EDITORIAL

The call for an *Organised Sound* issue on 'organising electroacoustic music' brought forth an eclectic, wide-ranging set of interpretations of the phrase. In some senses the theme for this issue might be interpreted as a tautology. After all, if electroacoustic music is primarily what Leigh Landy has termed 'sound-based music', and *Organised Sound* is what it says on the can, then every issue of the journal is in part potentially on this topic. Having come up with the idea (a follow-up to the theme for the 2007 Conference of The Electroacoustic Music Studies (EMS) Network in Leicester, *The languages of electroacoustic music*) I had misgivings in the days leading up to the deadline that the theme was too unfocused.

'How' something is put together can be interpreted in so many ways. The relationship of whole to parts might be descriptive or explanatory. Aristotle reduced the nature of causality to four components – material, formal, efficient and final. What *causes* the musical phenomenon has all these components and more. To begin with, music is caused by its sonic materials, the 'stuff' in the fluid around us which we find hard to pin down – witness the intensity of discussion around Jean-Jacques Nattiez's notion of 'the trace' of the signal (Nattiez 1990, which was roundly criticised, for example in Delalande 2001), and whether it could possibly be described as 'neutral'! Furthermore music is caused by how this signal *changes* – its morphological, formal properties which give it character – the myriad of possible *different sounds*, their combinations and relationships. These first two of Aristotle's notions together create the essentially transcendental and ephemeral phenomenon of music elevated by Kant and Schopenhauer to a status equal to human thought (and will) itself. But that seems to bracket out the most important of the causes of music – *who* or *what* does the making? Music is also caused by *that which makes* (and takes decisions concerning) the sonic material. This was assumed to be of human agency until recently – 'the music of the spheres' aside, which might not have been music (or even sound) as we discuss it here. Such causes now extend to include a wider soundscape, including geological, atmospheric, cosmic and human-constructed phenomena. Some of these act as secondary agencies, translated through sonification, mapping, algorithmic formalisation, metaphoric transcription (call

it what you will) to become the music. But in this broadening of the possible sources of action we should not loose sight of the *essentially human listener* – who is of course also a participant. Perhaps some music has always been addressed to non-human entities – deities, 'nature', the environment, 'the cosmos' – but I will exclude for the moment the philosophical possibility (post-Cage) of a music without human participants in production or reception. 'How does the music affect us?' is not a cause in itself but relates to Aristotle's 'final cause' – why does the music exist? For what purpose? It may be worship, celebration, research, an unexplained aesthetic drive or Darwinian imperative for tribal reinforcement (or many other things from the sublime to the ridiculous). *Organisation* can relate to any (or all) of these – and a lot else besides.

As the proposals and finally the scripts came in relationships began to form. Any journal issue has such *emergent* properties. I do not believe any author had knowledge of any other author's intentions, yet aspects of a shifting *Zeitgeist* became clear, new thoughtlines became manifest. Points of contact and contrast suggest (we hope) future work to clarify, extend and innovate, and hopefully to explain.

Lasse Thoresen and Andreas Hedman continue their ongoing project of analysis based on a developing representation system allied to a clearly defined vocabulary, descriptive of the *behaviours* of the sound structures. Their first contribution to *Organised Sound* (issue 12(2)) had introduced Thoresen's adaptation of Schaeffer's *typomorphology* – most importantly his rethinking of the *TARTYP* (*Tableau récapitulatif de la typologie*) diagram with additional insights from Denis Smalley and Michel Chion. This was extensively tested in the second contribution (to issue 14(3)), a 'spectromorphological analysis' of Åke Parmerud's acousmatic work *Les objets obscurs*. Their vocabulary was post-Schaefferian ('sound objects, characters and values') and applied rigorously to the transcriptions. In this current issue they have moved a stage further forward still. The title is 'Form-building patterns and metaphorical meaning'. The authors start with reference to the same Parmerud work referred to above but shift focus to the *formal functions* of the structures, crossing the rubicon to draw metaphorical insights into the interpretation of the work – its meaning. Mike Frengel's

contribution in some senses extends Denis Smalley's *indicative fields* originally designed for acousmatic sound behaviours into the world of 'mixed music' – that is where an instrument (usually conventional acoustic in this case) is combined with electroacoustic sound. This has rarely been examined before in the literature and Frengel concentrates on the *relationship* of the two sonic world (which he calls 'live' and 'non-live'). How something was created is not his concern here, but the many possible relations of the 'real and rooted' performer's sound and this infinitely wide electroacoustic universe are given a voice in a rich (and sometimes complex) multidimensional vocabulary.

This relates to James Andean's contribution, which opens up the field of psychology of perception and interpretation to electroacoustic acousmatic works. He suggests that the duality inherent in the material – between what he terms 'musical' and 'narrative' layers – is not as previously thought an 'either/or' (with a sometimes vain attempt to 'bracket out' the cause of a sound), but a 'both'. He applies the work of David Huron to this apparent paradox in revealing the dual nature of aspects of our interpretation and its interplay with memory and recall. It is merely the focus which shifts – not the mechanism. There are always two sides to the interpretative coin. Katharine Norman's interpretation of 'real world' soundscape goes way beyond the first stage recognition of 'what the sound is and what caused it'. She presents us with a coming together of two subjectivities – the 'autoethnography' of the author and the individual memories and experiences of the listener. This includes, of course, repeated listening where we may never regain the characteristics of a 'first time' – excitement and anticipation, but also bemusement and misunderstanding perhaps. Norman uses herself as one such subject (as she has done in a series of unique contributions to the literature since the late 1990s) and takes us through a revealing sequence of music examples, unravelling the vast variety of modes of address to us as individuals and our personal responses. The coming together of ecological approaches and semiotics is potentially a rich undertaking. Adam Basanta's article examines 'syntax as sign', furthermore as related to an ecological model where sign *is defined by syntax*. These he exemplifies through works by (amongst others) Damián Keller, Denis Smalley and Natasha Barrett which overtly refer to 'the way the soundworld behaves' (its sound syntax) rather than simply 'the way the world sounds'. This leads, he argues, to its signification in the world – and specifically the musical world.

Matt Rogalsky's doctoral research was on the work of David Tudor, whom he continues to champion. His article has a simple aim, clearly expressed and accomplished. He examines Cage's famous dictum of music 'imitating nature in her manner of operation' beyond its now clichéd interpretation as both a reason and a justification for chance (and indeterminate) operations. In relating Cage, Tudor and Alvin Lucier's practice through the interpretative mirror of 'nature', he gives each composer an individual voice (thus bringing Tudor out from the shadow of his great friend and colleague), but also succeeds in imparting a collective (particularly American) flavour to this organisational *principle* – and one which can surely be extended to other composers. Tom Davis describes a relatively recent form of organisational principle – the idea of complexity as an *emergent* property of a process. We cannot predict the final details of a swarm (for example) from the simple element-to-element generative algorithm which is at its heart. Musical structures may be so generated, too. We may be able to explain 'after the event' but cannot predict the behaviour, neither the instantaneous nor the overall trajectory. This he illustrates with examples from an installation work of his own, placing it in a wider context of ideas of such complex behaviours.

Roger Dean and Freya Bailes address ideas of music cognition through directly measurable sound characteristics. The clue to understanding the way composers and improvisers (of which Roger is a leading practical exponent through his group AustraLysis) really work is to examine the characteristics of the sound as actually produced. Humans act through a range of conscious and unconscious procedures. The authors focus on the creation of a 'computational analysis of temporal patterns of acoustic intensity' – the 'rise/fall' profiles at several levels within the musical flow, as evidenced in a wide range of electroacoustic works. This is analysed from a cognitive point of view, suggesting its influence on listener attention and arousal patterns. Their conclusions suggest interesting differences with the instrumental tradition. The only article to address the 'real time' of *live human* performance (Davis is concerned with real-time *systems*) is that from Arne Eigenfeldt and Philippe Pasquier. Of course there is a substantial literature on (so-called) improvisation – and some practitioners do not like the term, from Indian classical performers to Cage. The latter of course did not want to let his personal intention or memory influence his action, so we leave him aside for the moment. We must ask how performers can exercise informed choice in a computer-based real-time environment when they have a vast 'vocabulary' of options well beyond what can easily be held in accessible (human) memory. The authors harness the computer's power to represent degrees of similarity and difference of timbral sound type. On the fly we only have the 'time of a glance' to assess alternatives and choose an option. This article pioneers an important topic: let's call it 'machine informed real-time

choice'. Human history has been one of off-loading memory to external support, and how to search and find, hence represent to the user, becomes ever more important. Perhaps visual information is not the only way …

As the taxonomies of the eighteenth century paved the way for Darwin so we scarcely know how to classify the extended and experimental instruments created in recent decades, especially since the 1960s. Taking his inspiration from the work of Hugh Davies, Bill Vine argues for a coherent approach to the preservation of instrument building and performance experience, and its contribution to the development of ecologies and ontologies of the instrument. Not all such instruments can be preserved and 'housed' literally, so we need to develop a strategy for conserving what we can of plans and outcomes – whether deemed successful or not at the time.

It is clear that elements of this issue also 'feed forward' to subsequent volumes, still planned and in gestation. Forthcoming issues on the ideas of Denis Smalley and 'sound ecologies', for example, clearly have 'pre-echoes' here. As *Organised Sound* moves forward soon to conclude its fifteenth year these anticipations and reflections form a reverberant field of ideas – but one which grows rather than decays!

Simon Emmerson
s.emmerson@dmu.ac.uk

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