Television's Media Archaeology

Present State and Possible Directions

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A review of *Seeing by Electricity*. *The Emergence of Television* 1878–1939 by Doron Galili. Durham: Duke University Press, 2020.

Published in February 2020 just as the world entered its first COVID-19 related lockdown, Doron Galili's monograph *Seeing by Electricity. The Emergence of Television, 1871–1939* could have gone unnoticed. Yet, despite the disruption of the academic peer reviewing process during this period, it has attracted attention and received praise from many media scholars and television historians.¹ The thoroughly positive reception testifies to the book's historiographical significance for the field, as well as its methodological relevance for debates on the digital transformation, post-cinema, and the contemporary mediascape.

Television with Cinema / Cinema with Television

As the subtitle of his book indicates, Doron Galili studies television's long emergence between 1878–1939. Attuned to media archaeological approaches and their affinity for imaginary media, failed technologies, and other forgotten histories, Galili unearths the rich and complex strands of television's early phase. The roughly five decades covered include the initial ideas of "seeing at a distance" in the nineteenth century up to the first regular broadcasting services that opened in the mid-1930s in Europe, then in the USA. *Seeing by Electricity* thus stops where most television's emergence as a mass media. This historical framing does not hinder Galili to develop an argument regarding the digital mediascape and the recent transformations of cinema, television, and other media. The archaeological digging into the "deep time of media" (Zielinski 2006) indeed shines a light on contemporary debates as it emphasizes the continuous transformations of media and their intermedial entanglements before the digital "break."

Seeing by Television opens with a 1935 speech by French film pioneer Louis Lumière, in which Lumière reflects on television's future impact on society and its past "affiliations" with cinema (1). This story introduces Galili's topic as well as his methodology, which he deploys through the monograph's two parts and six chapters. For Galili, Lumière's interest in television in the mid-1930s highlights two major aspects of the history he aims to tell. First, Lumière's concern for television throughout the 1930s (he had previously collaborated with the French journal *La Télévision* (Lumière 1931)) emphasizes the medium's intermedial relationships with other media, and in particular with cinema. For Galili, the history of television is indeed closely intertwined with the social and cultural history of moving images—and of cinema—by large. To signify the importance of television's intermediality as well as its hybridity, Galili

privileges the notion of "moving image transmission" rather than "television," through which Galili embraces the multiplicity of televisual dispositifs imagined or actually realized in the period covered. From broadcasting to point-to-point communication, small-screen or large-screen reception, early television experiments utilized multiple forms of electrically produced moving images. Furthermore, analyzing "moving image transmission" emphasizes the importance of the distance covered between the camera and the receptor. "Moving image transmissions" thus stresses one fundamental difference with cinema, which has been historically conceived as a storing and archiving medium—for Galili, television's genealogy instead relates to transmission media such as telegraphy and telephony.

Lumière's mention of television further points to the second major argument of Galili's book, which is of historiographical nature. Historical research on moving images around 1900 has been overwhelmingly dominated by film historians, as Galili notes: "The prominent status that cinema had quickly gained and maintained throughout the twentieth century ... gives the impression that film is the inevitable vanishing point of the histories of the moving image and of screen practices" (2). It is this "vanishing point" of Western visual culture and modernity that Galili challenges throughout Emergence of Television as he emphasizes television's place within it. By organizing the opening paragraphs around a canonical figure in cinema history, Galili thus sets the scene for the monograph's major displacement. While its title and subtitle point towards a history that is solely of television, Galili's actual investigation is at least as much a study of cinema and media history, as well as a comment on current debates concerning digital new media. Significantly, Galili closes his study with a mention of the "countless 'deaths of cinema" that haunt contemporary media theory, and for which his research provides a historical revision that stresses "the historical-specific circumstances of media change" (188). Cinema's specificity, his work shows, has always already been defined in relation to the televisual, and contemporary debates on the (lost) autonomy may put perspective as a "media archaeological topoi that span historical eras in different formulations" (186). From the first page to the last, Galili's study of the "emergence of television" thus explicitly dialogues with cinema as an object *and* a field of study.

Television's Speculative and Experimental Era

As a whole, Seeing by Electricity covers two moments of television's emergence characterized by two distinct intermedial configurations. Borrowing from historians of television, Galili designates these moments as television's "speculative," respectively "experimental" era. The speculative era includes the years between the first publications on tele-visions in the late 1870s and the display of first working machines in the mid-1920s, whereas the experimental era sees technological progress in televisual transmission, but mainly also "intensive economic, cultural, and regulatory processes that would lead to the eventual formation of the autonomous mass media institutions of television" (10–11). Consequently—and as Galili details in his fourth chapter on the integration of television into the broadcasting structures—the speculative and experimental era result in the institutionalization of television as a mass media. The first part of Seeing by Electricity is dedicated to the "Archaeologies of Moving Image Transmission," when television mainly was a paper project and a media fantasy. Here, Galili's investigation resonates with media archaeological work on "imaginary media" and other media historical research insisting on the contemporaneity of fictional media such as Albert Robida's telephonoscope, whose "inventions" were less prophecies of what was to come than depictions of the current mediascape (Balbi and Natale 2014; Roberts 2019). In line with its main inquiry, the book's first part investigates the relationship between the two "proto-media" cinema and television, and the discourses that shape them in their respective "pre-cinematographic" or "pre-broadcasting" era.

However, contrary to the second part of his book, where Galili insists on the convergence or encounter

between the two media within realms such as classical film theory, the first part starts by tracing the two distinct genealogies of cinema and television. Galili forcefully demonstrates that the nineteenth century saw the emergence of not one but "two different forms" of moving image media, which actualized different media contexts: "Photography, phonography, the magic lantern, and a range of other optical devices provided the intermedial context to the coming of film, whereas television appeared to be an extension of the technologies and practice associated with electric telecommunication and media" (43).

Media historians have repeatedly underlined this differentiated trajectory of cinema and television. Most prominently, and not without provocation, Uricchio suggested that film was "the great compromise, rather than the great wonder, of the nineteenth century" (Uricchio 2002, 103). For Uricchio, the horizon of expectation within which cinema emerged was shaped by experiential contingencies, simultaneity, and flow—paradigms closer to "the televisual" than the cinematographic. In his research on the archaeology of sound media Alain Boillat has questioned the predominance of visual elements in tele-*vision*. Through an analysis of texts from 1900 by little-known German science fiction author Kurd Lasswitz, Boillat demonstrates that the visual component is secondary with regard to the telephonic origins of most of the televisual fantasies: his study nuances the preponderance of visuality in modernity by putting to the fore its aural dimensions (Boillat 2009, see also Stadel 2015 for a related analysis).

Galili's argument resonates with this body of research and partly expands upon it. Galili in particular emphasizes the necessity for a "dialectical" understanding of the parallel emergence of cinema and television (43). Rather than positing one before the other—television before cinema, sound before vision—he stresses the common conditions "of sensory disorientation of urban industrial modernity" that co-determined first experiments with the "cinema of attractions" as well as the early imaginaries of the televisual. Drawing upon Mary Ann Doane's analysis of modernity's temporal regimes, Galili argues that "modernity's concerns with simultaneity, on the one hand, and with archiving and recording, on the other, are themselves not distinct, but dialectically related" (45). If modernity's new temporal regimes embraced technologies of archiving (photography, gramophone, cinema), they also encompassed media forms of simultaneity, and "the fleeting and transient," namely telegraphy, telephony, and moving image transmission assemblages. Transmission and recording were two sides of modernity's coin—and "*no single medium could embody*" both of them (45, emphasis in the original). Television, *Seeing by Electricity* teaches us, is fully part of early cinema's history; inversely, the history of cinema cannot undo its manifold links to moving image transmission.

The monograph's second part is dedicated to television's "experimental phase" and looks at television in the 1920s and 1930s through the lens of canonical film theories—Dziga Vertov and Rudolf Arnheim—as well as the major cinema industry, Hollywood. All three case studies consolidate the displacement announced in the opening pages: the destabilization of cinema history through the perspective of a television archaeology. In this second part, a potent demonstration in favour of Galili's intermedial approach concerns his discussion of Rudolf Arnheim's writings. Galili starts the chapter by underlining the recurrent interest among film theoreticians for television. From Eisenstein to Bazin, many of the authors that constitute film studies' theoretical canon have acknowledged the emergence of television in the early 1930s is unique in its depth, and maybe also the most surprising given his essentialist approach to "Cinema as Art." Indeed, for Arnheim, cinema contains the potential for a unique artform since it does not simply reproduce reality, but offers an aesthetic experience thanks to its material specificities such as the two-dimensionality of its image, the absence of sound, or the black and white rendering of the non-cinematographic world, which may be exploited for artistic aims. Television, on the other hand, was in Arnheim's view not more than a tool of transmission lacking any proper aesthetic qualities. Galili

characterizes Arnheim's position as one that "considered television not a part of the lineage of artistic media but rather a relative of the car and the airplane" (172), a means to an end rather than an expression of art, with a (potential) impact on society that Arnheim described in ambivalent terms. While Arnheim recognized television's value as an instrument for education and transnational communication, he also feared its standardizing effects, produced through its capacity to reach mass audiences beyond the local or even national scale (an argument that Galili links to Arnheim's own experience with the rise of National Socialism in Germany, a country he left in summer 1933 for Italy, before emigrating to London and finally to the USA). Galili's discussion of Arnheim's theory of television adds important insights for an in-depth study of Arnheim's writings; it underlines that "classical film theory was indeed flexible, dynamic and responsive to the altering mediascape out of which it originated" (183). Even in a realm closely tied to the establishment of cinema as an object of scientific inquiry and Film Studies as an academic field, television "played a vital part" (183).

In the monograph's second section, Galili more broadly discusses television's slow institutionalization and its formation as an "autonomous medium" (107) within the context of the culture industries of cinema and radio. While technological proposals and solutions for the transmission of moving pictures had been presented decades before the 1920s, it was only during the interwar period that the social and cultural profile of television as a broadcasting medium was identified and (partially) fixed. Media specificity, whether of television or of cinema, Galili shows, was relentlessly debated and negotiated among a diverse range of actants and milieus—from Hollywood to the Soviet avant-garde.

Towards the Institutionalization of Television's Archaeology

Galili's *Seeing by Television* intervenes in a broad but rather loose net of scholarship on "early TV," which includes works by historians of technology, media scholars, and cinema historians, but also practitioners and journalists. Already in 1942, 4000 *Years of Television: The Story of Seeing at a Distance* suggested a *longue durée* chronology, which reaches back to the mythical times of "cavemen" and their need to communicate (Hubbell 1942). Forty years later, CBS engineer Albert Abramson's standard work *History of Television* came in two volumes, the first including a section on television's "archaeology" from 1671–1879 (Abramson 1987). In it, Abramson not only described the innovations in the field of electricity that led to first drafts of image transmission devices, such as the discovery of selenium (1817) or the Kerr effect (1877), but also discussed first imaginary media such as "Edison's telephonoscope," famously caricatured in the British journal *Punch* (1878).

Around the same time, and thanks to the introduction of television into academic curricula, media scholars who were attentive to nonlinear and non-teleological historiographical models began to investigate television's pre-broadcasting era. Driven by the necessity to apprehend the medium's role under National Socialist rule, German scholars were among the first to unearth the medium's early histories. Siegfried Zielinsk's habilitation, published as *Audiovisionen: Kino und Fernsehen als Zwischenspiele in der Geschichte* in 1989, remains a seminal contribution to an intermedial media history covering film and television from the nineteenth century to the 1980s. While Zielinski's *Audiovision* was only translated in 1999 into English, his German colleagues' scholarship has been made partly accessible thanks to William Uricchio's work as a *passeur* between linguistic frontiers. Uricchio has himself extensively published on the early years of (German) television, and in parallel has edited research by Monika Elsner, Peter Spangenberg, Jürgen E. Müller, and Siegfried Zielinski, among others (Uricchio 1990).

More recent scholarship builds upon these early works and confirms the validity of media archaeological approaches for early television. Interested in the materialities and imaginaries of forgotten, overseen, and

neglected moments in television's history, the media archaeological works in television history share an interest for historical configurations of the new medium, and a curiosity for alternative narratives of "it could have been otherwise." Such scholarship shifts away from institutional or content analysis and instead, focuses on those moments when the institution was not yet formed and programs not yet established. In doing so, it expands television's periodization from post-war to interwar or pre-war periods. Overall, these media archaeological studies highlight the "slow emergence of a fast medium" (Elsner, Müller, Spangenberg 1990) by stressing its multiple formations before the broadcasting model (Andriopoulos 2006; Delavaud and Maréchal 2011; Fickers and Weber 2015; Galili 2016; Koszarski and Galili 2016; Sewell 2014; Stadel 2015; Roberts 2019; Weber 2022).

Seeing by Electricity offers a book-length contribution to this body of research: it confirms earlier findings by fellow media scholars, systematizes the media archaeological approach to television, and innovates its scope. In its methodological and historiographical ambition to revisit some of the definitions of *modernity* as a guiding concept in media studies, Galili's publication represents a culmination point of three decades of academic research into the medium's long history. As such, it also provides an opportunity to halt for a moment and to have a look at the future of media archaeological approaches of television. If *Seeing by Electricity* represents the new state of the art in television's media archaeology, what are the avenues that remain to be explored?

What's Next for Television's Archaeology?

In the introduction to a recent issue of Early Popular Visual Culture on media archaeology, Doron Galili and Erkki Huhtamo emphasize the abundance of recent media archaeological work, as well as the diversity of new approaches (Galili and Huhtamo, 2020). These approaches not only embrace new historical objects, but also explore new methods, as in the case of experimental media archaeology and its demand for hands-on scholarship that pays close attention to the tactile dimensions and sensorial aspects of (historical) media use (Fickers and van den Oever 2022; Heiden and Kolkowski 2023; also Parikka 2012). Simultaneously, the debate within the media archaeological field has turned towards its own missing links and blind spots. Prominently, calls for *feminist* perspectives have increased. In 2016, media scholar Sheenagh Pietrobruno observed the nonexistence of intersectional or feminist media archaeologies; in their more recent assessment, Jörgen Skågeby and Lina Rham deplore the "untenable clear separations between biomachinic materiality and sociocultural dimensions" and the absence of cross-fertilization between media archaeology and feminist perspectives (Skågeby and Rham 2018; Pietrobruno 2018).² In addition, recent thematic issues of the journals *boundary 2* and *Theory, Culture &* Society have called for a "global" and a "decolonial" take on media archaeology, respectively (Morgan 2022; Sengupta 2021). What is at stake in these pleas is the reintroduction of an analysis of power dynamics in media and knowledge production, and the acknowledgment that machines are "always already entangled in gendered, racialized and sexualized regimes of truth, saturated with (asymmetrical) power relations" (Skågeby and Rham 2018, 5). The focus of media objects, their imaginary and their materiality, which characterizes media archaeology, should not neglect the politics of machines, and their historical entanglement with coloniality and patriarchy.

Television studies might actually offer a fertile ground to expand media archaeology, in particular with regard to feminist methodologies, which run in television studies' DNA. As a medium of domestic space, television—and its histories—are intrinsically entangled with questions of femininity, maternity, and private space. However, media archaeological studies of, for instance, Albert Robida's or Jules Verne's media phantasies seldomly link these imaginaries to the formation of gendered spaces, nor to the relation between domesticity, care, and female labor, despite the representation of these issues on numerous

caricatures. As television scholar Lynn Spigel has already pinpointed in 1992 in her seminal work on television and domesticity, during the nineteenth century, middle class definitions of the "good home" shifted towards more consumer-based acceptations, within which women no longer only incarnated the moral guardian of family values, but actively participated in the forming consumer economy (Spigel 1992). It might be insightful to ask how this context of new family ideals and the redefinition of gendered norms transpires through the different imaginaries of electric moving image transmission discussed by television archaeologists (Roberts 2019; Galili 2020). In the prominent case of Georg Du Maurier's caricature, for instance, the televisual communication is anchored within the colonial context and translates into explicit gender dynamics. How do the colonial geographies sustained by televisual imaginaries intersect with gendered issues such as marriage (an explicit theme for caricature), or the question of the British "home economy" in colonial space? With its long tradition of feminist historiography, television scholars might investigate such questions and contribute to unearth the politics of media archaeology.

Another avenue for possible new insights into television's archaeology might come through an emphasis of television's function as a surveillance, policing, and control apparatus. As Galili discusses in Seeing by *Electricity*, the imaginary of televisual surveillance was widespread and disseminated in parallel to early ideas of televisual broadcasting; educational television was another dispositif that found wide acknowledgement, as was bidirectional communication. The imaginary machines of the medium's speculative era would find their historical materialization in the many applications of closed-circuit television (CCTV) developed from the 1940s on, and more broadly in military, industrial, scientific, and other non-broadcasting uses of moving image transmission. Throughout his study, Galili gives numerous examples that underline the longue durée of this multifaceted identity of television, but he does not investigate the history of these non-broadcasting dispositifs further—instead, his analysis focuses on the emergence of the broadcasting medium. This focus is justified by the overarching argument of cinematelevisual entanglements and the two media's intertwined institutionalization; it is also linked to Galili's choice to subscribe to André Gaudreault's and Philippe Marion's historiographical model of a media's "double birth" (Gaudreault and Marion 2000), in which a first phase of intermedial entanglements is followed by the birth of the institutionalized media form with an autonomous media identity. While the Gaudreault-Marion model is productive to rethink modes of intermedial connections in "new media," it also risks veiling alternative strands of television's history as the biological metaphor of "birth" hides the idea of a linear process unfolding from a medium's infancy towards its independent adulthood. This conception thus tends to overemphasize the history of institutionalized mass media and obscures alternative strands of television's identity linked to such uses as surveillance and control.

Recent scholarship on the history of television as a "useful medium" is revising this historiographical frame. It shows that non-broadcasting and "useful" television not only has its own long history but develops in parallel, and often in relation with, domestic television. From the 1940s on, military, and later industrial, scientific, or educational applications of television served to organize bodies, direct gazes, and manage institutions. As Katherine Chandler's work on the history of drone warfare teaches us, military development of television, encouraged during World War II in relation with research on guided missiles and unmanned planes, was conceived of as part of the colonial and racialized politics that governed the earliest drone programs overall (Chandler 2020). From its inception, military tele-visuality created an asymmetrical regime of observer and observed tied to new weaponry that protected some bodies and was lethal to others. Here, Rakesh Sengupta's wish for a decolonial media archaeology might very much find a starting point. Furthermore, looking at the corporate workplace and its use of industrial television, Kit Hughes argues that the medium functioned as a tool sustaining the post-Fordist transformation of labor in postwar USA. Closed-circuit systems, for instance, became much sought-after instruments in

industrial, but also medical, and educational spaces from the 1950s on, before they would take over public space as surveillance systems (Hughes 2020; see also Furuhata 2014; Kammerer 2009; Murray 2020; Stauff 2005; Weber forthcoming). Investigations into such useful applications of television produce new insights into the distribution of power through television, and thus may nourish new work in television's archaeology. Approached through the *longue durée* perspective, television's affordances for surveilling, among the broadly disseminated tropes on moving image transmission in the nineteenth century, may also become part of an expanded notion of media modernity, in which media imaginaries fuel expansionist dreams and racialized, gendered, and militarized visualities that find their contemporary correspondences not in post-cinema or post-television, but ubiquitous CCTV systems and drone warfare.

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Notes

- 1. See Doron Galili's website for an overview of the reviews: *www.dorongalili.com*. Return to note reference.
- 2. Paul Flaig similarly argues that "the questions concerning technology and sexual difference cannot be asked apart" and elaborates a stimulating critique of prominent archaeologists like Wolfgang Ernst and Friedrich Kittler (Flaig 2018).

Return to note reference.

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