

Bayle in the narrow sense, but also as a contribution to a methodological and theory-oriented discussion of acousmatic music. In an almost provocative way its heterogeneity serves – fruitfully – to encourage further discussion, demonstrating several perspectives on music coming solely from loudspeakers. The character of the publication means that it can be accessed from several perspectives and it therefore offers a lot of material to an open-minded reader.

All of this makes this volume an interesting educational resource for electroacoustic studies in general, although it is of course at first glance a book to honour François Bayle as one of the figureheads of contemporary French music.

In particular, the DVD accompanying the book publication provides extremely illustrative sound material.

Of course the linguistic mix of French, German and English deserves note. Some articles are translated into one of the other languages, but not all – and more particularly the presentation of the material is a challenge for the reader. Still, the book represents an impressive omnibus volume for future research on the analysis of electroacoustic music as well as on the sound world of François Bayle.

Finally it is worthy of note as a special merit of the publication that the wide and multilingual discussions of the conferences and seminars are transcribed in their plurality and thus offer a good deal of material pertinent to lacunae in research on the reception of acousmatic music.

Tatjana Böhme-Mehner
Tatjana.Mehner@t-online.de

REFERENCE

Ina-GRM (ed.) 2003. *François Bayle: Portraits polychromes*. Paris: Michel de Maule.

**Karmen Franinovic and Stefania Serafin (eds.), *Sonic Interaction Design*. Cambridge, MA: The MIT Press, 2013. ISBN: 978-0-262-01868-5
doi:10.1017/S1355771813000460**

The main theme of this publication is to highlight how sound can be an active medium within design, and its implications upon interactivity. It presents a robust argument of how sound can or should be more than functional, representational or signalling within design, and draws together research findings from a broad range of scholars, artists and designers in the field of SID (sonic interaction design) alongside electronic music composers and cognitive science theorists. As such, this is a book aimed at interactivity research and designers, and *Sonic Interaction Design* will, for most of the readership of *Organised*

Sound, be of some interest as peripheral reference. However, for those who seek to understand this emerging cross-disciplinary field, this book will be of great benefit, bringing a broad range of knowledge from a wide range of perspectives.

The book focuses on both theoretical approaches to most of the major themes within SID, and presents alongside these case studies of exemplary practice and system design such as mobile music, sensorimotor learning, rehabilitation and gaming. The chapters are organised in two sections: the first is composed of longer chapters presenting key themes and theoretical frameworks, with the second section presenting recent practice, design and system research as case studies. Chapter 1 offers an historical perspective of how sound-producing objects have been applied as sources of information, or as noise control through such innovations as acoustic cocooning. Although many areas here mirror the discourse with similar territories in electroacoustic music, the chapter's multi-disciplinary approach does offer an interesting perspective. While this might not deliver significantly new insights, it does present the discourse in a slightly different context.

Chapter 2 deals with the use of interactive sound in art and design, with a particular focus on the social and cultural aspects. Again, there is nothing overtly new here that cannot be read in Dyson (2009) or Kahn (2001), but it does discuss the 'multisensory experience' (p. 39) from a different perspective, which can offer some interesting insights and novel applications of interactive sound.

Chapter 3 presents the most valuable insights to *Organised Sound* in its discussions around the tactile and kinaesthetic aspects of interactivity and sound. Of interest here is the cross-disciplinary strands that come together to deal with the fluid issue of subjectivity. This chapter treads this quicksand well, and could be a useful reference point for the *Organised Sound* reader who wishes to follow a similar path.

Chapters 4 and 5 deal with pedagogy and auditory cognition, respectively. Chapter 4 presents some valuable insights, methods and examples of pedagogic approaches to enhancing the learning of students dealing with sound and interactivity. Chapter 5, whilst presenting a new framework with which to understand the processes in auditory cognition, doesn't add anything significant to the existing tools of, for example, spectromorphology. However, the taxonomy on p. 152 presents a range of methods – including psychophysical, dissimilarity, semantic and multisensory – that may indicate new avenues of analysis for the *Organised Sound* reader. It is the final section of this chapter on motion capture that indicates some enticing avenues of research, especially for the *Organised Sound* researcher who is dealing with the performer's cognition within human-computer interaction.

The second part of the book presents various examples of systems, products, designs and research projects that deal with different aspect of SID. Thirteen in total are presented, each linking with a theoretical proposition from section 1. The first case studies offer insights into the relationship between sound and touch, and relate to chapter 3. The first example here is Essl and O'Modhrain's *Pebblebox*, a box filled with pebbles and a microphone linked to a granular synthesiser. Of interest in this case study is that Essl and O'Modhrain are clearly dealing with instrumental gesture and performer's cognition, but related to the SID community via an interface model that can 'extend beyond the realm of musical instrument design to encompass a whole class of interfaces where coupling of sound and touch is required' (p. 210). There are others too, in this first section, that draw upon research into new interfaces for musical expression and audio engineering, with many *Organised Sound* articles cited. I mention this to highlight the potentially rich cross-disciplinary research collaborations emerging between *Organised Sound* disciplines and SID.

The proceeding case studies are situated in areas more adjacent, and complementary, to the field of electroacoustic music. Monache, Polottis and Rocchesso's *Gamelunch* offers a practical experiment dealing with sound identity and initial perceptions of manipulated objects. Barrass's *SoundCouch* presents qualitative responses from users of SID as an affection diagram that can be a tool used within future design processes. Rinott's *SonicTexting* presents a hardware solution for a 'gesture based text entry' that utilises tactile input and auditory output, in an attempt to create an 'engaging interaction that would be challenging and rewarding to master' (p. 245). Tanaka, Bau and Mackay discuss the *A20: Interactive Instrument Technique for Sonic Design Exploration* from the perspective of user-centred design, expanding on the breadth of discourse already disseminated from this

project within the field of new instruments for musical expression.

The following case studies discuss novel approaches to sonification using high-density sonification techniques, adding important insights to the literature in 'non-visual focus + context systems' (p. 304). Another discusses the use of sound in virtual reality and mixed reality, and draws some valuable conclusions on the impact of sound and surround-sound synthesis, particularly the role of spatial sound in VR simulation alongside visual and haptic feedback, while the final case studies examine the 'deep relationship' (p. xii) between the rhythmic iteration within human-machine interaction and the workshop-based methods to aid in the investigation of artefacts utilising sound interactivity.

As a whole, the theoretical frameworks and conceptual propositions of the first half of the book, with the second-half case studies, reinforce the cogency of this emerging cross-disciplinary field. I would agree with the claim in the introduction that this book 'proposes a fresh perspective on interactive sound as a situated and multisensory experience' (p. xii). However, the general *Organised Sound* readership will be familiar with much that is discussed here, or have been introduced to the case studies at, say, NIME or ICMC conferences. But it is this multi-disciplinary approach that offers valuable insights to those readers interested in SID, or any of its subsidiary forms of interactivity.

Craig Vear
cvear@dmu.ac.uk

REFERENCES

- Dyson, F. 2009. *Sounding New Media: Immersion and Embodiment in the Arts and Culture*. Berkeley: University of California Press.
- Kahn, D. 2001. *Noise Water Meat: A History of Sound in the Arts*. Cambridge, MA: The MIT Press.