Sonic writing: technologies of material, symbolic, and signal inscriptions

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BOOK REVIEW


Sonic Writing presents a trove of ideas and perspectives on music and technology, spanning from speculative human pre-history towards the complex present. Over 304 pages, music technology researcher, teacher and artist Thor Magnusson sets out the argument that the contemporary ‘digital’ music technology landscape and the cultures it supports are more relatable to bygone eras than we might be led to believe. In reviewing history and making connections between past and present musical practices, Magnusson’s book could be summarised by the adage that history does not repeat itself, but it often rhymes. Sonic Writing’s rhythmic take on music history enables the author to highlight unique aspects of computational multimedia and how, like all previous technologies in the book’s view, it ‘conditions’ music practice in ways which are imminently unfolding. The book goes on to argue that digital writing is dissolving staid boundaries between composer, performer and luthier via new epistemic tools with fluidic materialities. As a result, notation, musicology, and organology are facing old and new challenges which, as Magnusson suggests, require new pedagogical perspectives in order to flourish. To capture these changes, Sonic Writing offers new terminology – ergodynamics and musical organics – to describe the longitudinal migratory patterns of music practice across technological epochs. Combining ideas from media theory, semiotics, materiality, science and technology studies (STS) and philosophy, Sonic Writing’s treatise on music technology is both coherent and stimulating.

Essential to Sonic Writing is its four parts rooted in ‘types of inscriptions’, working from the abstract Material and Symbolic inscriptions to concrete Signal inscriptions, and ending with Digital Writing. Each part consists of four chapters which chart the co-evolution of musical practices alongside technology, ending with a reframing of the present against its historical backdrop. Material Inscriptions considers anything from the bone flute to the drum machine, insisting that all musical instruments have ideological, epistemic, and ontological dimensions. Symbolic Inscriptions considers written musical notation before and after the printing press and then into the computational era, suggesting that musical practice has pivoted in the last centuries around the favourability of the work-concept, which is currently in a phase of rejection. Signal Inscriptions posits the mechanical and direct notation of sound as an opposite to symbolic inscriptions, which are by contrast meant to be interpreted by human readers. Digital Writing seeks to unravel how the issues of material, symbolic and signal inscriptions manifest in computational musical media. The final Conclusion part addresses the direction of future music technologies including those based on artificial intelligence, and their possible impact on practice and education.

Scattered throughout Sonic Writing are curious and inviting references and figures – of manuscripts, illustrations, graphical scores, and new inventions – which often show that ideas conceived as modern have in fact been echoing throughout history. This includes ‘non-linear rule-based notational pieces’ from 1535, where ‘the melodic parts were scored onto the squares of a chess board, and the music would evolve according to the chess play’ (81). There are plenty of such references in Sonic Writing, and while a reader of one or more of the book’s domains will find some to be familiar, the continual leaping across domains allows a broader picture of music technology and culture to emerge. For example, a section
reviewing new instruments (multidimensional gestural controllers, sound parameter mapping engines and electromagnetically augmented pianos) is paired a few pages later with a review of instruments as philosophical tools of enquiry in Renaissance-era Europe, after which similarities between these apparently different notions of instrument are drawn.

The brevity of Sonic Writing means that it inevitably strides with a giant’s gait over detailed landscapes, and this may leave many question marks for readers who have yet to cover the same ground in smaller steps, but fortunately the book also serves up a rich bibliography for curious minds. Readers may also need to digest slowly sections involving Magnusson’s literary inventions, or even venture into their original publications for a more complete explanation. The first half of the book is full of thoughtful commentary and reflection, whereas later sections covering more modern developments are sometimes more observational than interpretive. The dualistic challenge faced by the author is clear though, as his unique perspective requires its own historical narrative to be established in order for the critique to follow. Perhaps we can look forward to the author dealing with present and future timelines with matched incision in upcoming books.

Sonic Writing will be useful to any musician, technologist, researcher, or other multi-disciplinarian seeking a comprehensive yet concise treatment of music technology. Students and entrepreneurs in particular can test their beliefs and predictions against the book’s final chapters on the impact of artificial intelligence on music education, practice, culture, and industry. In Sonic Writing, Magnusson founds his position on distinctions between acoustic, electric and digital technological eras, and between material, symbolic, and signal forms of writing. Intended as functional rather than polemic distinctions, these choices will inevitably dissatisfy some readers, perhaps in particular those wary of Greco-centric perspectives. The reward of Sonic Writing’s generalising approach, however, is a trusty pocket-sized map of cogent landmarks for navigating the territory of music technology. In a conceptual twist that characterises the book’s style well, Sonic Writing concludes by proposing that music itself is the ultimate instrument through which humanity introspects on itself and its relationships with machines. Magnusson certainly introspects deeply on those subjects, and in all likelihood Sonic Writing will engender introspections, responses and inventions from its readers that will also be interesting to trace.