EDITORIAL

The main theme of this issue of *Organised Sound* is algorithmic composition, one which we have featured before, and yet the flavour of the current issue is very different. It perhaps says something of the richness and variety of the topic that it can elicit such different responses. Perhaps many of us are still not clear exactly what algorithmic composition is, and the vagueness of the definition itself contributes to a broad range of responses.

However defined, there is one thing that we can surely all agree upon: algorithmic composition is a product of the computer age. The computer is necessary for holding and manipulating possibly vast amounts of numerical data that are the *prima materia* of the algorithmic process. The exact nature of the data, what it represents and the interrelationships of the types of data – particularly with regard to the hierarchies within the data structures – are perhaps what most distinguishes one kind of algorithmic idea from another. Above all, the originator of the idea (dare we say 'composer'?) needs to shape the evolving algorithmic process through time – as ever, a nontrivial task.

There are those who may take a narrow view – that the essence of algorithmic composition is in the nature of the algorithms themselves. Once we have identified the evolving algorithmic process, irrespective of the musical significance of the data being manipulated, little more remains to be said on the matter. To a composer, this can only be the beginning of the significance of what is being expressed. Above all, composers are practical people. To regard the central aspect of compositional thought as essentially mechanical is anathema to them. The composition

comes in the way that the hierarchies of interrelationship are expressed, rather than in the algorithms *per se*.

Luckily, our contributors share this view-they essentially regard music as a practical matter, and put forward ideas for algorithmic composition which have a basis in the realities of music making. Frank Pecquet considers the process of developing the algorithmic application from its conception, as a mental model. Nick Fells writes on three of his works for live performance which nevertheless incorporate algorithmic ideas: Kendhang, Or and Vug. Shlomo Dubnov writes about some algorithmic techniques based on manipulation of pre-existing musical work, and illustrates the techniques amusingly with analogies drawn from the literary world. The next contribution, Palatal Sound by Michael Edgerton, is the one article outside our main theme for the issue. It is, nevertheless, a valuable contribution to our understanding of vocal articulation and will be a helpful reference article for composers interested in exploring compositional techniques for the voice.

The final four articles represent a departure for *Organised Sound*: they are based on papers which were originally presented at the 1999 Brazilian Symposium on Computer Music, and are included here with the agreement of the authors and by arrangement with the Conference Organiser, Eduardo Miranda. All have an algorithmic dimension. The first discusses an environment for polymodal music; the next presents a chord prediction model developed at the University of Pernambuco. The last two articles discuss employing genetic algorithms for compositional purposes, an approach that we feel has yet to be developed to its full potential.