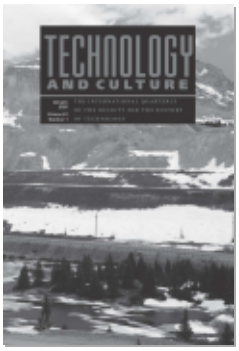
Sonic Writing: Technologies of Material, Symbolic and Signal Inscriptions by Thor Magnusson (review)



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contention" and the "official public" evolve in the age of social media? How can "counterpublics" be effectively mobilized? What is the agency of digital infrastructure in this process? Second, although the author demonstrates awareness of "alternative" approaches such as postcolonial thinking, the book remains anchored, as per the author's admission, to a Western perspective, with largely U.S. examples. Adopting a decolonial lens could bring into focus other cases studies and give more grounding to the useful concepts this excellent book put forward. On both accounts, however, these are not deliberate blind spots, but potential paths to take this important work to the next level, and see whether the concepts it launches stand the test of *other* empirical venues.

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Sonic Writing: Technologies of Material, Symbolic and Signal Inscriptions.

By Thor Magnusson. London: Bloomsbury, 2019. Pp. 304.
Paperback $34.95.

The evolution of music is inseparable from its relationship with technology. The actual materials of music such as pitch, dynamic behavior, and spectral development are determined by the physical construction of instruments and performance techniques. All traditional instruments are evolving, and the activities of composers, performers, and instrument makers constantly interact as instruments are modified to increase pitch and dynamic ranges or to homogenize timbres. The inevitable result of these changes is the transformation of every aspect of music.

The instrument as a social "fact" is frequently relegated to systems of classification based on methods of sound production—aerophones, chordophones, membranophones, etc. This satisfies the legitimate need for a taxonomy appropriate to musical instrument collections: the Hornbostel-Sachs system is the most obvious example. However, the active role instruments play in producing new musical languages is often overlooked. In *Sonic Writing*, Thor Magnusson reevaluates this imbalance in an intelligent, authoritative manner. He poses the question: how do instruments (broadly defined) contribute to all activities of music-making? The reader must accept what appears to be an idiosyncratic use of terms such as "writing" and "inscription" in the context of "contemporary digital technologies" (p. 6). "Inscribing" implies making a written mark on a surface; the term's usual language register suggests a formal, spoken statement transcribed into a more permanent form. How can this be applied to digital

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technologies? In a literal sense, computer programs are indeed written and read on printouts.

By using "writing" as a generalized term, Magnusson creates a compelling metaphor for the process of how sound as an ephemeral, invisible phenomenon is rendered into physical form. This metaphor is successfully sustained throughout the book. "Writing" thus includes not only notation as the symbolic representation of specifically musical sounds, but also the recording of sound and even the devices by which sounds are made and modified—in other words, instruments. Magnusson's discussion of instrumental sound sources is particularly perceptive. He locates instruments within the "material turn" in music studies, thereby embracing not only the acoustic properties of traditional instruments, but also the nexus of numerous practices that constitute music: composition, performance, dissemination, reception, etc. In order to do this, he refers to an impressive range of philosophical sources, including Aristotle, Plato, Heidegger, Stiegler, and Foucault. Consequently, instruments are investigated as "concretized music theory" (p. 5), as devices which not only formalize theory but which are dynamic creators of knowledge. Viewed in this way, the knowledge created by instruments clarifies many contemporary musical activities and also identifies new questions such as the nature of performance practices arising from digital, rather than analog, technology. Indeed, the accepted concept of "instrumental unity" is now challenged by the proliferation of innovative interfaces and mapping techniques. This does not lead inexorably to a dystopian musical future, however, and Magnusson continues to emphasize the importance of human gesture and that elusive, even mysterious, quality: expressivity. I confess I wanted to read a succinct definition of expressivity in *Sonic Writing*; there is no entry for this term in the index, though it is frequently alluded to. I know how I would approach a working definition—small modifications of pitch and rhythm in real time—and I wonder if this is consistent with the author's viewpoint. Perhaps it is necessary for readers to reach their own conclusions whilst simultaneously engaging with Magnusson's text?

My one slight criticism is the repetition of certain ideas, albeit key ones. I felt the point that theory is embedded within instruments and technology was made several times. Magnusson's prose style guides the reader skillfully through complex ideas, but some judicious editing might have produced a more compact text is some places. Repeating key concepts may be a necessary accommodation to the fact that many students will read selected chapters instead of the book in its entirety, so this is a difficult balance to strike.

In conclusion, we don't know where making music with digital technology will take us. The final chapter is optimistic and left me with renewed hope for musicians and their engagement with sound and society. As the author claims, new instruments are starting points for a "journey

into the unknown" (p. 49). Thor Magnusson, with his insights based on a profound knowledge of both theory and practice, provides us with as good a map as we are likely to get.

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Bright Signals: A History of Color Television.

By Susan Murray. Durham: Duke University Press, 2018.
Pp. 320. Paperback $27.95.

The contours of Western culture have been shaped by countless attempts to isolate, harness, and control color as a stable object of inquiry. Such efforts inevitably fail, however, because color is always on the move, shifting and escaping the rules that attempt to master and contain it. Such is its nature. Colors fade, oxidize, and change based on their environment. To quote Bauhaus colorist Josef Albers, "in visual perception a color is almost never seen as it really is, as it physically is. This fact makes color the most relative medium in art" (Albers, *Interaction of Color* [New Haven: Yale University Press, 2013], p. 3). As a shape-shifting apparition, color thus becomes one of the most challenging topics to address in any history of standardization. And yet, this is precisely accomplished in Susan Murray's *Bright Signals: A History of Color Television*.

The book charts the path from early color television experimentation and innovation through its acclamation as a televisual norm in the 1960s and 1970s. Experimentation begins in the 1920s in London, with John Logie Baird's demonstration of a 120-line mechanical system with "rotating Nipkow disc," followed by a series of problematic live broadcast tests and calibrations for color, through the politics of color advertising and shows suitable for network programming. The book's inquiry concludes in the 1970s, marking the transitions to digital television. Upstaged by a new age of digital media, color was called into question once again, no longer able to retain the title as the "most significant technological development in the medium's history" (p. 256). Murray illustrates the ways in which these developments came about, from the struggles between executives and technicians, advertisers, and psychologists, to the conception of these standards. Together, these struggles eventually gave a radical new face to televisual viewing. Color television, she writes, "was imagined and sold as a new way of seeing" (p. 4). A noteworthy example is the way color television helped the medical profession by introducing a new form of depth "seeing" that greatly aided in medical training (p. 5). Other tie-ins connect color television to a broader culture of color film, postwar consumerism, colorful