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Introduction: A Sequel and a Shift

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This book is unique in that it is a sequel. Academic publications do not usually have sequels. Sequels in the film industry limit novelty as much as possible to minimize risk, whereas in science, like in art, risk-taking is a virtue and relevance flows from originality and novelty. This book, however, departs from its predecessor, *Films That Work*,[1] not through minimal variation, but through what the language of management calls diversification and expansion. In business, diversification and expansion result from a quest for profit. This book has a different motivation: It reflects the conviction that the work which the first book started was not finished, but only beginning. It also reflects the reality that a significant number of scholars, many of whom are now represented in this volume, shared this conviction and had already set out to consolidate and expand the field mapped by the first book.

The original *Films That Work* covered a wide variety of topics but was held together by what may be described as a shared research design. It combined a broad and bold working hypothesis with a manageable, relatively limited focus. The working hypothesis was that economic activity is inexorably tied to – i.e. dependent upon and shaped by – media and media infrastructures. Industrial films were, in other words, not merely an add on and, over time, a source of historical information but an indispensable part of industrial organization. This was a bold claim for the fields of social and economic history and, following the work of JoAnne Yates[2] and Susan Leigh Star,[3] less so for management and science and technology studies. Prior to *Films That Work*, Charles R. Acland and Haidee Wasson's *Useful Cinema*,[4] Lee

1   Hediger, Vinzenz, and Patrick Vonderau, editors. *Films That Work: Industrial Film and the Productivity of Media*. Amsterdam University Press, 2009.
2   Yates, JoAnne. *Control through Communication: The Rise of System in American Management*. Johns Hopkins University Press, 1989.
3   Star, Susan Leigh. "The Ethnography of Infrastructure." *American Behavioral Scientist*, vol. 43, no. 3, 1999, pp. 377–91.
4   Acland, Charles R., and Haidee Wasson, editors. *Useful Cinema*. Duke University Press, 2011.

Grieveson's *Cinema and the Wealth of Nations*[5] and Florian Hoof's *Angels of Efficiency*,[6] it was certainly a bold claim for film studies – a field which owed its existence to the demonstration that a canon of important art works exists in cinema and which, as a consequence, had barely paid attention to objects deemed artless like commissioned films, let alone to the nexus between business, industrial organization and film. The focus of *Films That Work* was manageable because it was limited to the firm as the privileged organizational entity; to the 1895–1970 time period with an emphasis on the post-war period of economic expansion; and to moving images as key elements in the "*Medienverbund*" of the firm, the media network which sustains the firm and makes its operation possible.

Films That Work Harder maintains the original working hypothesis and diversifies and expands this approach to include a broader array of organizations beyond the classical firm; to cover a broader geographical territory – in fact, all continents except Australia and Antarctica – and to expand the time frame from about 1970 to the contemporary transformations of the global economy. The most important modification, however, is the one indicated by the subtitle of the book: a shift from a focus on production to circulation or, if you will, a shift from the first volume of *Das Kapital* to the second.

Industrial films from the period of early cinema through what Anna Maria Falchero in this volume calls the "golden age" of industrial film, which coincides with *Les Trente Glorieuses* in France and the "economic miracles" in Germany and Italy, i.e. the post-war economic expansion between 1945 and 1973, tend to focus on processes of production. As Salomé Aguilera Skvirsky shows in her contribution to this volume and her recent book,[7] the process film is a genre unto itself, a cultural template of modernity which originates in visual representations of the eighteenth century and, by way of the industrial film, pervades other areas of cinema as well. In the spirit of the industrial film's focus on production, the subtitle of the first volume spoke of the "productivity of industrial cinema." But as Karl Marx writes in the *Grundrisse einer Kritik der politischen Ökonomie*, modern industry production is not an end in itself, but a means. Production serves to accumulate surplus value, which is the subject of Volume 1 of *Das Kapital*. However, that value is only realized in the sphere of circulation, which is the subject of the (unfinished and posthumously

5   Grieveson, Lee. *Cinema and the Wealth of Nations: Media, Capital, and the Liberal World System.* University of California Press, 2017.
6   Hoof, Florian. *Angels of Efficiency: A Media History of Consulting.* Oxford University Press, 2020.
7   Aguilera Skvirsky, Salomé. *The Process Genre: Cinema and the Aesthetic of Labor.* Duke University Press, 2020.

published) Volume 2. So, if indeed we are to fully understand how industrial organization relates to the moving image, we need to look not only at production, but at circulation, and at how circulation enables and informs production.

This claim seems even more valid from the vantage point of today's economy and the transformation brought about by the introduction of the standardized shipping container and the development of point-to-point supply chain logistics,[8] which runs parallel to and goes hand in hand with digitization. The classical factory, the focus of many, if not most, industrial films up to 1970, had a specific location close to raw materials such as iron ore and coal, proximity to markets and large inventories. From the eighteenth through the twentieth centuries, the classical factory – in exemplary fashion in the textile industry, which was at the forefront of industrialization in North-western Europe – greatly benefited from colonialism's exctractive supply chains for raw materials and human labor spanning Europe, Asia, Africa and the Americas, which also served to trade finished products back to the point of extraction. But in this system, the classical factory was the central node, a site of production organized around proprietary technologies and processes which were jealously guarded by their owners. It was also typically a national institution. "What is good for General Motors is good for America," Charles Erwin Wilson, president of General Motors, famously said during his Senate confirmation hearings to become Eisenhower's secretary of defense in 1953. Wilson said this to justify his decision not to divest himself of his important shareholding position in his company and was widely ridiculed for it, but he expressed, in the words of one commentator, an "undisputable fact of modern political life."[9] Container shipping has largely invalidated Wilson's equation. By dramatically lowering the cost and increasing the speed and reliability of transportation, containerization has replaced the classical factory model with global supply chains, which span the globe according to where labour and raw material inputs are cheapest and where demand is highest. General Motors took the lead in this process when they relocated most of their production away from Detroit and Flint, Michigan, to lower cost locations in the 1980s, leaving a trail of social and economic destruction which Michael Moore showcased in what was at the time the most successful theatrical documentary of all time, *Roger*

8   Levinson, Marc. *The Box: How the Shipping Container Made the World Smaller and the World Economy Bigger*. Princeton University Press, 2006; Klose, Alexander. *The Container Principle: How a Box Changes the Way We Think*. MIT Press, 2015.
9   Redish, Martin H., and Howard M. Wasserman. "What's Good for General Motors: Corporate Speech and the Theory of Free Expression." *George Washington Law Review*, vol. 66, no. 2, 1997–1998, pp. 235–96.

and Me from 1989. But this change from what Marc Levinson describes as the "massive industrial complexes in vogue since the turn of the twentieth century" to "networks of much smaller factories, linked by international supply chains and employing even smaller numbers of workers" affects not just the volume and location, but the types and forms of labour. Well-paid factory jobs disappeared, and in the new economy value comes "from innovation, design, and marketing, not from the physical process of tuning raw materials into finished goods."[10] What is more, as Anthony G. Hopkins writes, "the breakdown of complementarities between industrial metropoles and primary-producing peripheries, undermined vertical, hierarchic imperial systems," potentially furthering notions of racial equality and democracy.[11]

What is clear is that what economists and sociologists started calling globalization in the 1980s amounts to more than just an extension of trade and a proliferation of what William Cronon, in his discussion of the emergence of the futures market for grain in the nineteenth century, calls the "transmutation" of material objects and their displacement into "the symbolic world of capital."[12] From a media theory point of view one could argue that with containerization production, distribution and consumption finally fully catch up with the property of money as the primary medium of exchange, which according to Marx, still in the *Grundrisse*, is to split exchange into two acts, sale and purchase in different locations at different times. As early as 1990, at the very onset of the second wave of globalization, Arjun Appadurai described what the emerging economic and social order means in terms of disjuncture and difference in the new global cultural economy.[13] Considering the history of the industrial film and its long-standing focus on production and the firm, the demise of the classical factory alone is reason enough to shift the focus from production to circulation.

Film and media studies in the years since the publication of *Films That Work* has seen a turn towards the study of infrastructure in the work of Marta Braun, Charlie Keil, Lisa Parks, Nicole Starosielski, Gabriele Schabacher, Rahul Mukherjee and others.[14] A shift from production to circulation in

10   Levinson, Marc. *An Extraordinary Time: The End of the Postwar Boom and the Return of the Ordinary Economy*. Random House, 2016, p. 131.
11   Hopkins, A.G. "Globalisation and Decolonisation." *Journal of Imperial and Commonwealth History*, vol. 45, no. 5, 2017, pp. 241–42.
12   Cronon, William. *Nature's Metropolis: Chicago and the Great West*. W.W. Norton, 1991, p. 120.
13   Appadurai, Arjun. *Modernity at Last: Cultural Dimensions of Globalization*. University of Minnesota Press, 1996.
14   Braun, Marta, Charlie Keil, Rob King, Paul Moore, and Louis Pelletier, editors. *Beyond the Screen: Institutions, Networks and Publics of Early Cinema*. John Libbey, 2012; Parks, Lisa, and

the study of industrial film involves a similar focus on the material arrangements that sustain industrial organization and economic activity beyond the factory, both in the past and present. At the same time, the question of how cinematic forms act as part of such material arrangements remains central. Across the transformations sketched above, the moving image remains a constant factor of the "*Medienverbund*," which sustains industrial organization, and it remains what is perhaps the privileged format of corporate communication with so-called stakeholders, even as digital infrastructures and technologies supplant older media across organizations.

The circulation of industrial films has always been facilitated by small-gauge films and mobile projectors.[15] But while *Les Trente Glorieuses* and the "economic miracle" period may have been the golden age of the theatrical industrial film, the transition to digital platforms and the emergence of compression formats like MP4 – which is to sounds and images as the shipping container is to consumer goods, and which is a global standard approved and regulated by the same body, the International Organization for Standardization (ISO)[16] – has created more outlets for moving images which can be described as industrial films than at any other point in history. In particular, corporations use digital platforms like YouTube for global recruitment and to spread messages of sustainability. The latter have become de rigueur since the human and environmental costs of what J.R. McNeill and Peter Engelke call "the great acceleration" have become apparent, i.e. the phase of unprecedented growth since 1945, which has made humans the determining factor in the history of the environment and which is also known as the "Anthropocene."[17] In that sense, the study of the circulations of industrial film offers a perspective on media history more generally, as well as on environmental history and the study of the ecology and/of media.[18]

Nicole Starosielski, editors. *Signal Traffic: Critical Studies of Media Infrastructures*. University of Illinois Press, 2015; Starosielski, Nicole. *The Undersea Network*. Duke University Press, 2015; Schabacher, Gabriele. "Mobilizing Transport: Media, Actor-World, and Infrastructures." *Transfers*, vol. 3, no. 1, 2013; Mukherjee, Rahul. *Radiant Infrastructures: Media, Environment, and Cultures of Uncertainty*. Duke University Press, 2020.

15   Wasson, Haidee. *Everyday Movies: Portable Projectors and the Transformation of American Culture*. University of California Press, 2020.

16   Sterne, Jonathan. *MP3: The Meaning of a Format*. Duke University Press, 2012; Jancovic, Marek, Alexandra Schneider, and Axel Volmar, editors. *Format Matters: Standards, Practices, and Politics in Media*. Meson Press, 2020.

17   McNeill, J.R., and Peter Engelke. *The Great Acceleration: An Environmental History of the Anthropocene since 1945*. Belknap Press, 2014.

18   See, for example, Fuller, Matthew. *Media Ecologies: Materialist Energies in Art and Techno-culture*. MIT Press, 2007.

What we propose to call the "circulations of industrial cinema" has three aspects: How industrial films represent circulation, how they operate as part of the infrastructures of circulation, and how they themselves circulate (that is, how distribution affects and potentially transforms their meaning and operation).

In sales, the role of film is usually limited to advertising rather than the visualization of process (unless the visualization of process serves advertising purposes, as a symbolic warranty of the quality of the product).[19] This makes the infrastructures and networks of circulation all the more significant if and when they come into view – for instance, in films about state-sponsored building projects, shipping and communication, but also in films about the primary medium of exchange, money. But it is equally as important to pay attention when they remain absent and their operation is simply assumed.

In the first volume, industrial cinema was discussed as a *parasite form*, i.e. a form of cinema that strategically adopts and inhabits other forms of cinema and adapts artistic forms and techniques to the requirements of specific pragmatic contexts or spaces of communication, to use Roger Odin's term,[20] with the ultimate goal of "disappearing in communication," as Michel Serres phrases it.[21] This is a property of infrastructures more generally speaking. Media infrastructures disappear into communication, and they only become perceptible when they break down, as Karen Ruhleter and Susan Leigh Star have argued,[22] or, following Fritz Heider, when established routines or formats of perception are thwarted.[23] In that sense, industrial films as part of the media infrastructure of circulation are particularly salient when they leave their designated space of communication. As they migrate across other spaces, in the new, decentralized and fluid forms of corporate communication, but also in new environments such as relational databases and digital archives, industrial films become *media boundary objects*,[24] i.e. objects that can mean different things to different people and

19   See Florin, Bo, Patrick Vonderau, and Yvonne Zimmermann. *Advertising and the Transformation of Screen Cultures*. Amsterdam University Press, 2021.

20   Odin, Roger. *Spaces of Communication*. Amsterdam University Press, 2022.

21   Serres, Michel. *Le parasite*. Grasset, 1980.

22   Star, Susan Leigh, and Karen Ruhleder. "Steps Toward an Ecology of Infrastructure: Design and Access for Large Information Spaces." *Information Systems Research*, vol. 7, no. 1, 1996, pp. 111–34.

23   Heider, Fritz. "Thing and Medium." *On Perception, Event, Structure, and Psychological Environment: Selected Papers*. International Universities Press, 1959.

24   Hoof, Florian. "The Media Boundary Objects Concept: Theorizing Film and Media." *MediaMatters: The Materiality of Media, Matter as Medium*, edited by Bernd Herzogenrath. Bloomsbury, 2015, pp. 180–200.

serve different purposes in different contexts, ranging from the original purpose of industrial organization to an afterlife in the sense of Warburg,[25] whether as historical markers or as raw material for artistic production.

The contributions to this book cover the three aspects of the circulations of industrial film – representation, operation, distribution – from a variety of angles and based on a broad range of case studies. The volume escapes the fate of what Hegel calls the "*schlechte Unendlichkeit*," the miserable infinity, of an endlessly proliferating series of case studies by largely sharing the modified heuristics which informs this sequel: that in industrial modernity, there is no production without circulation and neither without media, and that the moving image, as their enduring element, offers a privileged handle on both the analogue and digital media networks of industrial organization.

The book is organized in seven sections. Section 1, "Networks and Flows: Visualizing Value Chains," consists of four approaches to infrastructures and media networks beyond the factory. Furthermore, it tackles the afterlife of industrial film both as the circulation of meaning and by focusing on the material and political consequences that prevail over time. In Chapter 1, "The Aesthetics of the Global Value Chain: Container Shipping, Media Networks and the Problem of Visibility in the Global Sphere of Circulation," Vinzenz Hediger addresses the question of the form of infrastructures by analysing the corporate image strategy of Maersk, the world's largest container shipping provider. He develops the outline of an aesthetics of the global value chain by analysing three different, but interconnected types or styles of visibility: critical, operative and representational visibility. In Chapter 2, "Object Lessons and Infrastructural Imperialism," Lee Grieveson highlights the antecedents of the recent transformations of the world economy by showing how the US government in the 1910s and 1920s used industrial films to promote the construction of roads and the Pan-American highway system, with a view to facilitating the circulation of capital and new practices of economic imperialism during the period in which the US become the world's dominant industrial state. Thomas Turnbull adds an aspect of media theory in Chapter 3, "Energy and Industrial Film: Energo-Critical Registers," by proposing a thermodynamic reading of industrial film that addresses them as agents of form, content and transmission of energy. He draws on a wide range of industrial films from the 1920s through the 1960s to argue that industrial cinema can be analysed in ways that are congruent with the physicist's

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25   Warburg, Aby. *Nachhall der Antike. Zwei Untersuchungen*. Edited by Pablo Schneider. Diaphanes, 2011; Didi-Huberman, Georges. *The Surviving Image: Phantoms of Time and Time of Phantoms: Aby Warburg's History of Art*. Penn State University Press, 2016.

concept of energy. In Chapter 4, "Digital Afterlife of Industrial Film: Weak Dispositives, Choice Architecture and the Distribution of Industrial Cinema," Florian Hoof develops a theoretical model to describe the digital afterlife of industrial film. Taking the German car industry as his example, he discusses the reappearance of industrial film as a cinematic experience structured by "weak dispositives" that are constantly being stabilized by relating them to "cinematic time" and "cinematic space."

Section 2, "Operative Iconographies, Industry and the Nation State," studies the implications, tensions and contradictions inherent in Charles E. Wilson's famous claim that corporate and national political interests align. Putting a focus on water and (media) infrastructures of hydropower, it illustrates how media and industrial film in particular turn the economic resource of water into a (national) cultural resource.[26] In Chapter 5, "Beautiful Luxembourg, Steel Works and a Swimming Pool: The Corporate Film *Columeta* and the Formation of a Corporate and a National Image," Ira Plein focuses on the steel industry in Luxembourg and shows how this industry, represented by the dominant company, ARBED, created and perpetuated an iconography that became operative also for the nation state of Luxembourg. In Chapter 6, "Hydropower for a Sealess Nation: Representation of Water Energy in Czech Visual Culture," Lucie Česálková explores the cultural imagination of rivers, waterways and generally water as a source of energy in Czech film and visual culture in the nineteenth and twentieth century. In particular, she traces landlocked Czechoslovakia's dream of ocean access and its water management projects across the economical paradigm shift from capitalist to nationalized socialist order. In Chapter 7, "Modern Water Sprites: History, People and the Landscape of Northern Sweden in Vattenfall's Film Production in the 1950s," Fabian Zimmer outlines a cultural history of hydroelectricity in Sweden by looking at films from the Swedish state-owned enterprise Vattenfall. Zimmer traces the narratives of hydroelectric modernity through the "golden age" of Vattenfall's film production to study their rhetoric and discursive contexts. In Chapter 8, "Taxonomy of Techniques: Visions of Industrial Cinema in Post-war Japan," Takuya Tsunoda discusses an infrastructure project in post-war Japan, which was the subject of *Sakuma Dam,* a series of highly popular industrial films for theatrical distribution made between 1954 and 1958. Tsunoda shows

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26   Bartelheim, Martin, et al. "'ResourceCultures' – A Concept for Investigating the Use of Resources in Different Societies." *Persistent Economic Ways of Living: Production, Distribution, and Consumption in Late Prehistory and Early History*, edited by Alžběta Danielisová and Manuel Fernández-Götz. Archaeolingua Alapítvány, 2015, pp. 39–50.

how these films served to convey a new sense of industrial modernity both through the infrastructural changes they represented and through their form and technique as an epitome of state-ordained modernization and democratization. In Chapter 9, "The Power of Flows: The Spatiality of Industrial Films on Hydropower in Switzerland," the final chapter of this section, Yvonne Zimmermann draws on Manuel Castells' concept of "the space of flows" to explain how films on hydropower in Switzerland from the 1930s and 1950s mediate between the dynamic space of flows of technology and economy and the static places of society within a national framework that uses water – and its power – as a cultural resource.

Section 3, "Institutions and Distribution Frameworks: Archives, Festivals, Fairs," tackles the distribution aspect of the circulations of industrial film and how this relates to the conceptualization and the building of audiences, the creation of imagined communities, and technological frameworks of visual display. In Chapter 10, "Industry on Screen: The British Documentary in Distribution – British Transport Films: A Case Study," Steve Foxon provides an overview of the distribution of the British documentary film from the interwar period to the 1960s and its "aftermath" in the age of video and the digital. With a focus on the films made by British Transport Films, he describes the various target audiences that should be persuaded by these films and outlines a typology of distribution modalities and venues. In Chapter 11, "On the Red Carpet in Rouen: Industrial Film Festivals and a World Community of Filmmakers," Brian Jacobson discusses the history of industrial film festivals as key nodes in shifting global networks of cultural and economic exchange. Tracing the history of these events from early film festivals held in the 1950s in Europe, he argues that they were crucial to build and unite a community of capitalists with an international community of filmmakers. In Chapter 12, "Cinema and Industrial Design: Showmanship, Fairs and the Exhibition Film," Haidee Wasson discusses the history of form and circulation of industrial film in context of industrial fairs and exhibitions. By focusing on the 1939 World's Fair in New York City, she describes how cinema was an integral part of a wider array of presentational techniques but also how film stood out as a key element of such events, as one of the persistent and most voluble public interfaces for industrial and sponsored media.

Section 4, "Teaching Oneself and Others," focuses on pedagogy and governance in and through industrial films. It looks more closely on how these films were part of the co-creation and the circulation of knowledge and how they affected concepts of subjectivity. In Chapter 13, "Putting Films to Work: *System, the Magazine for Business*," Gregory A. Waller studies

how this prominent American business periodical advised manufacturers and retailers on how to use moving pictures to boost sales and increase efficiency and managerial oversight in the workplace. Waller argues that *System* at this formative historical moment articulated the possibilities of film as an emerging and still largely untapped "force in the world of business." In Chapter 14, "New Media for the Schools of Tomorrow: The AV Instructional Films of Robert W. Wagner," Charles R. Acland looks at how new media and multimedia ensembles related to the educational realm in the post-WWII period. He parallels the work of Robert W. Wagner with ecological concepts from media theory that try to understand new environments of images and sounds. In Chapter 15, "We Must Know More Than We Can See: Images for Vocational Training and the Emergence of Cognitive Ergonomics," Guilherme Machado analyses techniques of video-based pedagogy and the emergence of a new type of ergonomics, which is focused on mental rather than bodily processes in a key moment in the broader history of industrial labour, the transition to the so-called "post-industrial" or service economy in the 1960s and 1970s. In Chapter 16, "Free Enterprise Film: Aims of Industry, Economic Propaganda and the Development of a Neoliberal Cinema," Scott Anthony discusses the filmmaking activities of Aims of Industry, an influential educational organization in Britain in the immediate post-war years. He analyses how Aims' library circulated a range of industrial and sponsored films and argues that in the consumerist, privatizing and post-industrial mode of cinema patronized by Aims some of the cultural origins of neoliberalism can be discerned.

Section 5, "Post/Colonial Industries and Third Industrial Cinemas," brings together approaches to industrial film and empire at the threshold of decolonization and shows how industrial film built and shaped colonial audiences. In Chapter 17, "Framing Local and International Sentiments and Sounds: Unilever and Royal Dutch Shell in a Changing Nigeria," Rudmer Canjels shows how the film department of Royal Dutch Shell, one of the oldest and most prolific units of any major company, used music to anchor their image and educational films in local and regional cultures and soundscapes to postulate a connection between enterprise and nation with a view to its continued operation in post-independence Nigeria. In Chapter 18, "Working through the End of Empire," Tom Rice discusses industrial film as a governmental approach to shape concepts of citizenship in the context of the colonial history of the British Empire and shows that film became increasingly important in the government's work to define and shape productive citizens and to formalize economic ties between colonizer and colonized. In Chapter 19, "Cinema-going on the Railway

Tracks: Transportation, Circulation and Exhibition of Information Film in Colonial India," Ravi Vasudevan addresses the role of railways as a mode of film distribution and a site of exhibition in colonial India. Discussing the logistics and programmes of the mobile exhibition by train, Vasudevan shows how the British administration used film to educate the rural population by intermingling educational films with travel films and other attractions to cultivate an audience. In Chapter 20, "The Latin American Process Film," Salomé Aguilera Skvirsky addresses a shared concern with process, i.e. with the material and bodily aspects of production, across a wide range of Latin American films and discusses the connection between post-war industrialization and the emergence of the New Latin American Cinema of the 1960s and 1970s.

Section 6, "Production Cultures and/of the Industrial Film: Amateurs and Professionals," demonstrates that, much as film has never been exclusively tied to the dispositive of cinema, industrial films are not exclusively tied to the factory. Rather, they need to be understood as cultural practices that exist beyond and constantly permeate organizational boundaries. In Chapter 21, "Soviet Industrial Film across Categories: Negotiating between Utility, Art and Science," Maria Vinogradova shows how despite the absence of an established category of "industrial film" within the Soviet film industry, such films were produced and spanned a broad variety of types, such as industrial process, educational, labour and advertising film. She explains how the focus on production processes reflects an economic system based on central planning. In Chapter 22, "'There Is No Life More Reckless and Adventuresome Than That of the Oil Prospector': ENI's Geologist-Filmmakers in Iran," Luca Peretti shows how the prospectors of Italy's state energy company ENI were also consummate amateur filmmakers who combined their geological exploration with the making of personal travelogues and family films, which complement the official presentation of the company's activities in Iran in films, such as Bernardo Bertolucci's three-part documentary *La via del petrolio*. In Chapter 23, "Industrial Film from the Home Studio: Amateur Cinema and Low-Budget Corporate Moving Image Culture in West Germany (1950 to 1977)," Alexander Stark takes amateur filmmaker Elisabeth Wilms, "the filming baker's wife" from the city of Dortmund in Western Germany, as his case study to show how amateur film practices intersected with the field of sponsored film in the 1950s to the late 1970s. In Chapter 24, "Movie and Industry in Italy: The 'Golden Age' of Italian Industrial Documentary (1950–1970)," Anna Maria Falchero offers a comprehensive account of industrial film production during the post-war boom era, with a focus on the main lines of film on output in terms of production arrangements,

themes and distribution. And finally, in Chapter 25, "A Film That Doesn't Seem to Work: A Shot of Renault's Early Assembly Line (1920 to 1929) – A Case Study, Methodology and 3D Restitution for Film Analysis," Alain P. Michel traces the trajectory of *At the Renault Factory*, a film produced in the 1920s to showcase Renault's effort during WWI, through different storage and distribution formats. He discusses the implications of the loss of the film's original materiality as he reconstructs the film's original production context through a combination of new methodologies such as systematic cross-analysis and 3D technology.

Section 7, "Ephemeral Artistry: Ecologies of Authorship in Industrial Cinema," addresses a spectre which continues to haunt industrial film research despite the field's radically pragmatist orientation and focus on the nexus of cinematic form and industrial organization rather than expression: the spectre of authorship. In doing so, the section highlights one aspect of cinematic form in particular which has hitherto been largely neglected: sound. In Chapter 26, "Business and Art: Pharmaceutical Industries, Film Production and Circulation, and the French Film Production Company ScienceFilm, 1960–1980," Christian Bonah sheds light on the production and circulation of chemical-pharmaceutical films from the point of view of the film production company ScienceFilm, founded by French film director Éric Duvivier, a nephew of Julien Duvivier. Bonah shows how Duvivier connected his industrial filmmaking practice, which spans fifty years from 1950 to 2000, with contemporary film art while enlisting leading physicians as allies for contracting with industrial sponsors. In Chapter 27, "Transfer of Power: Films Officers in the British Coal Industry," Patrick Russell suggests that pragmatism and functionalism developed in the early phases of industrial film research by arguing for a concept of co-authorship. Based on a comprehensive survey of the British post-war film production in the energy field, Russell proposes an engagement with film style which remains attentive to moments of singularity rather than focusing exclusively on regular patterns. In Chapter 28, "Saudi Arabia's John Ford? Robert Yarnall Richie, *Desert Venture* and Ephemeral Authorship in Industrial Film," Martin Stollery offers an even more direct challenge to Rick Prelinger's suggestion that we should try to avoid the trap of auteurism this time around. He proposes the concept of "ephemeral authorship" to show how reviews and other paratexts treated Robert Yarnall Richie's *Desert Venture*, a film commissioned by Saudi-American oil giant ARAMCO, as a documentary work in the tradition of Robert J. Flaherty and John Ford, enlisting auteurist discourse to broaden the audience for a corporate film. In Chapter 29, "Sounds Industrial: Understanding the Contribution of Music and Sound

in Industrial Films," Annette Davison focuses on a sample of promotional industrial films produced by the Shell Film Unit in the 1950s under the supervision of Arthur Elton to highlight the importance of sound and music in industrial films. She identifies and evaluates techniques of audiovisual rhetoric which are crucial to the work of industrial films but have so far been overlooked. In the final contribution to the volume, Chapter 30, "Creative Films for Creative Corporations: Music and Musicians in Experimental Italian Industrial Films," Alessandro Cecchi shows how Italian corporations in the 1950s and 1960s enlisted modernist composers like Angelo Francesco Lavagnino, Franco Potenza and Vittorio Gelmetti to produce musical scores which often featured electronic sounds and projected an aura of innovation and technological sophistication even as they resonated with some of the major trends of the contemporary musical avant-garde.

This book is partially based on a discussion and screening event held in Frankfurt in December 2015. Other contributions were then added to fully represent the current state of the field. Frankfurt is an apposite choice for a discussion on industrial film and circulation not just because of its role as the financial centre of Germany and, increasingly, Europe. Frankfurt was also the headquarters of the Thurn und Taxis postal service monopoly from 1810 to 1867, which was a key system of communication in the early phases of industrialization and became an agency of the Prussian state after the war of 1866, further boosting the industrial development of "*Gründerzeit*" Germany. Frankfurt is today the site of DE-CIX, the world's largest internet exchange in terms of average traffic throughput and the key node of the internet in Europe. It is, in other words, a good vantage point for further sequels.

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