

Reviewed by Christina G. Petersen

# *Seeing by Electricity: The Emergence of Television, 1878–1939*

by **Doron Galili**.

Duke University Press. Sign, Storage, Transmission Series.

2020. 264 pages.

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As the lines between television and film have become increasingly blurred in the streaming era and now even further in the age of the COVID-19 pandemic, Doron Galili's pathbreaking intermedial history of television before the broadcast era is an important entry into television, film, and new media studies. An expansion of a dissertation honored by the Society for Cinema and Media Studies in 2013, *Seeing by Electricity: The Emergence of Television, 1878–1939* provides a wide-ranging study of television as "moving image transmission" that moves away from defining television against film in favor of exploring both media's "historical instances of intermedial influences, technical amalgamations, and shared imaginaries."<sup>1</sup> At the heart of this study is a consideration of medium specificity not as enduring ontology but rather as a continual process of emergence. As such, Galili's excavation of the history of the medium that became known as television offers a model for how to think through both the recent past and the mercurial present of moving image transmission.

*Seeing by Electricity* takes a media archaeological approach to the pre-broadcast era, uncovering early conceptualizations of television from the 1870s to late 1930s. Galili engages with the work of early television scholars,

1 Doron Galili, *Seeing by Electricity: The Emergence of Television, 1878–1939* (Durham, NC: Duke University Press, 2020), 6–7 (emphasis in original).

including William Uricchio and Siegfried Zielinski, to break down previous contrasts between film as a medium of “capturing, storing, and reanimating scenes” for display and television as a medium of “scanning or dissecting” images for relay to a distant viewer.<sup>2</sup> Equally important, this book explores early television’s relationship to twentieth-century modernity, when political, economic, and technological changes accelerated alterations in social relations. Galili’s approach thus has important implications for the present day. Indeed, the cultural imaginary of early television, which engaged the implications of visual connectedness at a distance, resonates with the current Zoom era and the rise of socially distanced video chats, happy hours, and town halls. As Galili discusses, long before the formation of commercial television networks, moving image transmission shared with early cinema the ability to foster both connection to and disconnection from disparate groups and individuals.

Divided into two parts of three chapters each, *Seeing by Electricity* begins with television history’s “speculative era”: the late 1870s to the mid-1920s.<sup>3</sup> The first chapter, “Ancient Affiliates: The Nineteenth-Century Origins of Cinema and Television,” offers a fascinating account of how television, like film, was initially conceived in the context and “as an *extension* of other media.”<sup>4</sup> In this case, technicians, journalists, and science fiction writers described television as a visual version of the telegraph or telephone that could also conquer the barriers of space and time to create decentralized communication networks.<sup>5</sup> Building on Wolfgang Schivelbusch’s study of the effects of railway transportation and Mary Ann Doane’s discussion of cinema and modern time, Galili notes that television’s affiliation with the telegraph presented utopian (and dystopian) implications. Long before Marshall McLuhan’s “global village,” television’s disintegration of distance between peoples held the potential to reduce prejudice as much as to reinforce colonial ways of thinking.<sup>6</sup> Employing Carolyn Marvin’s concept of “media fantasies,” this chapter mines science fiction literature by Jules Verne, Edward Bellamy, and Mark Twain to note how early television was imagined as a way for future societies to eradicate difference by reinforcing connection, equality, and uniformity through the ability to see “*everything, everywhere, at all times.*”<sup>7</sup> Like conceptualizations of early cinema as engaging with the lived experience of modernity through its form as well as content, *Seeing by Electricity* argues persuasively that media fantasies of early television addressed the ambivalence of modern existence.<sup>8</sup>

2 Galili, 6.

3 Galili, 10.

4 Galili, 25 (emphasis in original).

5 Galili, 22–28.

6 Wolfgang Schivelbusch, *The Railway Journey: The Industrialization of Time and Space in the Nineteenth Century* (Berkeley: University of California Press, 1986), 35; Mary Ann Doane, *The Emergence of Cinematic Time: Modernity, Contingency, the Archive* (Cambridge, MA: Harvard University Press, 2002), 82; and Galili, *Seeing by Electricity*, 29–32. For more on the global village, see Marshall McLuhan, *Understanding Media: The Extensions of Man* (Cambridge, MA: MIT Press, 1994), 89–105.

7 Carolyn Marvin, *When Old Technologies Were New* (New York: Oxford University Press, 1988), 35; and Galili, *Seeing by Electricity*, 36, 39 (emphasis in original).

8 Galili, *Seeing by Electricity*, 47–48. For more on the connections between cinema

The next chapter, “Severed Eyeballs and Prolonged Optic Nerves: Television as Modern Prosthetic Vision,” excavates early television’s relationship to modernity in a careful consideration of technological discourse about moving image transmission as like “an eye that ‘sees’ by electricity.”<sup>9</sup> Galili argues that early television was conceived not as a technology distinct from the modern human body but rather as a type of detachable prosthesis, in which the electrified eye could travel places where the rest of the body could not.<sup>10</sup> In my view, this immersive quality of early moving image transmission offers much for contemporary considerations of virtual reality as an unbounded interactive viewing experience with a distinctive effect on the human body. Chapter 3 concludes this section by refusing a strict dichotomy between moving image transmission and recording, or television and cinema, in the period leading up to World War I; instead, it offers analyses of early cinema’s depictions of simultaneous moving image transmission. In films such as *Long Distance Wireless Photography* (Georges Méliès, 1908) and *Amour et science* (*Love and Science*, 1912), the new transmission technology initially leads to disaster and disruption but ultimately alleviates these effects through a demonstration of its affinity with cinema.

The second half of *Seeing by Electricity* moves from conceptions and fantasies of early television to realizations of the medium in its experimental period between World Wars I and II. One of the strengths of this section is its international focus, as Galili looks beyond the United States to the Soviet Union, Germany, and Italy for examples of how television took its shape. Chapter 4, “Cinema’s Radio Double: Hollywood Comes to Terms with Television,” reconsiders the beginnings of television—Charles Francis Jenkins’s patent application for the wireless transmission of images and the development of American television broadcasting—through its interactions with other media. In addition to situating early television within the context of radio broadcasting, Galili examines Hollywood’s interest in the new medium in ways that evoke today’s digital relocation of cinema away from the traditional movie theater.<sup>11</sup> *Seeing by Electricity* thus further defines both film and television as distinct viewing experiences rather than just specific forms of technology, which Galili explores through striking examples of films broadcast on television and filmic representations of television in this era, including the meta-televisual and meta-cinematic B movie *S.O.S. Tidal Wave* (John H. Auer, 1939).

The last two chapters unearth further confluences between early television and film in unexpected places. The fifth chapter reconsiders Soviet filmmaker Dziga Vertov’s canonical documentary, *Man with a Movie Camera* (1929), as an experiment in early television that could best represent the new Soviet order. As Galili discusses, Vertov viewed television as a new evolution of the moving image that aimed to “reveal aspects of everyday reality

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and modernity, see Tom Gunning, “Modernity and Cinema: A Culture of Shocks and Flows,” in *Cinema and Modernity*, ed. Murray Pomerance (New Brunswick, NJ: Rutgers University Press, 2006), 297–315.

9 Galili, *Seeing by Electricity*, 51.

10 Galili, 69–70.

11 Galili, 128–129.

that escape the naked eye.”<sup>12</sup> *Man with a Movie Camera* is often discussed as a case study for cinematic medium specificity, but in this chapter, Vertov’s film comes into view as an intermedial work that “simulates” television in its amalgamation of sound and image and its depiction of its own production and reception.<sup>13</sup> Such (re)thinking across media and national contexts also structures the book’s final chapter, which considers television’s emergence in the late 1920s and early 1930s as a factor in the classical film theories of André Bazin, Siegfried Kracauer, Walter Benjamin, Sergei Eisenstein, and Rudolf Arnheim. Arnheim in particular noted that the immersive and unmediated aspects of television could promote greater human understanding but also the potential for totalitarian conformity at the expense of moving images’ status as an art form.<sup>14</sup> As Galili persuasively argues, these film theorists’ engagement with television offers a rich archive of intermedial perspectives on the confluences between film and television that long predate the age of streaming.

Galili concludes with an evocative description of moving image transmission history “as a palindrome of sorts.” Whether one reads the history of moving image transmission forward or backward, the “relatively stable dominant mass media” in the center gives way to a “multiplicity of configurations” at either end.<sup>15</sup> This orientation allows for a comparison between the disparate media fantasies of television of the late nineteenth century and the splintered streaming mediascape of the early twenty-first without losing sight of either’s specific historical context. Deeply researched and thoroughly informed by theory, *Seeing by Electricity*’s discussion of media fantasy and reality as well as technological and textual examples unearths unexpected connections and offers exciting new pathways for thinking about the emergence of a new medium.

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12 Galili, 155.

13 Galili, 160–164.

14 Galili, 172–173.

15 Galili, 184.