television by Raymond Williams and Jane Feuer, I will then show how television's mode of address resembles the viewer address of film serials, making TV the perfect platform for similar content. Thus, whereas the production of film serials proper ended in the mid-1950s, television tapped into a film reception culture that had been part of cinema for decades. Simultaneously, as I will show, film serials refused to vanish into oblivion after their heydays. From the 1960s until today, the serial has demonstrated its adaptability to varying technological transformations by participating in media change, inscribing itself into television programs in the 1960s and 1970s, reappearing on VHS in 1980s and 1990s, on DVD around the millennium, and by thriving in today's online sharing culture.

Media and Forms, Serials and Television

1956 marked the end of the production of film serials. From the mid-1930s onwards, production had been almost exclusively in the hands of Universal, Columbia, and Republic. Universal terminated its serial output after its 1946 releases—a move that a *New York Times* article at the time believed would cause 'murmuring in the suburbs' because 'serials are the life-blood of nearly half of this country's approximately 21,000 theatres' (Hurst 2007: 146-147). Republic continued until 1955, ceasing production one year prior to Columbia's release of the final American film serial, *BLAZING THE OVERLAND TRAIL*. The demise of the film serial is typically seen as a more or less direct result of the consolidation of the television industry and the increasing availability of televised entertainment. J.P. Telotte, for example, attributes the death of the serial to shifting patterns of film distribution and film viewing, but also to TV (1995: 92). Similarly, Scott Higgins stresses that sound serials targeted a juvenile audience that found equally apt entertainment on television, the programming of which integrated serialized adventures more readily into the scheduling of daily life (2016: 180). While also attributing the end of film serial production to television, Richard M. Hurst adds that rising costs of film production after World War II and the resulting reduction in writing and production staff brought about less innovative and more cheaply produced film serials with shorter, qualitatively inferior episodes—a shift

that contributed to the form's demise (p. 145; see also Telotte 1995: 110). Without neglecting the immediate relation of the large-scale dissemination of television and the demise of the film serial in the 1950s, I argue that television offered a mode of viewer address that film serials had promoted throughout their more than four decades of existence. As I will briefly outline below, television's threat to film serials results not only from its placement in the home but from the fact that televisual programming with its self-ascribed liveness adopted a similarly presentist and presentational approach to storytelling as the one serials had propagated since American cinema's transitional era.

Serials hailed the advent of TV for more than a decade. Yet the live medium they imagined only existed for a short period—until the early 1950s. As chapter six illustrates, film-serial portrayals of television shifted from depictions of television in terms of sci-fi contraptions to TV as a live-broadcast medium in the 1930s and 1940s. The queen of the underground civilization in *THE PHANTOM EMPIRE* (Mascot, 1935), for example, uses television to surveil proceedings on the surface of the earth, whereas the masked villain of *SPY SMASHER* (Republic, 1942) operates a television channel as a front to place surveillance cameras in the offices of a military official. Although they cast television respectively as a futuristic fringe technology and a proto-factual broadcast medium, both serials highlight TV's capacity to transmit live images. And television was indeed live during its first years.

Adopting its programming strategy from radio, during the 1940s and into the 1950s television sold broadcasting time to advertising agencies who contributed live content (Anderson 1994: 6). However, aiming to increase control over their programming, TV channels introduced commercial breaks and began to air their own live shows (Boddy 1985: 27). By 1950, TV sought cooperation with Hollywood to create original content while reducing the financial risks of film production (Anderson 1994: 6). This collaboration resulted in a steady decrease in live programming in favor of recorded forms and practically ended television's era of live entertainment, shifting from the "Golden Age" of live anthology drama' to what some contemporaneous critics, according to William Boddy, perceived as the "vast wasteland" of 'studio-produced action-adventure series of the late 1950s' (1985: 23; see also Anderson 1994: 7; Boddy 1985: 29; Schatz 1998: 463-481). In line with early television's continuation or adaptation of radio programming, such critics equated liveness with quality (cf. Hilmes 1997: 50; see chapter 6 of this volume).

Serials had similarly envisioned television to be a live medium. In fact, their tendency to stress liveness in their portrayals of TV may have

eliminated concerns that television could become cinema's rival. Nevertheless, individual serials simultaneously seemed to suspect that future appearances of their protagonists would take place on television rather than on cinema screens (Mayer 2014: 98).¹ Serials thus both celebrated live television and acknowledged the medium's threat to replace weekly serialized film. And indeed, serial favorites such as Dick Tracy or The Lone Ranger appeared on TV in the 1950s (Hurst 2007: 148). Whereas the shared heroes of film serials and television shows often originated in comics and radio programs, individual television shows particularly referenced the film serials by shooting in the same locations—examples include *THE LONE RANGER* (ABC, 1949-1957), *SUPERMAN* (syndicated, 1952-1958), or *FLASH GORDON* (syndicated, 1954-1955) (Higgins 2016: 180). More generally, many telefilm series of the 1950s offered sequences of action and violence that resembled the appeals of film serials but packaged them in self-contained half-hour episodes (p. 180).

This redistribution of content between cinema and television co-occurred with a larger transformation of the Hollywood film industry. Facing post-war economic changes and the effects of the 1948 Paramount decree,² television became a convenient stock villain for the major studios, especially since antimonopoly regulations limited their influence on the new entertainment market (Anderson 1994: 2; see also Schatz 1998: 472).³ The studios that produced film serials—Columbia and Universal, who ran medium-size studios without attached theater chains, and Republic, a producer of B-fare without cinema ownership—profited from the 1948 court decision because it terminated block-booking practices that disabled the screening of film serials in many urban theaters, relegating them to suburban and rural, mostly independent theaters that had nevertheless sustained the form throughout the decades. As the majors were thus prohibited from forcing exhibitors to buy their B-fare along with their quality features, Hollywood's

1 Mayer's argument is based on her reading of Republic's 1940 serial *THE DRUMS OF FU MANCHU*. In fact, Fu Manchu debuted on TV in *THE ADVENTURES OF FU MANCHU* in 1956. The series was produced by the Hollywood Television Service, a company that was founded by Republic in 1950 and outlived the film studio (Hurst 2007: 221; Mayer 2014: 98).

2 At the time, the Supreme Court decision forced the vertically integrated majors to sell large amounts of their theaters, which, in concert with subsequent court decisions, inaugurated a transformation process that continued throughout the 1950s (Anderson 1994: 6; Boddy 1985: 24).

3 The Federal Communications Commission (FCC), originally the governmental institution to regulate radio, now oversaw the commercial television market. Fearing that the majors would continue their control over film distribution by replacing their theater chains with television channels, the FCC blocked the studio's purchasing efforts in order to avoid the continuation of monopolies (Schatz 1998: 472).

largest studios discontinued much of their low-budget production, making room for previously constrained smaller producers (Schatz 1998: 340-341). However, decades of practice in cost- and time-efficient filmmaking had prepared these smaller studios for telefilm production (p. 473). Instead of embracing new theatrical screening venues, these studios turned to television as their exhibition outlet (Anderson 1994: 2-3). As a consequence, film studios discontinued most of their B-fare production, while newly formed companies produced content for TV (cf. Anderson 1994: 6; Boddy 1985: 25; Schatz 1998: 464).

In the context of the large-scale transformation of Hollywood that followed the governmental dismantling of the monopolistic studio system, it is arguable whether the continuous production of generic, low-cost content ended because of television, or whether television picked up on popular-cultural forms that cinema had discarded and left up for grabs. Either way, television offered an ideal outlet for formulaic, B-production film. Not only the heroes and attractions of film serials migrated from cinema to television but also large parts of Hollywood's poverty-row or B-film culture. The result of this radical transformation of Hollywood production culture was a redistribution of forms among the media, to use Niklas Luhmann's terms (see chapter 6 of this volume). Television did not kill cinema, yet it adopted its forms. A return to Luhmann's distinction helps to describe this shift. As a medium, cinema functions as a container for particular forms, including the film serial but also for instance feature films, comedies, or newsreels. Television assumes a similar function, and the visual forms of both media become in a way detachable from their media-institutional breeding grounds. After television's early live phase—that is, as soon as TV began to show filmed material often referred to as 'telefilm'—both cinema and television became different media with the capacity to house the same forms.

In a way, the film studio RKO had anticipated this migration of forms in 1944 (importantly, before the Paramount decree) when, in response to exhibitors' threats to boycott studios that invested in and produced for television, they released a statement arguing that 'it would seem to be in the best interests of the entire motion picture industry that production-distribution companies should participate in television, not only to protect themselves but exhibitors as well, by directing television programming into fields which would be far removed from feature films created for the theatre' (quoted in Boddy 1985: 25). RKO thus campaigned for a cultural construction of television that would render its broadcasting of cinematic film inappropriate and thereby suspend TV's capacity to host cinematic forms. Despite such

efforts, television's technological capacity to broadcast telefilm was never effectively countered by opposing discursive ideals. As Elena Esposito has outlined following Luhmann's approach, audiences experience and define a given medium through its forms (see chapter 6 of this volume). Considered in this way, both cinema and television reinvented themselves in the 1950s through their efforts to both cooperate and differentiate, as both media are defined by the forms they offer to their audiences.

Television as it evolved after its early live phase drew on a mode of address that similarly informed film serials as they have been described throughout the preceding chapters. In fact, the concepts analyzed in this volume—film serials' presentism and presentationalism outlined in chapter three; the repetitions, reiterations, and reenactments explained in chapter five; and film serials' juxtaposition of multiple forms and modes of address and their imagined liveness examined in the penultimate chapter—seem to find correspondences in the field of television studies. Jane Feuer stresses that when television embraced prerecorded forms in the 1950s, it nevertheless retained its sense of presence because of its insistence on the simultaneity of transmission and viewing. The synchronicity of an event and its broadcast transmission gave way to TV's enduring 'ideology of the live, the immediate, the direct, the spontaneous, the real. This is true of both program formats and metadiscourse' (Feuer 1983: 14).⁴ Television thus ascribed a notion of liveness to its collage of recorded material just like film serials of the sound era did—most particularly in *THE PHANTOM EMPIRE* with its diegetic radio broadcast. For Feuer, television's insistence on liveness was a means to integrate the fragmented elements of the TV program, with its news reports, interview sections, clips, commercials, trailers, and segmented narratives into what Raymond Williams has famously termed the televisual 'flow' (p. 16). Williams employs the term to describe a shift from the programming of discrete units towards a broadcast model that offers a continuous flow of short elements like commercials, trailers, and parts of series without marking the transition between elements, and without connecting, comparing, or contrasting these elements (R. Williams 2004: 89-92, 118).⁵ Feuer adopts his notion of flow as it elucidates TV's suggestion of immediacy and presence,

4 Feuer in this passage draws on work by Stephen Heath and Gillian Skirrow (1977).

5 Writing during the 1970s, Williams contends that these elements are particularly short in American television programming (R. Williams 2004: 74). Interestingly, Williams himself locates a similarly interrupted viewing experience in cinema's inclusion of shorts and double bills or 'B'-films that, 'with appropriate intervals for advertising and for the planned selling of refreshments, began to develop the cinema towards the new kind of planned flow' (p. 91). Although he thus admits that cinema worked similarly, he overlooks the history of the practice,

but she stresses that television hinges on a dialectic of segmentation and flow, on 'segmentation without closure' (1983: 16). Although the flow of TV promises to continue endlessly, viewers are aware of its segmentation, especially when individual television programs begin or end for the day (cf. Kompare 2006: 340).

Film serials exist at a comparable nexus of segmentation and flow: although individual serials ended after a previously determined number of episodes, the three studios producing serials during the sound era each scheduled their output in a way that ensured the continuous supply of an episode a week throughout the year (cf. Higgins 2016: 5). Moreover, what I have referred to throughout the preceding chapters and particularly in chapter four as operational detection resembles television viewers' activity of correlating segments. More often than not, the connection or contrasting of elements bypasses the chronology of segments as they follow one another in TV's endless flow. Through practices of repetition and variation, individual segments establish themselves as part of a series and thereby invite a correlation with previous installments. Viewers quite obviously connect today's installment of a soap opera with yesterday's, and they similarly correlate, for example, today's weather forecast and yesterday's. Comparable correlative efforts apply to formula, when viewers contrast the narrative organization of the episodes of one cop show with another, or when they recognize similar plot twists in two different soap operas. In addition to identifying repetition and correlating comparable segments, viewers thus identify cultural anecdotes even within the segments of the ongoing flow. This mode of reception relates to the viewers' awareness of the operational aesthetics of TV, that is, of the recurring patterns that determine both the organization of television programming and the narrative formulae of particular shows.

In this process, every following segment or anecdote is encoded as 'new' and is integrated 'live' into the ongoing narrative and flow.⁶ John Fiske ascribes a similar task of live correlation to television viewers, and he considers this task a means of empowerment:

as especially the early Nickelodeon culture offered a kind of flow that resembles television much more than studio-era exhibition practices.

6 Lorenz Engell holds that repetition and variation—that is, the question of whether information in a given television program is coded as 'old' or 'new'—is not a quality inherent to that information but an attribute that is given in the moment it appears. Referencing the 'and-now' structure of television, Engell stresses that this 'operational memory', that is, the act of deciding whether something is old or new, always takes place according to the present needs of a program (2011: 117-120).

Television's "now-ness" makes suspense seem real, not manufactured, and invites the viewer to "live" the experience of solving the enigma, rather than be told the process of its already achieved and recorded resolution. The story appears to be happening *now*, its future to be still unwritten. So in soap opera, in sport, in quiz shows, the hermeneutic code is more imperative, the engagement it requires is more "equal", for both narrative and viewer appear to be equally lacking in knowledge as they live through the enigma's resolution. This is a more engaged and empowering reading relation than that offered by the novel or by film. (1987: 145)

Incidentally, Fiske's description itself invokes a vocabulary of mystery and detection ('solving the enigma') although he does not focus on detective series. Viewers, it seems, approach television in general in ways that resemble the engagement with detective stories that are not told in retrospect. TV's liveness is, on the one hand, a self-ascribed quality that results, for instance, from the pre-commercial break promise that the show will be 'right back'. On the other hand, seriality and the integration of interrupted narratives into the viewer's personal schedules suggests the simultaneous unfolding of televised stories alongside a viewer's own perceived passage of time. Serialized detective stories and serial narratives more generally thrive on fragmentation, on the breaks and disruptions that necessitate but also enable the viewers' efforts at operational detection. In film serials, this fragmentation not only results from their separation into weekly units, but each episode itself consists of anecdotal elements, with breaks that the serials refuse to suture. From weekly returning features such as the plot recap and the cliffhanger to the formulaic arrangement of narrative and action sequences, the return of anecdotal micro-plots, the inclusion of repeat or library footage, down to foregrounded cuts between individual shots, serials present fragments for correlation that resemble television's segmented flow.

Similar to Fiske's claim that the act of watching television is more 'engaged and empowering' than film viewing (1987: 145, see above), Williams and Feuer occasionally reference cinema as the antithesis of televisual flow (R. Williams 2004: 9; Feuer 1983: 15). Feuer, for instance, argues that in television, 'unlike narrative cinema, segmentation is already a property of the text' (p. 15). It is at this point that my previous analysis of film serials offers an intervention, as film serials are particularly segmented and fragmented, but they are nevertheless narrative forms of cinema. Serials thus preempt a shift that Miriam Hansen describes for the difference of television and cinema, when she argues that

the spatio-temporal configuration of television within the domestic environment has broken the spell of the classical diegesis; the compulsive temporality of public projection has given way to [...] distracted and fragmented acts of consumption. As critics have observed, an aesthetics of the “glance” is replacing the aesthetics of the “gaze”, the illusionist absorption of the viewer that is considered one of the hallmarks of classical cinema.⁷ (1993: 198)

Both film serials and television offer highly fragmented entertainment, and they evoke a sense of liveness to counteract segmentation. In film serials, the seams or gutters never disappear. Instead, serials exhibit and showcase the ruptures between fragments in ways that encourage operational detection.

As chapter five has shown, repetition, reiteration, and reenactment identify parts of a serial as anecdotal and ripe for correlation. In this context, anecdotes are segments that mean something in correlation to other segments, for instance shots that we have seen before, narrative strategies that recur at a particular point of each episode, or plot developments that have happened before in a comparable way. The arrangement of anecdotes relies on multiple forms of serialization, as anecdotal elements recur each week or warrant comparison outside of the scheduled chronology of the order of episodes. Feuer's analysis of the coverage of the 1980 Olympics on American television, which is at the heart of her argument, reveals a similarly serial organization. The coverage often cut back and forth between sports being pursued simultaneously, it included sequences of narrative commentary, sped up contests in time-lapse editing, or repeated sequences in slow motion. The segments of the coverage of the games thus similarly repeated sequences, returned to a game left off earlier, and connected all elements through the suggested liveness of the broadcast (Feuer 1983: 16). In arranging repeated and varying anecdotes within a context of supposed liveness, television employs a narrative strategy and mode of address from which film serials had profited decades earlier. In whatever way the demise of film serials and the rise of television interrelate, serials did employ a mode of address that television could offer similarly and probably better because it could at least reinforce its self-identification as live with reference to broadcasting. Whereas film serials offered alternative views on Hollywood's film culture before and during the studio era, they are also

7 Hansen compares the subject positions offered by television in the 1990s to early film practices, including Tom Gunning's description of early film's 'presentational style that addresses the viewer directly' and a 'more overt reliance on cultural intertexts' (1993: 200).

part of a cultural history of forms that exceeds any individual medium. They fit into a history of serialized programs and popular-cultural modes of address across the media. Moreover, it was this cross-media appeal of the serials' viewer address that enabled their repeated integration into the changing contexts of film dissemination after the termination of film serial production.

Afterlives: Media Change and the Continuous Appeal of Serials

Although production ended in 1956, film serials never truly disappeared from popular cultural knowledge. The film serial as a form easily crossed thresholds into new media and proved its resilience throughout the multiple media changes of the second half of the twentieth century and into the twenty-first. The reasons for their continuous reappearance in various media range from a sense of nostalgia for bygone times to a search for popular-cultural origins and to more pragmatic reasons such as their ready availability for re-editing and reruns, as copyrights were often not renewed or screening rights were sold to TV channels as a part of a studio's larger backlog. Moreover, their futuristic narratives and *mise-en-scène* seem to have addressed themes that continued to impact cultural and political issues and awareness throughout the twentieth century. Whereas the actual footage seemed historical, the central concerns of some serials were far from out of date.

This appeal to varying cultural-historical circumstances was prefigured before the end of film serial production. In 1945, *Film Daily* reported that New York's World Theatre reran *THE PHANTOM EMPIRE* (Mascot, 1935) as part of a double feature in order to take 'advantage of the Atomic Bombing of Japan'. The screening was accompanied by 'a showmanship display of facts about atomic machines of destruction' in the theater lobby, which also 'called attention to the thrilling picture itself, which tells of an Electrical Empire and the Atomic defensive devices they used—a preview of what we might expect in the future' (*Film Daily*). This somewhat disturbing marketing strategy brackets much of what defined film serials and their operational aesthetics for decades: the focus on novel technologies, the promise to showcase their application, and the explanation of science and technology in (supposedly) educational lobby displays. In fact, a misspelled caption underneath an image accompanying *Film Daily's* article points to the intersection of science-fiction and reality when it refers to *THE PHANTOM EMPIRE* as an 'unusual fact-action picture' (*Film*

Daily).⁸ It seems as if the interest in atomic technology itself sufficed for the opportune rerun, despite the fact that *THE PHANTOM EMPIRE*'s underground civilization destroys itself with its own atomic weapons at the end of the film. Moreover, the serial's appropriation in the immediate post-Hiroshima context exemplifies the reusability of serial plots and their diegetic technologies. Just as the 1925 serial *THE POWER GOD* had ascribed the possibility of its power engine to draw electricity from air varyingly to Tesla coil or atomic energy,⁹ the underground kingdom in *THE PHANTOM EMPIRE* uses technological marvels whose function can be attributed interchangeably to electricity, radio and television, or atomic energy. It was this ability to re-appropriate that enabled a ten-year-old serial to grant audiences a look into the future in 1945.

The version of *THE PHANTOM EMPIRE* that was shown in August 1945 in New York under the new title *THE ATOMIC RAIDERS* re-edited the serial into a self-contained feature film. It was thus not only the variably interpretable content of the serial that rendered it appropriable for a renewed screening but also the quite tangible adaptability of film serials to changing exhibition contexts. They could be edited into features or shown serially, and episodes could be shown individually, in groups, or back to back. It was this flexibility that then informed the serials' televisual screenings.

In 1966, *Film Fan Monthly* offered serial fans guidance within the shapeshifting culture of film serial exhibition. The magazine welcomed the new accessibility of Republic serials from the 1930s and 1940s, which were screened by television stations throughout the United States in the form of 100-minute features. At the same time, *Film Fan Monthly* lamented the TV stations' favoring of features over a possible screening of full serials, and the magazine compensated for the retitling of the films by providing a list of 26 feature versions and the corresponding release titles of the original Republic serials (Davy). Whereas a majority of them seem to be genuinely new titles, the renaming of *SPY SMASHER* (Republic, 1942) to *SPY SMASHER RETURNS* suggests that the rerun self-identified as a sequel, placing the serial again at a threshold of historicity and novelty, or repetition and variation. A decade later, an article about *FLASH GORDON* star Buster Crabbe homed in on the continuous interest in serials, their flexible screening options, and the sense of nostalgia that informed TV programming more generally. The article claims that millions of viewers tuned in for 'the antiquated,

8 *Film Daily*'s article refers to the film as a 'fast-action' film, which was a more common term to describe action films and probably the intended spelling for the image caption.

9 For a detailed reading of *THE POWER GOD*, see chapter five of this volume.

40-year-old series' on Fridays and Sundays, with a substantial female fan base. Additionally, the TV channel WFIX-TV telecast the entire original thirteen-episode serial on 4 July 1976, between midnight and four a.m. On the one hand, the article related the renewed interest in the serial to the contemporaneous interest in science fiction that followed the popularity of shows like *STAR TREK* (Gardella 1976), thus retrospectively ascribing the serial a culturally formative impact. On the other hand, the article explained TV's recycling of serials with reference to the fact that the programming chiefs of television channels at the time belonged to a generation that grew up watching them. Programmers as well as fans looked for a way to share their childhood favorites with their own children. However, the scheduling for *FLASH GORDON* on Sundays at eleven p.m. and the article's description of a college fan culture around Buster Crabbe suggests that the serials appealed to a more diverse audience, including viewers without personal nostalgic attachments (Gardella 1976). For audiences that were familiar with film serials, the fact that television recycled them implicitly affirmed the cultural value of a formerly ephemeral form, as Jonathan Gray describes it for TV reruns more generally (2010: 64). Moreover, as Paul Grainge stresses in an essay that questions the understanding of media nostalgia in terms of a longing for a bygone past, recycling culture and nostalgia are 'the result of specific technological transformations' (Grainge 2000: 29). Television reruns, especially outside of prime-time programming, revealed in the new technological possibilities to visit or re-visit Hollywood's history.

While attracting new fans of film serials, these reruns intensified the devotion of fans for whom such serials were a part of fond childhood memories. Thus, early histories of especially the sound serials served not only as works of critical reference before the advent of the internet but doubled as nostalgic entertainment for readers who remembered seeing serials in local cinemas during their childhood (Barbour 1979; Fernet 1968; R.W. Stedman 1971). The authors of *The Great Movie Serials: Their Sound and Fury*, for instance, claim in a note to the reader that 'while this is primarily intended as a book of nostalgia entertainment, we believe it can also serve as a reference work' (Harmon & Glut 1973: xix). In a way, these books corresponded to the serials' resurgence on TV, when viewers were reminded of their childhood favorites in a medium that offered a similarly fleeting form of entertainment as the cinema. Written accounts of serial actors and plots and printed film stills therefore also served to archive knowledge of a bygone cinematic tradition and allowed fans to hang on to a history that they could physically own. Alan G. Barbour's magazine the *Serial Quarterly*, which began publication to subscribers only in 1966,

should be considered in this context. For a limited amount of years, the *Serial Quarterly* printed episode plot summaries alongside serial posters, film stills, and other pressbook material (Barbour 1966; Barbour 1967). Like books on film serials, the magazine took up a similar function as fan magazines in the 1930s had, which, according to Kathleen Loock, 'prompted [...] readers to recognize themselves as a media generation' (2016: 130). Whereas some early authors on film serials had themselves been part of Saturday matinee audiences as children (Cline 1984: vii), later reference works were written by authors who had as children enjoyed afternoon reruns on television. These authors benefited particularly from VHS releases in the 1980s and 1990s, when independent publishers released serials that had gone into public domain (Davis 2007: 11, 13).

In another generational shift, some of today's serial enthusiasts inherited their interest in film serials from the previous generation. The Serial Squadron, an archival website and forum that offers digitally restored silent- and sound-era serials on DVD, was founded in the late 1990s by Raymond W. Stedman, who authored books on serials in the 1970s, and his son Eric Stedman, who now continues the project, releasing an increasing amount of restored serials each year. Additionally, historians and fans increasingly make serials available on open streaming and downloading sites, particularly on youtube.com and on archive.org. Although they are invested in and appropriate historical moving image material, these practices are deeply embedded in 'a digital media culture that thrives on remembering, storing, and archiving Hollywood's past and present' (Loock 2016: 123). As opposed to the ephemerality of cinematic screenings and televisual recycling, recording media such as VHS and DVD and later digital technologies have, as Loock stresses, 'enabled viewers to become film collectors and cultural archaeologists' (p. 133). The internet enables fans to make available vast amounts of twentieth-century moving images, it enables the formation of fan communities, and it fosters the conversion of new viewers to film serial fandom. These viewers might be driven by a family-genealogical interest in the favorite films of their parents or grandparents, they might be tracing the media histories of iconic comic heroes of their own time, or they may be more general film history enthusiasts.

The continuing popularity of film serials among fans, however small their groups may be, is part of an online culture that revels in the media-technological possibilities of its own time. Large archival websites align much of our popular-cultural history side by side, urging viewers to formulate personal evaluations of historical moving images instead of only providing previously culturally validated films. The current interest of

media studies in archaeological excavations of bygone technologies and forms of entertainment thus overlaps with a more general public interest in the history of popular culture. Consumers of film serials on the internet perform their own acts of media archaeology, despite the fact that they rely on previously found and digitalized material. As I hope I have shown, similar investigations on online platforms and in traditional local archives help film scholars to reinstate some of the complexities of twentieth-century entertainment culture.

Bibliography

- Anderson, Christopher. 1994. *Hollywood TV: The Studio System in the Fifties*. Austin: University of Texas Press.
- Barbour, Alan G. 1966. *Serial Quarterly*.
- . 1967. *Serial Quarterly*.
- . 1979. *Cliffhanger: A Pictorial History of the Motion Picture Serial*. New York: Citadel.
- Blazing the Overland Trail*. Dir. Spencer Gordon Bennett. Perf. Norma Brooks, Dennis Moore, Lee Roberts. Columbia, 1956.
- Boddy, William. 1985. "The Studios Move into Prime Time: Hollywood and the Television Industry in the 1950s." *Cinema Journal* 24 (4): 23-37.
- Cline, William C. 1984. *In the Nick of Time: Motion Picture Sound Serials*. Jefferson, NC: McFarland.
- Davis, Hank. 2007. *Classic Cliffhangers, Volume 1-3*. Baltimore, MD: Midnight Marquee Press.
- Davy, Daryl. 1966. "Republic Serials on TV." *Film Fan Monthly*, November.
- Drums of Fu Manchu*. Dir. William Witney, John English. Perf. Henry Brandon, Robert Kellard, William Royle. Republic, 1940.
- Engell, Lorenz. 2011. "Erinnern/Vergessen. Serien Als Operatives Gedächtnis Des Fernsehens." In *Serielle Formen. Von Den Frühen Film-Serials Zu Aktuellen Quality-TV Und Online-Serien*, edited by Robert Blanchet, Kristina Köhler, Tereza Smid, and Julia Zutavern, pp. 115-33. Zürcher Filmstudien 25. Marburg: Schüren.
- Esposito, Elena. 2004. "The Arts of Contingency." *Critical Inquiry* 31 (1): 7-25.
- Fennett, Gene. 1968. *Next Time Drive Off The Cliff!* Cocoa, FL: Cinememories.
- Feuer, Jane. 1983. "The Concept of Live Television: Ontology as Ideology." In *Regarding Television: Critical Approaches, An Anthology*, edited by E. Ann Kaplan, pp. 12-21. Los Angeles: American Film Institute.
- Film Daily*. 1945. "Atomic Picture Bombs Broadway: Showmanship Scoop Boosts Receipts," August 22.
- Fiske, John. 1987. *Television Culture*. London and New York: Routledge.
- Flash Gordon*. Dir. Frederick Stephani. Perf. Buster Crabbe, Charles M. Middleton, Jean Rogers. Universal, 1936.
- Gardella, Kay. 1976. "Tide of Nostalgia Washes Buster in." *Sunday News*, June 6.
- Grainge, Paul. 2000. "Nostalgia and Style in Retro America: Moods, Modes, and Media Recycling." *Journal of American & Comparative Cultures* 32 (1): 27-34.
- Gray, Jonathan. 2010. *Show Sold Separately: Promos, Spoilers and Other Media Paratexts*. New York: New York University Press.

- Hansen, Miriam. 1993. "Early Cinema, Late Cinema: Permutations of the Public Sphere." *Screen* 34 (3): 197-210.
- Harmon, Jim, and Donald F. Glut. 1973. *The Great Movie Serials: Their Sound and Fury*. New York: Routledge.
- Heath, Stephen, and Gillian Skirrow. 1977. "Television: A World in Action." *Screen* 18 (2): 7-59.
- Higgins, Scott. 2016. *Matinee Melodrama: Play and the Art of Formula in the Sound Serial*. New Brunswick: Rutgers University Press.
- Hilmes, Michele. 1997. *Radio Voices: American Broadcasting, 1922-1952*. Minneapolis: University of Minnesota Press.
- Holt of the Secret Service*. Dir. James W. Horne. Perf. Evelyn Brent, Jack Holt, Montague Shaw. Columbia, 1941.
- Hurst, Richard M. 2007. *Republic Studios: Between Poverty Row and the Majors*. Lanham, MD: Scarecrow Press.
- Kompare, Derek. 2006. "Publishing Flow: DVD Box Sets and the Reconception of Television." *Television & New Media* 7 (4): 335-60.
- Loock, Kathleen. 2016. "Sound Memories: 'Talker Remakes,' Paratexts, and the Cinematic Past." In *The Politics of Ephemeral Digital Media: Permanence and Obsolescence in Paratexts*, edited by Sara Pesce and Paolo Noto, pp. 123-137. New York: Routledge.
- 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.
- Schatz, Thomas. 1998. *The Genius of the System: Hollywood Film-Making in the Studio Era*. London: Faber and Faber.
- Spy Smasher*. Dir. William Witney. Perf. Marguerite Chapman, Sam Flint, Kane Richmond. Republic, 1942.
- Star Trek*. Creator: Gene Roddenberry. Perf. DeForest Kelley, Leonard Nimoy, William Shatner. Norway Productions, Desilu Productions, Paramount Television/NBC, 1966-1969.
- Stedman, Eric. n.d. "About the Serial Squadron Archive." The Serial Squadron Cinema Cliffhanger Archive. Accessed December 11, 2016. www.serialsquadrone.com/about/.
- 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.
- The Adventures of Fu Manchu*. Dir. Franklin Adreon, William Witney. Perf. Clark Howat, Glen Gordon, Lester Matthews. Hollywood Television Services/NBC, 1956.
- The Chinatown Mystery*. Dir. J. P. McGowan. Perf. Joe Bonomo, Francis Ford, Ruth Hiatt. Syndicate, 1928.
- The Flame Fighter*. Dir. Robert Dillon. Perf. Jerome La Grasse, Branda Lane, Herbert Rawlinson. Beacon Productions, 1925.
- The House of Hate*. Dir. George B. Seitz. Perf. John Webb Dillon, Antonio Moreno, Pearl White. Astra/Pathe, 1918.
- The Lone Ranger*. Dir. William Witney, John English. Perf. Lee Powell, Hal Taliaferro, Chief Thundercloud. Republic, 1938.
- 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 Tiger's Shadow. Dir. Spencer Gordon Bennett. Perf. Hugh Allan, Frank Lackteen, Gladys McConnell. Pathe, 1928.

Williams, Raymond. 2004. *Television: Technology and Cultural Form*. London and New York: Routledge.

Index of Names

- Abel, Richard 34 n. 11
Acland, Charles 34
Altman, Rick 110 n. 45
Anderson, Christopher 238 n. 3, 289-91
Austry, Gene 122, 241-56, 260-67
- Backer, Ron 11
Barbour, Alan G. 11, 298-99
Barefoot, Guy 11, 16 n. 3, 20, 33, 106
Barnum, P.T. 27, 35, 43-44, 53, 70, 76-77, 128
n. 64, 158
Barthes, Roland 20, 136
Baudelaire, Charles 165
Baym, Nina 53
Bean, Jennifer 10, 126-28
Bell, Alexander Graham 28, 60, 63, 73, 274-75
Benjamin, Walter 36, 137, 147-48, 150-55, 157,
159, 162-63, 165, 171-72, 178, 184
Berry, Chad 248 n. 13
Biesen, Sheri Chinen 280 n. 43
Boddy, William 289, 290 n. 2, 291
Bolter, J. David 229, 240 n. 5
Bordwell, David 17-18, 126 n. 61, 186, 190, 208
n. 24, 228-29
Brooks, Peter 175,
Buck-Morss, Susan 152
Burnett, Lester 'Smiley' 248
Burns, William J. 84-86, 92 n. 13
- Canjels, Rudmer 10, 33, 87 nn. 5-6, 89, 91, 93
n. 14, 197, 199, 200 n. 16,
Canutt, Yakima 129
Castleman, Harry 257
Chaplin, Charlie 67, 77
Charles, Nick 49,
Cline, William C. 11, 299
Cohen, Debra Rae 279
Cole, Simon A. 102 n. 28, 207
Conan Doyle, Arthur 35, 45, 47-48, 76, 146-47
Crabbe, Buster 129, 297-98
Cubitt, Sean 23
Curtis, Scott 113 n. 55
- Dahlquist, Marina 10, 89, 127, 148
Damon, Ida 81-82, 84-85, 87, 92, 189
Darro, Frankie 129, 242, 245, 248
Davis, Hank 299
Davy, Daryl 297
Deleuze, Gilles 20, 54, 174, 176-77
DeMarinis, Paul 61
Dempsey, Jack 98, 127
Denson, Shane 10, 89 n. 10, 107 n. 39, 116-17, 120,
137, 146 n. 1, 170 n. 15, 186-87, 193, 218, 222,
229, 278
Doane, Mary Ann 18-19, 24, 33
- Douglas, Diane M. 59, 157
Doyle, Arthur Conan *see* Conan Doyle, Arthur
Dulac, Nicolas 29, 65-67
Dupin, C. Auguste 44-47, 146, 184
- Eco, Umberto 13-14, 36, 66, 174-75, 175 n. 18, 272
Edison, Thomas 86, 265
Emerson, Peter Henry 65
Engell, Lorenz 94 n. 16, 96, 293 n. 6
Enstad, Nan 10, 82, 87-88, 116
Esposito, Elena 94 n. 16, 236, 239, 239 n. 4, 268,
292
Everett, Justin 242 n. 7
- Fernett, Gene 11, 298
Feuer, Jane 288, 292, 294-95
Fineman, Joel 23-24, 27 n. 8
Fiske, John 293-94
Flanders, Charles 108
Foucault, Michel 25, 28-29, 170 n. 16
Fowler, Marian 198
Friedberg, Anne 147, 170 n. 16
- Gallagher, Catherine 25 n. 6, 26, 28-29, 274 n. 39
Gallop, Jane 24 n. 5
Gardella, Kay 298
Gardner, Jared 19-20, 135-36
Gasnier, Louis 128
Gaudreault, André 29, 65-67
Geertz, Clifford 26
Gerber, Neva 206, 215
Gernsback, Hugo 264, 264 n. 30
Giebler, A.H. 82
Glut, Donald F. 11, 298
Goldberg, Rube 48, 71
Goldman, Harry 216 n. 29
Gomery, Douglas 110 n. 46
Gossman, Lionel 23-24
Grainge, Paul 298
Gray, Elisha 60 n. 5, 62,
Gray, Jonathan 298
Greenblatt, Stephen 25 n. 6, 26, 28-29, 274 n. 39,
Griffith, D.W. 87 n. 6, 191, 197, 200 n. 16
Grusin, Richard 229, 240 n. 5
Guattari, Félix 54
Gunning, Tom 28, 70-73, 116, 135, 147, 153 n. 5,
160, 169, 171-73, 175 n. 18, 177-78, 186-88, 191,
221-22, 295 n. 7
- Haenni, Sabine 89 n. 9, 201 n. 18
Hagedorn, Roger 87 n. 7, 102 n. 27
Hammett, Dashiell 45, 48-49
Hansen, Miriam 17, 147, 186, 187 n. 2, 197, 294,
295 n. 7
Harmon, Jim 11, 298

- Harris, Neil 27-28, 30, 35, 43-44, 70, 72, 76-77, 128 n. 64
- Hearst, William Randolph 87 n. 7, 89, 146
- Heath, Stephen 292 n. 4
- Hediger, Vinzenz 24, 64-65
- Henderson, Stuart 93
- Higgins, Scott 11-12, 20, 106-07, 121-22, 131-36, 189-92, 203 n. 20, 204 n. 21, 212 n. 27, 228, 235, 241, 246, 280 n. 44, 288, 290, 293
- Hilmes, Michele 235, 237, 238 n. 3, 243, 248, 251, 254-55, 260-61, 289
- Hine, Lewis 122
- Holmes, Sherlock 35, 47-50, 146, 195
- Hope, Lord Francis 198
- Horak, Jan-Christopher 99 n. 23, 100 n. 25, 101
- Houdini, Harry 75, 98, 113-15, 127
- Hühn, Peter 49
- Huhtamo, Erkki 25-26, 25 n. 7, 32-33, 256
- Hurst, Richard M. 11-12, 15, 33, 288, 290
- Jahn-Sudmann, Andreas 174, 176-77, 208 n. 26, 214, 225
- Jenkins, Henry 17, 238, 240-41, 244, 246
- Jenner, Mareike 109 n. 44
- Jess-Cooke, Carolyn 88, 94
- Jones, Robert Kenneth 242 n. 7
- Kasson, John 53
- Keaton, Buster 72, 112, 197 n. 13
- Keil, Charlie 187
- Kelleter, Frank 12-14, 16, 29, 94, 121, 174-77, 189 n. 5, 203, 208 n. 26, 214, 225, 272
- Kennedy, Craig 11, 35, 84 n. 4, 102, 105, 109, 122-23, 129, 134, 136, 146-67, 170-74, 277-78
- King, Rob 74-75, 212-13
- Kinnard, Roy 104 n. 31
- Klein, Amanda 168-69
- Kohl, Leonard J. 11
- Kompare, Derek 293
- Kracauer, Siegfried 20, 136-37
- Krah, Barbara 121, 175, 203
- Krämer, Sybille 96, 236, 239 n. 4, 266-68
- Laemmler, Carl 103, 105, 106 n. 36
- Landon, Brooks 49
- Latour, Bruno 12 n. 1
- Lenthall, Bruce 242, 244
- Leonard, Benny 98, 127
- Levine, Nat 130
- Li-Hua, Richard 53-54
- Lindbergh, Charles 134
- Löffler, Petra 25 n. 7
- Loock, Kathleen 13, 93 n. 15, 105, 299
- Luhmann, Niklas 30 n. 9, 94 n. 16, 96, 236, 236 n. 1, 237 n. 2, 267-68, 291-92
- Maltby, Richard 97, 100, 110, 113 n. 55
- Martin, Clyde 253, 253 n. 19
- Marx, Leo 53
- Massie, Keith 264 n. 30
- Massumi, Brian 54
- Mayer, Ruth 12, 15-16, 24, 54, 93, 95, 121, 130, 137, 146 n. 1, 167 n. 13, 174-75, 177, 184, 195, 201 n. 17, 203, 216, 262, 272-78, 290
- Maza, Sarah 26, 28, 274 n. 39
- McChesney, Robert W. 244
- McLean, Adrienne L. 93-94
- McQuire, Scott 169
- Méliès, George 114
- Miller, Cynthia J. 11, 104 n. 31, 243, 257, 267
- Milne, Peter 83
- Misa, Thomas J. 53
- Mittell, Jason 76-77, 176
- Morris, Justin J. 10, 89 n. 10, 90-91
- Mott, Frank Luther 87 n. 7, 88
- Münsterberg, Hugo 146 n. 2
- Musser, Charles 28, 70, 72-73, 187-89, 193
- Muybridge, Eadweard 63-66, 73
- Myers, Henry 242 n. 7
- Newhall, Beaumont 64-65
- Nye, David 216-17
- Panek, LeRoy 146
- Pangburn, Clifford H. 146
- Parikka, Jussi 25-26, 25 n. 7, 33, 256
- Pauline, J. Robert 98
- Pearson, Elmer 102
- Perry, Stephen D. 264 n. 30
- Pickett, Calder M. 51-52
- Podrazik, Walter J. 257
- Poe, Edgar Allan 35, 43-48, 49 n. 2, 54, 76, 145-47, 154, 183-84
- Porter, Dennis 48, 49 n. 2
- Prevost, Emile 57
- Projansky, Sarah 201, 203 n. 19
- Putnam, Amelia Earhart 130
- Raczkowski, Christopher T. 40
- Reeve, Arthur B. 35, 97 n. 19, 102, 105 n. 33, 106 n. 34, 146
- Robertson, Hamish 33
- Rogers Cooper, Grace 58
- Roland, Ruth 10-11, 98, 126-27
- Ross, Betsy King 129, 246, 248
- Rothafel, Samuel 'Roxy' 248-49 n. 15
- Schaschek, Sarah 191-92, 191 n. 9
- Schatz, Thomas 289-91
- Schivelbusch, Wolfgang 57
- Schwartz, Vanessa R. 147
- Sewell, Philip 235, 237, 257, 260-65
- Shanks, Jeffrey H. 242 n. 7
- Singer, Ben 10, 14, 17, 35, 68-69, 82-83, 87-93, 97, 116 n. 58, 120 n. 60, 121, 125, 175, 192, 197, 203, 219, 259
- Skirrow, Gillian 292 n. 4
- Sklar, Robert 100, 113 n. 55, 244

- Smith, Phyll 10-11
 Sobchack, Vivian 25 n. 7
 Solomon, Matthew 10, 113-15
 Sontag, Susan 191-92, 191 n. 9
 Sorensen, Leif 242 n. 7
 Spadoni, Robert 252
 Spencer, David R. 51
 Spigel, Lynn 157
 Staiger, Janet 17-18, 186-87, 229
 Stamp, Shelley 10, 82-83, 87 n. 5-6, 89-92, 92-93
 n. 14, 116 n. 58, 146 n. 2
 Stanfield, Peter 242-43, 246 n. 12, 247-48, 252
 n. 18
 Stanford, Leland 65
 Stedman, Eric 299
 Stedman, Raymond William 11, 298-99
 Stein, Gertrude 49
 Strauven, Wanda 64, 66-68
 Strickfaden, Kenneth 136-37, 216 n. 29
- Telotte, J.P. 11, 14, 132-33, 237, 241 n. 6, 288-89
 Thanouser 81-84, 92, 120 n. 60, 121 image 7
 Thompson, Kristin 17-18, 126 n. 61, 186-87, 229
 Tichi, Cecilia 132-33, 135
 Todorov, Tzvetan 109 n. 44
 Trahair, Lisa 71, 160
 Tramp, the 67
- Travaglia, Joanne 33
 Tunney, Gene 102
 Tuska, Jon 11, 129-30, 134
 Tzioumakis, Yannis 113 n. 55
- Uricchio, William 244, 256-57, 262, 265
 Usai, Paolo Cherchi 104 n. 32
- Vela, Rafael 10, 16 n. 3, 19, 89-92, 97-101, 103-104
 Vollmer, August 102, 207-08, 213
- Wasko, Janet 238 n. 3, 244
 Welles, Orson 261 n. 29
 Whissel, Kristen 216
 White, Pearl 4, 10-11, 35, 89 n. 10, 98, 105, 106
 n. 34, 117, 127-29
 Williams, Linda 121-22, 175, 192, 203, 205, 211
 Williams, Raymond 288, 292, 292 n. 5, 294
 Wilson, Ben 206, 215
 Wiltse, Ed 47-50
 Winston, Brian 60
- Yates, Herbert J. 243
 Yohe, May 98, 197-98, 206-07
 Young, Paul 73-74, 161, 238-39
- Zimmer, Catherine 168-69

Index of Film Titles

- ACE DRUMMOND 107-12, 130, 256 n. 23, 268-77, 280
- ACE OF SCOTLAND YARD 104 n. 31
- ADVENTURES OF FU MANCHU, THE (TV) 290 n. 1
- ADVENTURES OF KATHLYN, THE 10, 89, 201 n. 18
- ADVENTURES OF TARZAN, THE 99
- AMAZING EXPLOITS OF THE CLUTCHING HAND, THE 105, 133-36, 216, 259 n. 26, 268-69, 277
- L'ARROSEUR ARROSÉ 70-71, 160
- AS SEEN THROUGH A TELESCOPE 169
- ATOMIC RAIDERS, THE 297
- BATMAN 11, 279 n. 43
- BELOVED ADVENTURER, THE 13, 83, 89 n. 12, 115-16
- BLACK BOX, THE 216 n. 29
- BLACK DIAMOND EXPRESS, THE 188
- BLACK SECRET, THE 99
- BLAZING THE OVERLAND TRAIL 288
- CAPTAIN AMERICA 106 n. 35, 110 nn. 48-49, 111 n. 50, 132
- CAPTAIN MIDNIGHT 107 n. 40, 110 nn. 47-49, 111 n. 50, 112, 112 n. 54, 129
- CARTER CASE, THE 146 n. 1
- CHINATOWN MYSTERY, THE 11, 104, 129, 286
- DAREDEVIL JACK 98 n. 22
- DICK TRACY 11, 107, 107 n. 38, 107 n. 40, 154 n. 9
- DICK TRACY RETURNS 107-08, 108 n. 43, 110 n. 40, 111, 111 n. 51, 112, 130
- DICK TRACY'S G-MEN 130
- DOG FACTORY, THE 169
- EVIL EYE, THE 98
- EXPLOITS OF ELAINE, THE 10-11, 35-36, 83, 84 n. 4, 89 n. 10, 91, 97, 102, 104 n. 32, 105, 106 n. 34, 109, 122-23, 128 n. 62, 133, 145-78, 190, 196 n. 12, 208 n. 26, 214, 277, 278 nn. 41-42
- FALL OF BABYLON, THE 200 n. 16
- FANTÔMAS 149 n. 3
- FANTÔMAS SE DÉCHAÎNE 278 n. 41
- FLAME FIGHTER, THE 286
- FLASH GORDON 107-08, 110 n. 49, 111 nn. 51-52, 112, 129-30, 134, 137, 189-90, 290, 297-98
- FIGHTING MARINE, THE 102
- FIGHTING WITH BUFFALO BILL 103 n. 29
- FRANKENSTEIN 136-37, 216, 218, 220 n. 31
- GREAT ALASKAN MYSTERY, THE 134
- GREAT RADIUM MYSTERY, THE 216 n. 29
- GREAT TRAIN ROBBERY, THE 72-73
- HASH HOUSE FRAUD, A 209 image 24
- HANDS UP! 104 n. 31
- HAZARDS OF HELEN, THE 82, 87 n. 6, 104 n. 32, 203
- HIDDEN DANGERS 216 n. 29
- HIT THE SADDLE 134
- HOLT OF THE SECRET SERVICE 106 n. 35, 108 n. 42, 110 n. 48, 112 n. 53, 130, 286
- HOPE DIAMOND MYSTERY, THE 36, 98, 104 n. 32, 117 n. 59, 183-85, 195-207, 211, 215, 228, 272 n. 37
- HOUSE OF HATE, THE 155 n. 11, 285
- INDIANS ARE COMING, THE 104, 104 nn. 30-31
- INTERRUPTED LOVERS 169
- INTOLERANCE 197, 200 n. 16
- JAZZ SINGER, THE 104
- KING OF THE KONGO, THE 104, 104 n. 31
- KING OF THE ROYAL MOUNTED 107
- KISS, THE 168
- KLEPTOMANIAC, THE 169
- LIFE OF AN AMERICAN FIREMAN, THE 74
- LONE RANGER, THE 106 n. 36, 111, 212 n. 27
- LONE RANGER, THE (TV) 290
- LONEDALE OPERATOR, THE 73, 191
- LOST (TV) 77
- LOST CITY, THE 136-37, 216 n. 29
- LUCILLE LOVE, GIRL OF MYSTERY 83, 89, 104 n. 32
- MANDRAKE THE MAGICIAN 106 n. 35, 107, 108 n. 43, 110 nn. 47-49, 111-12, 130
- MAN NEXT DOOR, THE 212
- MASK OF FU MANCHU, THE 136, 216
- MASTER MYSTERY, THE 98, 113-15
- METROPOLIS 122, 258
- MILLION DOLLAR MYSTERY, THE 81-86, 89 n. 10, 92, 116, 189
- MISTAKEN CALLING, A 208
- MODERN TIMES 67, 77
- MOTHER AND THE LAW, THE 200 n. 16
- MUMMY, THE 134, 136
- MYSTERY MIND, THE 97 n. 19, 98
- MYSTERY OF 13, THE 104 n. 32
- MYSTERY SHIP, THE 206 n. 23
- NEW ADVENTURES OF TARZAN, THE 107 n. 39,
- NEW EXPLOITS OF ELAINE, THE 146 n. 1, 148, 196 n. 12
- NOAH'S ARK 197 n. 13

- OFFICER 444 11, 36, 102-03, 104 n. 32, 128-30, 167
n. 13, 183-85, 195, 205-15, 229
- OUR HOSPITALITY 72
- PEARL OF THE ARMY 95-96, 117, 127
- PERILS OF PAULINE, THE 35, 82-83, 89-96, 104
n. 32, 105, 115-17, 127, 148, 156 n. 11, 192, 203,
228
- PERILS OF NYOKA, THE 131, 192
- PHANTOM EMPIRE, THE 15, 109, 122, 129, 131,
133-34, 240-70, 241 n. 6, 244 n. 11, 246 n. 12,
248 n. 14, 261 n. 29, 278, 280
- PHOTOGRAPHING A FEMALE CROOK 169
- PLUNDER 109, 117, 118 images 4-5, 119-20, 123, 127
- POWER GOD, THE 11, 36, 113 n. 55, 137, 183-85,
195, 206, 215-24, 229, 297
- RADIO DETECTIVE, THE 102-03, 146 n. 1
- RADIO PATROL 11, 36, 107, 108 n. 43, 110 n. 47,
183-85, 195, 223-27, 268-272, 276
- ROMANCE OF ELAINE, THE 146 n. 1, 148, 216 n. 29
- RUTH OF THE ROCKIES 10
- SCREAMING SHADOW, THE 206 n. 23
- SECRET AGENT X-9 107-08, 110 n. 47, 112
- SHERLOCK, JR. 112
- SILENT MYSTERY, THE 104 n. 32
- SON OF TARZAN, THE 90 n. 12, 107 n. 39
- SOS COAST GUARD 130
- SPY SMASHER 20, 109, 259 n. 26, 268-69, 277-80,
289, 297
- STAR TREK (TV) 298
- STRAWBERRY ROAN, THE 134
- SUNRISE 104
- SUPERMAN 11, 290
- TARZAN THE FEARLESS 107 n. 39
- TARZAN THE MIGHTY 107 n. 39
- TARZAN THE TIGER 107 n. 39
- THREE AGES, THE 197 n. 13
- TIGER'S SHADOW, THE 286
- TIMBER QUEEN, THE 10, 117 n. 59, 126-27
- TIM TYLER'S LUCK 107-08
- TRAIL OF THE OCTOPUS, THE 195, 206 n. 23
- TRIP TO THE MOON, A 169
- UNCLE JOSH AT THE MOVING PICTURE SHOW 68
- VANISHING LEGION, THE 109, 133-34, 268-273,
276
- VANISHING SHADOW, THE 216 n. 29
- VOICE FROM THE SKY, THE 104, 206 n. 23
- VOICE ON THE WIRE, THE 206
- WHAT HAPPENED TO MARY 10, 19, 82, 87-88,
92-93, 93 n. 14, 187, 206
- WHAT HAPPENED IN THE TUNNEL 168-69
- WHO IS NUMBER ONE? 99
- WHO WILL MARRY MARY? 206
- WILD HORSE MESA 134
- WOLVES OF KULTUR 216 n. 29
- WOMAN IN GREY, A 21-22, 123-26
- WORKERS LEAVING THE FACTORY 168
- ZUDORA (OR THE TWENTY MILLION DOLLAR
MYSTERY) 83, 120-22

Index of Subjects

- 10-20-30s melodrama 17, 68-69
- Actors (concept) 12, 12 n. 1
- Actors (people) 98 n. 21, 113, 116, 127, 129, 137, 188, 196, 200
- Actualities 19, 175 n. 18, 177, 265
- Adult audiences 98, 106, 110 n. 49, 112, 286
- Alienation 62, 76, 185, 205, 214, 227
- Amateurs 65, 75, 110 n. 47
- Amateur broadcasting 243, 251, 254-56
- Amateur detectives 152, 184
- Amos 'n' Andy* 251 n. 17
- Anecdotes 9-10, 14-16, 20-37, 52, 65, 81, 87, 92, 240, 245, 249, 256, 269-77, 281, 293, 295
- Archives 20, 33-35, 34 n. 11, 104 n. 31, 267, 285-86, 298-300
- Arts 52, 55-56, 63, 65,
- Assembly lines 67, 135
- Attractions 13, 32, 67, 76-77, 83, 86, 116, 128-30, 157, 160, 169, 247, 274, 291
cinema of 69, 70-73, 168, 185-91, 221-22
- Automobiles *see* cars
- Aviation, airplanes 15, 112-13, 115, 130, 134, 136, 266, 270, 271 n. 36, 273 n. 38
- Badaud 152
- Ballyhoo, street bally 109-12, 193, 194 n. 10, 286
- Berkeley Daily Gazette* 129
- Big data 33-34
- Bioscope 265
- Black Mask* 50
- Block-booking 101, 290
- Bodies 57-58, 66-68, 126-28, 192-93, 222
- Body genres 185, 192
- Boys' Life* 102-03, 103 n. 29
- Boy scouts 102-03, 110 n. 49
- Bricolage, bricoleur 134, 154
- Broadcasting 237, 242, 244, 253-57, 261-62, 279, 289, 291, 295
- Cause and effect 29-31, 45-51, 54, 57-63, 69-77, 122-26, 132, 287
- Cars 13, 68-69, 83, 110 nn. 46-47, 115, 117, 118
image 4, 130, 133-36, 208, 218, 223, 225, 258, 270, 277-80
- CBS* 244, 254
- Censorship 90, 97-98, 97 n. 19, 114, 237
- Chicago Daily News, the* 262
- Chicago Herald, the* 89
- Chicago Tribune, the* 89, 107
- Child
actors 129, 242, 245-48
audiences 16, 19, 98 n. 21, 103, 106, 107 n. 40, 110, 112, 247 n. 13, 249, 259, 298-99
characters 11, 15, 133
- Cinematographs 70, 72
- Cinematography 31-32, 74, 91, 115, 125, 160, 266-67
- Circulation 88-89, 91, 94, 158, 240
- Classical Hollywood 16-19, 72, 100 n. 24, 185-86, 192-93, 222, 227-29, 236-41
- Cliffhanger 10-11, 18, 20, 32, 87 n. 6, 89, 95-96, 115-16, 122-25, 132-36, 185, 190, 194, 197, 199-200, 203 n. 20, 206, 208, 210, 218-20, 224-26, 229, 249, 266 n. 31, 294
- Clubs 110-11, 245-50, 254, 261 n. 28
- Clues 45-46, 85-86, 147-48, 178, 224, 262, 276, 287
- Cogwheels 29-30, 48-49, 76, 229
- Collage 19, 245, 276, 292
- College cops 207-08
- Columbia 12, 100 n. 25, 106, 288, 290
- Comedy 72, 75, 206, 208, 212, 220, 236, 247 n. 13, 248, 251, 251 n. 17
- Comic sidekick 11, 109, 133, 207, 224, 270, 273, 276, 278
- Comics' aesthetics and technique 18-19, 135
- Comic strips and books 11, 15, 32, 66, 71, 107-08, 107 nn. 37 and 40, 108 n. 43, 110 nn. 47 and 49, 111, 119, 175, 193, 235-36, 244 n. 11, 279 n. 43, 286-87, 290, 299
- Commerce, commercial products 13-14, 55, 72, 100, 110 n. 46, 111, 134, 151, 175-76, 238 n. 3, 243
- Commercial broadcasting 243-44, 251, 254-57, 255 n. 22, 257 n. 24, 261-62, 279, 278, 289, 290 n. 3, 292, 294
- Communication 60-62, 66, 74, 109, 163, 235-37, 240, 254, 256, 259, 259 n. 25, 260-61, 268, 270-80
- Communications' Act 243, 244 n. 10
- Contemplation 20, 74, 186-88, 193, 206, 244
- Contingency 16, 18-24, 31, 33, 37, 46, 95-96, 167, 167 n. 13, 184, 235-81, 287
- Continuity 12, 18-19, 85-86, 102, 213
- Continuity editing 17, 19, 222
- Contraptions (includes death contraptions) 15, 31-32, 75, 81-84, 86, 122, 125, 132-33, 167, 169, 223, 226-27, 236, 274, 277, 286, 289
- Conventions
cinematographic 10, 17-18
of storytelling 10, 15, 17-18, 76, 191, 203, 210, 212
- Convergence culture 238, 240-41, 244-46, 262, 277-280
- Conqueror Record Time* 242, 246 n. 12
- Cosmopolitan, the* 35, 92, 128, 146 n. 2, 157
- Country rube 68
- Crafts 65-66
- Crime fiction or stories 27, 44-46, 49-50, 57, 66, 72, 75, 84 n. 4, 169

- Crime serials 35-36, 109, 114, 146-47, 154-57, 184, 206, 208-09, 211, 224, 278 n. 42, 286
- Crosscutting 73, 160, 164, 212
- Cross-media 93, 103, 107-08, 236, 240-42, 245-46, 272, 296
- Daily Globe, the* 60
- Death rays 133, 171-73, 177
- Deduction, deductive 32, 47, 63, 84-86, 146, 148, 156
- Democracy 52-53, 61 n. 6, 217, 270,
- Detection 36, 47-50, 86, 106 n. 34, 109, 109 n. 44, 133, 147-48, 157, 159, 162, 278 n. 42, 294
operational detection 36, 145, 147-48, 152-54, 165-67, 177-78, 183-227, 293-95
- Detectives:
Benjamin's detectives 36, 145-78, 183-84
fictional 11, 15, 35-36, 43-50, 102, 105, 109, 113, 122, 129, 134, 136, 145-78, 195, 225, 271-72, 277-78, 286-87
spectators as 85, 92, 183-84
- Detective fiction 10, 35-36, 44-45, 48-50, 54, 66, 69, 76, 109, 111, 145-78, 195, 286-87, 294
- Dictagraphs 83
- Dictaphones 112, 130
- Digitalization 33-35, 37-39, 134 n. 68, 239-40, 244, 257, 285, 299-300
- Dime Mystery* 242 n. 7
- Directors 104 n. 32, 128-29, 276-78
- Discernment 85-86, 131-32, 187-95, 249
- Discontinuities 25, 29, 127
- Dissemination 12, 33, 238 n. 3, 240, 265, 296
of electricity 216
of knowledge and print media 50, 53, 55, 87 n. 7, 101
of television 37, 235, 238 n. 3, 257, 265, 281, 289
- Distribution, distributors 17, 25, 37, 90 n. 12, 91, 97, 100, 100 nn. 24-25, 106, 113 n. 55, 115 n. 57, 238, 245, 256, 259, 285, 288, 290-91, 290 n. 3
- Domestic technology and media 58-59, 153, 155, 163, 256-57, 295
- DXing 254
- Economizing film production 12-14, 103, 131, 173, 213, 224, 227, 242-244, 290
- Economy chapters 20
- Edison, studio 169
- Editing 20, 74, 102, 115, 125-26, 135, 160, 164, 191, 197, 204, 210-12, 222, 259-60, 264-66, 273, 295-96; *see also* continuity editing and parallel editing
into feature films 102, 296
- Education 23, 52-55, 75, 87 n. 7, 153, 159, 189, 296
- Efficiency 12-14, 17-18, 58, 60, 135, 167, 207, 212-13, 255, 270-71, 291
- Electricity
history and dissemination of 56, 61, 74-75, 216-23
on stage and screen 61, 68, 122, 137-38, 217-23, 296-97
- Embodiment 36, 185, 193-94, 212, 222
- Engines
actual engines 34, 55-57, 62, 75,
in movies 216-21, 223-24, 226, 271 n. 35, 297
narratives as 13-14, 194
- Evening Post, the* 51 n. 3
- Excess 15, 18, 94, 138, 174-76, 192, 203, 213
- Exhibition
of film 9, 18, 37, 90 n. 12, 100, 100 n. 25, 113 n. 55, 178, 185-88, 223, 238, 244 n. 10, 291, 293 n. 5, 297
in museums, in theater lobbies, of technology 27, 43-44, 50, 54, 56, 60, 68, 70, 74, 76, 130, 158, 275
of technology in film 158-61, 167 n. 13,
- Exhibitionist cinema 28, 70, 116, 135
- Exhibitor's Trade Review, The* 98 n. 21, 99, 101-02, 238
- Exploitation 99-100
- Factories 59, 67, 77, 88 n. 8, 213, 224, 258
- Famous Players-Lasky 100, 113 n. 55
- Fatigue *see* material fatigue
- Feature film 9, 12, 16, 18, 20, 87, 87 n. 6, 93, 93 n. 14, 98 n. 21, 99 n. 23, 100-01, 105, 115, 119-20, 132, 134-35, 178, 190-92, 194 n. 10, 197 n. 13, 199, 201, 204, 218, 228-29, 247-48, 252, 274, 287, 290-91
serials edited into features 102, 296-97
- Federal Communications Commission (FCC) 290 n. 3
- Film Daily* 296, 297 n. 8
- Film Fan Monthly* 297
- Film Index, the* 252
- Flâneur 36, 145-47, 151-52, 159, 165, 170 n. 16, 174, 184
- Flow 116, 197, 240-41, 245, 292-94, 292 n. 5,
- Footage, recycled, repeated, or library 12, 14, 20, 32, 132 n. 66, 133-35, 174, 213, 224-27, 258-59, 294, 296
- Fordism 12, 17, 135
- formula
narrative or stylistic 11-18, 26, 36, 50, 83-84, 95, 115-17, 131-33, 153, 174, 188-94, 197, 203, 210-11, 2015 205, 227-28, 273 n. 38, 291, 293-94
scientific 10, 56-57, 75, 105 n. 33, 133, 210, 223-25
- Fragments, fragmentation 19-24, 125-26, 131, 134-38, 183-84, 292-95
- Fu Manchu 136, 146 n. 1, 174, 201 n. 17, 216, 216 n. 29, 259 n. 26, 272, 274, 290 n. 1
- Genre 10, 15, 17, 20, 35, 72, 82 n. 2, 132, 145, 212, 241 n. 6, *see also* body genres
- Golden age, golden era 9, 107-108, 113, 235, 280, 289

- Grand histories or narratives, *grand récit* 23-25,
27 n. 8, 28-29, 35
- Great Depression, the 103, 242 n. 7, 257, 286
- Gutters 19-20, 135-36, 295
- Hard-boiled novels 48-49, 109
- Historiography 23-25, 287
- Hoaxes 27, 35, 43-44, 54, 76-77
- Hollywood film industry 12, 18-20, 86, 104-05,
189, 203, 228-29, 238-41, 247, 287-91, 295,
298-99; *see also* classical Hollywood
- Hope diamond, the 98, 195-201, 205-06
- Hyperstimulus 259
- Illusion, optical 20, 64-68, 222, 259, 295
- Illustrated News, the* 58
- Immediacy 229, 240 n. 5, 292
- Immersion 36, 49-50, 69, 73-77, 85, 112, 115,
185-94, 205, 212, 222, 227-30, 245-50
- Independent
studios and film production 101-04, 113
n. 55, 115 n. 57, 135, 243, 247
cinemas 9, 100-01, 110, 290
- Indexicality 18, 63
- Industry (film industry) 12, 18-19, 97, 101, 113
n. 55, 135, 238, 244 n. 10, 246, 290-91
- Industrialization 12-14, 17-18, 29, 31, 49 n. 2, 50,
58-59, 66, 78, 122, 132, 134, 151, 213, 241
- Intérieur* 147-48, 153-60, 163-65, 171-72
- Irony 174, 176, 212, 214, 225
- Jeffersonian Republican, the* 57-58
- Journalism 44, 51, 54, 60, 237, 287
- Journalists, fictional 94, 109, 146, 159, 207, 210,
213, 279
- Jungle adventures 10, 15, 99, 137
- Keystone 56, 74-75, 208-09, 212-13
- Kinetograph 74
- Kissing cycle, the 168
- Ladies' World, The* 87-88, 87 n. 7
- Lancet, the* 57
- Liveness 61 n. 6, 62, 72, 107 n. 38, 109, 156, 177
n. 21, 186, 239-41, 243-52, 257, 261, 263-68,
275, 278-80, 288-95
- Lobby decoration 32, 111-13, 130, 193, 273 n. 38,
274, 296
- Lubin 13, 83, 115
- Machines
actual machines 13, 15, 28-29, 31, 44-45,
51-52, 55, 58-63, 65, 67, 83-84, 122-23,
157-58, 296
narrative machines 13-14, 16, 31-32, 45,
47-50, 71-73, 76-77, 83-84, 116, 127, 132,
135, 178, 194-95, 213, 224, 226-27, 267, 286
police machinery 206-07, 229
- Machinism 54
- Magazine
tie-ins 10, 15, 31-32, 87-89, 92-94, 99, 102-03,
146, 193, 238, 287, 299
ads 89, 92 n. 14, 99, 110, 126-27, 286, 297-98
articles 27-28, 32-34, 44-45, 50-55, 60, 63-65,
71, 88, 257, 287
- Manipulation 66, 154, 156, 166-67
- Marginalization 16, 237
- Marketing 29, 32, 88, 92-93, 97-111, 130, 138, 238,
246, 296
- Mascot 104, 106, 130, 241, 243
- Masked villains 35, 146, 148, 170, 210, 280, 286,
289
- Mass
culture 66, 75, 95, 175, 246
marketing 29, 111
media 12, 14-17, 93, 235, 241, 243-44, 256-57,
261-63, 276-77
- Masses, the 52, 151 n. 4, 152, 165
- Material fatigue 58
- Media change 236-38, 262, 280, 288, 296-300
- Media archaeology 25, 33, 256, 300
- Melodrama 10, 17, 35, 68-69, 82 n. 2, 86, 121-22,
145, 147, 175-76, 185, 192, 203-06, 210-12, 217,
221, 229, 251
- Memory 15, 94 n. 16, 94-96, 133, 168, 218-20,
293 n. 6
- Mise-en-scène 22, 85, 114, 121-22, 147, 155, 161,
201, 273, 296
- Modernity 9, 14-19, 22 n. 4, 24, 27, 31, 33, 44, 59,
67, 95, 122, 147, 153, 166, 179, 184, 195, 253,
259, 262, 273, 278
- Monitoring 36, 156, 162, 165, 167, 171, 178, 213,
245, 256, 260, 270
- Monopolization 100 n. 25, 101, 113 n. 55, 243,
254, 290-91
- Monstration 67, 116, 131, 136
- Montage 15, 20, 32, 37, 81, 114-15, 134, 197, 228,
248 n. 14, 249 n. 16, 252, 272, 280
- Morse code 60-62, 73, 275
- Motion Picture News* 81-83, 89, 92, 148, 157-58,
213
- Motion Picture Story Magazine, The* 93
- Motography* 13, 83, 158
- Movie Pictorial, The* 84, 86
- Moving Picture World, The* 82, 84, 208
- Mutual 82, 90 n. 12
- Narration 10, 14, 17, 24, 28, 32, 45, 49, 76, 86,
116-117, 120, 125, 131, 160, 165, 174, 178, 190-91,
195, 245, 249-50, 272-73
- National Barn Dance, the* 243, 246-47, 248 n. 13,
249 n. 16
- National Board of Review 97
- National Parent Teacher's Organization 98
- National syndication 31, 51, 93, 93 n. 14, 97, 100,
108, 111, 243, 244, 254, 256
- NBC* 243-44, 254, 257 n. 24

- Networks (tv and radio) 243 n. 8, 251, 254,
 270-71
 Networks (concept) 12, 12 n. 1, 15-16, 19, 51, 62,
 76, 94, 97, 103, 108, 235, 238
 New historicism 26
 Newspaper
 ads 99-101, 105
 articles 27-28, 31-34, 44-45, 50-53, 51 n. 3,
 55-56, 60-61, 60 n. 5, 67, 75, 84, 96, 105,
 126-29, 128 n. 63, 168, 188, 198, 220, 240,
 255, 257, 174
 comics 11, 107-08, 107 n. 37, 108 n. 43, 110
 n. 49, 111, 193, 235, 240, 244 n. 11, 286-87
 tie-ins 10, 15, 31-32, 84, 88-92, 92 n. 14, 97,
 99-101, 146, 153 n. 7, 158, 160, 286-87
New-York Daily Tribune, the 52, 55-57, 60 n. 5, 62
New York Sun 51
New York Times, the 52, 288
 Nickelodeons 67, 110 n. 45, 293 n. 5
 Normalization 59-60
 Nostalgia 68, 104-05, 263, 296-98
 Novels (newspaper and magazine), dime novels
 15, 19, 27, 44-49, 66, 87-88, 89 n. 12, 93, 99,
 105 n. 33, 109, 128 n. 63, 146, 175, 193, 238,
 286-87, 294
 Novelty or new-ness 50-56, 60, 60, 72-74, 83, 92
 n. 14, 99, 146, 159-61, 177-78, 186, 275, 296-97

 Operators 58-63, 66-67, 71, 82, 86, 88 n. 8, 122,
 256, 258-59, 280
 Operational aesthetic 10, 27-35, 43-78, 81, 86,
 120, 125-26, 131, 147, 156, 160, 165-71, 174-75,
 225, 253, 267, 273, 275, 287
 Operational detection 36, 145, 147-48, 183-230,
 293-95
 Optical toys 28-31, 43, 64, 69, 172
 Outbidding 174, 176, 208, 214, 225

 Parallel editing 121, 126, 160, 204, 211-12, 266
 Paramount 100, 113 n. 55
 Paramount decree, the 290
 Paraphernalia 107, 112 n. 53, 130
 Pathos 147, 175, 192, 203, 203 n. 20, 203-05, 215,
 228
 Periscope 171-77
 Phenakistiscope 29-30, 64-68, 78
 Phenomenology 193
 Phonographs 60, 66, 70, 161, 242-43, 251, 275
 Photography 16-18, 63-65, 73, 75, 87, 122, 159,
 165-69, 278
 Set photography 128 n. 63, 146 n. 2
Photoplay 93
Picture-Play Magazine 216 n. 29
 Policemen, the police 11, 47, 102, 110-12, 112 n. 53,
 128-30, 133, 157, 184, 206-215, 223-29, 260,
 269-72, 276, 280
 Popular Culture 10, 29, 37, 72, 78, 174-75, 280,
 286, 300
 Pornography 185, 191-92, 203-04

 Praxinoscopes 64, 66, 265
 Pressbooks 31-32, 98 n. 22, 99-100, 105-112,
 129-30, 146 n. 1, 193, 242-46, 259, 271 n. 35,
 273 n. 38, 274, 299
 Presentationalism 15, 31-32, 36, 81, 85-87,
 113-117, 120-38, 147, 150, 167, 169-71, 174,
 184, 190-95, 205, 207, 218, 229-30, 236, 240,
 245-50, 253, 265-66, 266 n. 31, 272, 281,
 286-89, 292, 295 n. 7
 Presentism 31-32, 48, 81, 86-113, 125-138, 147, 150,
 184, 219, 252, 266, 287-89, 292
 Production budget 12, 69, 101, 213, 291
 Programming
 cinema 9, 93 n. 14, 186
 radio 243, 261
 television 285, 288-89, 291-93, 297-98
 Progress 50-56, 208, 213, 224-25, 237, 262

QST 254, 255 n. 22

 Radio 15, 32, 37, 102, 106-11, 133, 223, 230, 235-80,
 286-92, 297
Radio Broadcast 264
Radio News 260, 264
 Railroads 51, 57-58, 61, 65, 82, 225
 Rape threats 200-04
 Rationalization 18, 213
 RCA 257 n. 24
 Realism 47, 69, 76, 85, 130, 161, 169-70, 192, 196,
 228, 242 n. 7, 252-53, 265
 Recaps 11, 94, 96, 132, 190, 199, 236, 249, 266
 n. 31, 294
 Recycling of footage, of sets, of narrative
 strands 32, 133-35, 183, 205, 224-27, 298-99
Reel Life 82, 82 n. 1
 Reenactment 36, 183-90, 197, 200-06, 211, 214-15,
 218, 220, 223-27, 272 n. 37, 275, 292, 295
 Reiteration 36, 50, 116, 132, 174-75, 183-85,
 187-89, 203, 206, 213, 215, 220, 227, 269 n. 32,
 292, 295
 Remaking 93, 93-94 n. 15, 105, 189 n. 5
 Republic 12, 106-08, 130, 243-44, 243 n. 9, 247,
 288, 290, 290 n. 1, 297
 Reruns 296-99
 Reviews 81-84, 91, 97, 99, 111, 115, 116 n. 58, 146,
 RKO 100 n. 25, 103, 244 n. 10, 257 n. 24, 291

 Sampling 15, 19
San Francisco Examiner 91
Scientific American, the 47, 52-54, 60, 63-65, 73,
 262, 275
 Scientific policing 207
 Scientific management 262,
 Screenwriting/ screenwriters 12-13, 20, 81,
 83-84, 92, 130, 198, 288,
Sears 242-43
 Segmentation 199, 293-95
 Seismographs 123, 156-58, 163, 165, 171

- Self-reflexivity 18, 36, 47, 49, 49 n. 2, 63, 70,
 76, 113, 115, 117, 120, 148, 169-71, 174, 176, 178,
 183, 205, 211-12, 215, 230, 243, 245, 259, 262,
 267-68, 272
- Sensationalism 68-69, 93, 176, 260
- Serial craze 10, 19, 35, 88, 97, 104, 108, 187
- Serial-queen melodrama 10, 17, 35, 82 n. 2, 145
- Seriality 9, 12-13, 15-16, 24-25, 50, 66, 78, 102, 137,
 166, 171, 174-78, 175 n. 18, 197, 199, 272, 294
 formulaic 197, 205, 211
 thematic 197, 199, 200, 106
- Serialization 9, 12, 14, 29, 91, 107, 135, 147, 295
- Serial Squadron 285
- Serial Quarterly* 298-99
- Series production 66
- Sewing machines 28, 43, 58-62, 157, 249
- Shorts (short film) 16, 28, 68, 168, 173, 188, 208,
 213, 221, 236, 287, 292 n. 5
- Silver Screen* 248
- Slapstick 16, 75, 206, 208, 210, 213
- Social energy 26-27
- Sound era 11-12, 15-16, 18, 32, 37, 97, 100, 105-06,
 128-33, 136, 212 n. 27, 228, 230, 262, 292-93
- Standard Exhibition Contract 100, 100 nn. 24-25
- States Rights 104, 115 n. 57
- Stenographers, stenography 81-82, 84
- Stereotypes 10, 121, 201, 203, 205, 255-56, 261
- Stock footage 12, 133-35
- Studio era 9, 186, 189, 295
- Stunt
 actors 129, 246, 248
 marketing stunts 98-99, 102, 111
 mechanisms 17, 56, 68, 75, 86, 129, 137, 247
 scenes 13, 20, 32, 113-15, 127-31, 134, 137, 170,
 128, 250
- Sunday supplements 11, 87 n. 7, 107, 187
- Superheroes 11, 15, 20, 279
- Surveillance 13, 37, 133-35, 148, 161-62, 165-71,
 178, 245, 256-63, 267, 269, 277-79, 289
- Suture 19, 134, 136, 222, 269, 281, 294
- Talker remakes 105
- Tangibility 43, 65, 67
- Taylorism 18, 135, 151, 213
- Telegraphs, telegraph operators 51, 60-63, 66,
 68-69, 73-74, 82, 88 n. 8, 244 n. 10, 254, 275
- Teleology 24-25, 120
- Telephones 28, 43, 60-63, 66, 68-70, 73, 159, 161,
 257, 260, 265, 270, 272 n. 34, 274-75, 277, 280
- Television 17, 37, 69, 76-77, 79, 89 n. 9, 94,
 107, 109 n. 44, 134-35, 157, 176-77, 194 n. 11,
 208 n. 26, 214, 230, 235-41, 245-46, 256-69,
 277-300
- Tesla coil 136-37, 215-16, 218, 220, 222-23, 297
- Thaumatrope 64
- Theater lobbies 32, 81, 111-113, 130, 193, 273 n. 38,
 274, 286, 296
- Thunder sheets 252-53
- Tie-ins 83-84, 87-92, 95 n. 17, 97, 153 n. 7, 158,
 160, 238
- Tools 54, 68, 71
- Traces 32, 36, 145-77, 278 n. 42
- Trade press, trade magazines 16, 31, 34, 81-82,
 89, 92 n. 14, 99, 157, 160
- Training 61, 92, 95, 120
- Trains *see* railroad
- Transatlantic cable 51
- Transitional era 37, 74, 87, 91, 120, 126, 147, 169,
 186-87, 191-92, 212, 229, 287, 289
- Transmedia storytelling 31, 81, 90-91, 98, 235
- The Tribune see New-York Daily Tribune*
- Unidirectional address 241, 257, 260 263, 270,
 274-77, 279
- Universal 12, 90 n. 12, 98, 100 n. 25, 101-08, 288,
 290
- Variation 10, 14, 16, 94 n. 16, 95, 169, 174, 177-78,
 272, 293, 297
- Variety* 208 n. 25
- Vaudeville 186, 198, 208, 215, 248 n. 14, 249 n. 15
- Vernacular modernism 16-19, 22
- Vertical integration 98, 100, 103, 244, 290 n. 2
- Victimization 200, 203-04, 219
- Vitagraph 265
- Vocaphones 156, 159-65, 171
- Warner Bros. 100 n. 25, 244 n. 10
- Washington Times, the* 115-16
- Weenie 10, 200, 216
- Weirdness 242, 242 n. 7
- Weird Tales* 242 n. 7
- Western, the 10, 15, 66, 133, 175, 241
- Western Electric 244 n. 10
- WFIX-TV 298
- WLS 243, 246 n. 12
- WMAQ 262
- W9XAP 262
- Zoetropes 64-66, 68, 73
- Zoopraxiscopes 64

Film Culture in Transition

General Editor: *Thomas Elsaesser*

Thomas Elsaesser, Robert Kievit and Jan Simons (eds.)

Double Trouble: Chiem van Houweninge on Writing and Filming, 1994

ISBN paperback 978 90 5356 025 9

Thomas Elsaesser, Jan Simons and Lucette Bronk (eds.)

Writing for the Medium: Television in Transition, 1994

ISBN paperback 978 90 5356 054 9

Karel Dibbets and Bert Hogenkamp (eds.)

Film and the First World War, 1994

ISBN paperback 978 90 5356 064 8

Warren Buckland (ed.)

The Film Spectator: From Sign to Mind, 1995

ISBN paperback 978 90 5356 131 7; ISBN hardcover 978 90 5356 170 6

Egil Törnqvist

Between Stage and Screen: Ingmar Bergman Directs, 1996

ISBN paperback 978 90 5356 137 9; ISBN hardcover 978 90 5356 171 3

Thomas Elsaesser (ed.)

A Second Life: German Cinema's First Decades, 1996

ISBN paperback 978 90 5356 172 0; ISBN hardcover 978 90 5356 183 6

Thomas Elsaesser

Fassbinder's Germany: History Identity Subject, 1996

ISBN paperback 978 90 5356 059 4; ISBN hardcover 978 90 5356 184 3

Thomas Elsaesser and Kay Hoffmann (eds.)

Cinema Futures: Cain, Abel or Cable? The Screen Arts in the Digital Age, 1998

ISBN paperback 978 90 5356 282 6; ISBN hardcover 978 90 5356 312 0

Siegfried Zielinski

Audiovisions: Cinema and Television as Entr'Actes in History, 1999

ISBN paperback 978 90 5356 313 7; ISBN hardcover 978 90 5356 303 8

Kees Bakker (ed.)

Joris Ivens and the Documentary Context, 1999

ISBN paperback 978 90 5356 389 2; ISBN hardcover 978 90 5356 425 7

Egil Törnqvist

Ibsen, Strindberg and the Intimate Theatre: Studies in TV Presentation,
1999

ISBN paperback 978 90 5356 350 2; ISBN hardcover 978 90 5356 371 7

Michael Temple and James S. Williams (eds.)

The Cinema Alone: Essays on the Work of Jean-Luc Godard 1985-2000, 2000

ISBN paperback 978 90 5356 455 4; ISBN hardcover 978 90 5356 456 1

Patricia Pisters and Catherine M. Lord (eds.)

*Micropolitics of Media Culture: Reading the Rhizomes of Deleuze and
Guattari*, 2001

ISBN paperback 978 90 5356 472 1; ISBN hardcover 978 90 5356 473 8

William van der Heide

Malaysian Cinema, Asian Film: Border Crossings and National Cultures,
2002

ISBN paperback 978 90 5356 519 3; ISBN hardcover 978 90 5356 580 3

Bernadette Kester

*Film Front Weimar: Representations of the First World War in German
Films of the Weimar Period (1919-1933)*, 2002

ISBN paperback 978 90 5356 597 1; ISBN hardcover 978 90 5356 598 8

Richard Allen and Malcolm Turvey (eds.)

Camera Obscura, Camera Lucida: Essays in Honor of Annette Michelson,
2003

ISBN paperback 978 90 5356 494 3

Ivo Blom

Jean Desmet and the Early Dutch Film Trade, 2003

ISBN paperback 978 90 5356 463 9; ISBN hardcover 978 90 5356 570 4

Alastair Phillips

City of Darkness, City of Light: Émigré Filmmakers in Paris 1929-1939, 2003

ISBN paperback 978 90 5356 634 3; ISBN hardcover 978 90 5356 633 6

Thomas Elsaesser, Alexander Horwath and Noel King (eds.)
The Last Great American Picture Show: New Hollywood Cinema in the 1970s, 2004
ISBN paperback 978 90 5356 631 2; ISBN hardcover 978 905356 493 6

Thomas Elsaesser (ed.)
Harun Farocki: Working on the Sight-Lines, 2004
ISBN paperback 978 90 5356 635 0; ISBN hardcover 978 90 5356 636 7

Kristin Thompson
Herr Lubitsch Goes to Hollywood: German and American Film after World War I, 2005
ISBN paperback 978 90 5356 708 1; ISBN hardcover 978 90 5356 709 8

Marijke de Valck and Malte Hagener (eds.)
Cinephilia: Movies, Love and Memory, 2005
ISBN paperback 978 90 5356 768 5; ISBN hardcover 978 90 5356 769 2

Thomas Elsaesser
European Cinema: Face to Face with Hollywood, 2005
ISBN paperback 978 90 5356 594 0; ISBN hardcover 978 90 5356 602 2

Michael Walker
Hitchcock's Motifs, 2005
ISBN paperback 978 90 5356 772 2; ISBN hardcover 978 90 5356 773 9

Nanna Verhoeff
The West in Early Cinema: After the Beginning, 2006
ISBN paperback 978 90 5356 831 6; ISBN hardcover 978 90 5356 832 3

Anat Zanger
Film Remakes as Ritual and Disguise: From Carmen to Ripley, 2006
ISBN paperback 978 90 5356 784 5; ISBN hardcover 978 90 5356 785 2

Wanda Strauven
The Cinema of Attractions Reloaded, 2006
ISBN paperback 978 90 5356 944 3; ISBN hardcover 978 90 5356 945 0

Malte Hagener

Moving Forward, Looking Back: The European Avant-garde and the Invention of Film Culture, 1919-1939, 2007

ISBN paperback 978 90 5356 960 3; ISBN hardcover 978 90 5356 961 0

Tim Bergfelder, Sue Harris and Sarah Street

Film Architecture and the Transnational Imagination: Set Design in 1930s European Cinema, 2007

ISBN paperback 978 90 5356 984 9; ISBN hardcover 978 90 5356 980 1

Jan Simons

Playing the Waves: Lars von Trier's Game Cinema, 2007

ISBN paperback 978 90 5356 991 7; ISBN hardcover 978 90 5356 979 5

Marijke de Valck

Film Festivals: From European Geopolitics to Global Cinephilia, 2007

ISBN paperback 978 90 5356 192 8; ISBN hardcover 978 90 5356 216 1

Asbjørn Grønstad

Transfigurations: Violence, Death, and Masculinity in American Cinema, 2008

ISBN paperback 978 90 8964 010 9; ISBN hardcover 978 90 8964 030 7

Vinzenz Hediger and Patrick Vonderau (eds.)

Films that Work: Industrial Film and the Productivity of Media, 2009

ISBN paperback 978 90 8964 013 0; ISBN hardcover 978 90 8964 012 3

François Albera and Maria Tortajada (eds.)

Cinema beyond Film: Media Epistemology in the Modern Era, 2010

ISBN paperback 978 90 8964 083 3; ISBN hardcover 978 90 8964 084 0

Pasi Väliäho

Mapping the Moving Image: Gesture, Thought and Cinema circa 1900, 2010

ISBN paperback 978 90 8964 140 3; ISBN hardcover 978 90 8964 141 0

Pietsie Feenstra

New Mythological Figures in Spanish Cinema: Dissident Bodies under Franco, 2011

ISBN paperback 978 90 8964 304 9; ISBN hardcover 978 90 8964 303 2

Eivind Røssaak (ed.)

Between Stillness and Motion: Film, Photography, Algorithms, 2011

ISBN paperback 978 90 8964 212 7; ISBN hardcover 978 90 8964 213 4

Tara Forrest

Alexander Kluge: Raw Materials for the Imagination, 2011

ISBN paperback 978 90 8964 272 1; ISBN hardcover 978 90 8964 273 8

Belén Vidal

Figuring the Past: Period Film and the Mannerist Aesthetic, 2012

ISBN 978 90 8964 282 0

Bo Florin

Transition and Transformation: Victor Sjöström in Hollywood 1923-1930, 2012

ISBN 978 90 8964 504 3

Erika Balsom

Exhibiting Cinema in Contemporary Art, 2013

ISBN 978 90 8964 471 8

Gilles Mouëllic

Improvising Cinema, 2013

ISBN 978 90 8964 4551 7

Christian Jungen

Hollywood in Canne\$: The History of a Love-Hate Relationship, 2014

ISBN 978 90 8964 566 1

Michael Cowan

Walter Ruttmann and the Cinema of Multiplicity: Avant-Garde Film – Advertising – Modernity, 2014

ISBN 978 90 8964 585 2

Temenuga Trifonova

Warped Minds: Cinema and Psychopathology, 2014

ISBN 978 90 8964 632 3

Christine N. Brinckmann

Color and Empathy: Essays on Two Aspects of Film, 2014

ISBN 978 90 8964 656 9

François Albera and Maria Tortajada (eds.)

Cine-Dispositives: Essays in Epistemology Across Media, 2015

ISBN 978 90 8964 666 8

Volker Pantenburg

Farocki/Godard: Film as Theory, 2015

ISBN 978 90 8964 891 4

Paul Cuff

A Revolution for the Screen: Abel Gance's NAPOLÉON, 2015

ISBN 978 90 8964 734 4

Scott Loren and Jörg Metelmann (eds.)

Melodrama After the Tears: New Perspectives on the Politics of Victimhood,
2015

ISBN 978 90 8964 673 6

Steve Choe

Sovereign Violence: Ethics and South Korean Cinema in the New Millennium, 2016

ISBN 978 90 8964 638 5

Melis Behlil

Hollywood is Everywhere: Global Directors in the Blockbuster Era, 2016

ISBN 978 90 8964 739 9

Thomas Elsaesser

Film History as Media Archaeology: Tracking Digital Cinema, 2016

ISBN 978 94 6298 057 0

Michael Walker

Modern Ghost Melodramas: 'What Lies Beneath', 2017

ISBN 978 94 6298 016 7

Steffen Hven

Cinema and Narrative Complexity: Embodying the Fabula, 2017

ISBN 978 94 6298 077 8

Alexandra Seibel

Visions of Vienna: Narrating the City in 1920s and 1930s Cinema, 2017

ISBN 978 94 6298 189 8

Rossella Catanese

Futurist Cinema: Studies on Italian Avant-garde Film, 2018

ISBN 978 90 8964 752 8

Adrian Martin

Mysteries of Cinema: Reflections on Film Theory, History and Culture

1982-2016, 2018

ISBN 978 94 6298 683 1

Paula Albuquerque

The Webcam as an Emerging Cinematic Medium, 2018

ISBN 978 94 6298 558 2

