

Rethinking Music Through Science and Technology Studies

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This book comprises a collection of papers which seek to explore the possibility of applying Science and Technology Studies (STS) to the study of music; investigations generated by scholars from across the broad span of STS and bringing personal and scholarly expertises to a broad range of relevant substantive interests. The volume is cohered by an editorial team whose experience collectively represents the two major themes of the collection (STS and music) evenly, and who, rather than situate the volume against other disciplinary takes on music that exist elsewhere (media studies, history, anthropology, etc.), explicitly aim to *begin* with the theories and approaches of STS to see what might be said in this space. This review will, then, begin with a descriptive account of some of the contributions made by authors in this volume, paying regard to just how these have been organised so as to evidence the relevance of STS to the study of music, and from there come back to reflect on the ways in which this might both assist and frustrate the editors' intentions.

To do this work, the editors have thoughtfully organised the book into discrete Parts reflecting some of the different ways in which the link between the field and its hitherto under-explored (in STS, at least) subject might be manifest. Part One, on "Histories", includes chapters on the development of a standard shared concert pitch in France and Western Europe beginning in the 19th century, and on the DIY development of recording and amplification technologies to support new forms of musical performance and recording in the first half of the 20th century. Part Two narrows the field of view to a more singular focus: "Instruments". This includes chapters covering different forms of audio synthesiser; early Moog instruments, the Fairlight CMI sampler, and the Eurorack amongst them. Part Three explores "Technologies" in a largely conceptual way, including chapters on Hatsune Miku as a fabricated and fictional celebrity manifest through vocaloid technologies (i.e., computer-generated vocals) around which musical communities have coalesced in different ways. And finally, Part Four deals with "Practices", again primarily conceptual in its approach, with chapters focusing in part on music consumption practices (e.g., via smartphones and streaming services) as well as practices of designing and delivering music in artful ways (e.g., as "net art").

The book situates itself most directly as an example of Science and Technology Studies – no surprise, given the title and stated intentions of the book's editors – as a broad field which

provides a set of structuring tools with which the individual pieces of research represented can lock on to their phenomena. The titles of the various Parts are emblematic of common methodological approaches and topical interests that a wealth of Science and Technology Studies scholars have pursued since the fields' inception. In terms of the more topical context within which the book is situated (i.e., studies of music) there are far fewer precedents to grip onto, barring a (comparatively) small selection of direct ancestors (e.g., Trevor Pinch's programme of work around the Moog synthesiser, of which Pinch and Trocco (2002) stands as an exemplar) and some more indirect applications of STS-relevant lines of enquiry to music (e.g., Brooker and Sharrock 2016; de la Fuente 2007; O'Hara and Brown 2006; Tolmie, Benford and Rouncefield 2013). This, the novel contribution that this book seeks to make is important – rather than rely on singular studies exploring quite niche interests and bespoke approaches, the value here is in *collectively* carving out space for STS to embrace music as a potential area of interest. The editors and individual contributors achieve this by virtue of the range of interests that the book heralds, both in terms of the aspects of music covered but also the different ensembles of STS schools of thought that are represented.

In terms of its strengths and weaknesses, the book intends to show the breadth and diversity of STS approaches as applied to music, by way of a series of scholarly demonstrations that the languages of STS can be brought to bear on a whole range of topics hitherto uncovered in the field. But what may actually be most valuable about this volume is not another outing for various existing STS *approaches and debates*, but rather the breadth and diversity of musical *topics* that are historicised and located in society as collective productions. Put differently, the question of whether or not STS could be applied to music was already settled prior to putting any pen to paper – of course it can, since this is an area where there are untold histories to be told, and glossed-over relationships and practices to be foregrounded. The real question, then, is *why might we bother* applying STS to music? And *what do we stand to learn* in doing so? This collection provides plenty of demonstrations that would positively and strongly answer those questions, but these are less to be located in the material that speaks to internal debates/turns within STS and more in the material that tackles music as a topic head-on. For instance, Mooney and Pinch's critique of the "great man" model of musical technology innovation, which retells the history of David Van Koevering's involvement in recruiting, advertising, demonstrating and selling early Moog synthesisers to live performers (where it is typically those live performers and Robert Moog himself that feature centrally in narratives):

[creative] imagination is often cast by composers and musicologists as the origin of new developments in music such as instruments, genres, or even technological regimes... By promulgating the notion that musical futures are somehow "dreamed up" by the visionary composer, musician, or engineer, such accounts detach the imagination from developments in the sociomaterial world. (113)

Similar in approach, Ribac's chapter unpicks a commonly-received musical myth that punk music is to be credited with a DIY attitude to musical innovation in response to the staid musical "dinosaurs" of the past. This is deflated by Ribac's argument that punk's DIY attitude was continuous with the past rather than a revolutionary shift away from it – for

instance, famed crooner Bing Crosby was foundational to similar amateur experimentation with microphone and amplification equipment to break with the “dinosaur” styles of *his* past (e.g., Vaudeville) – and this helps show how STS can be a vital space within which to engage with musical technology innovation differently:

ever since sound reproduction and broadcasting tools have been accessible, amateurs have been using them to discover music, learn to play an instrument, sing, compose, come together, and invent new worlds together. While every generation invents its own specific ways, the fact remains that forms taken by learning, socialization, and deployment in the public space are quite similar, including in countries that have different cultures... A given technology... can thus give rise to uses that had not been envisaged by its designers or the companies that marketed it... If amateurs like Crosby or the punks invented new uses for technologies, it is precisely because another path is always possible, and probably also because not being familiar with an object can allow you to imagine something different. (60)

The stories told in these chapters and others stand as insightful interventions that bring oft-overlooked stories to the fore; an objective that represents STS at its best. Yet, the organisation of these chapters into discrete parts that bracket out histories, instruments, technologies and practices from one another perhaps does more harm than good. Such an approach to taxonomising by the extant (theoretical, conceptual) categories of STS research seems to direct the gaze of the book inward to STS’ internal disciplinary wranglings, and the material in this volume that speaks to these field-internal issues seemingly does little to advance those debates excepting to note that they are also applicable to studies of music as well as science and technology. With the latter removed, the former still presents an interesting, valuable and exciting collection on its own merits. Hence, for STS practitioners and students who are forming their own interests in exploring music in their own ways, this book will no doubt be a vital touchpoint; STS as it stood already provides us with our three chords, and this volume demonstrates that now is the time to form bands.

References

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