Introducing the ElectroAcoustic Resource Site (EARS)

Leigh Landy and Simon Atkinson

Music, Technology and Innovation Research Group, De Montfort University, Leicester UK
email: llandy@dmu.ac.uk, satkinson@dmu.ac.uk

Abstract

The ElectroAcoustic Resource Site (EARS) project has been established to provide resources for those wishing to conduct research in the area of electroacoustic music studies. EARS will develop in the form of a structured Internet portal supported by extensive bibliographical tools. To aid the greater understanding of the opportunities offered by these radical forms of sound organisation, as well as their cultural impact, the project will cite (or link directly to) texts, titles, abstracts, images, audio and audio-visual files, and other relevant formats. During the first phase of its development, a glossary and accompanying subject index have been prepared. Both glossary and index are dynamic and will be regularly updated and refined in the future. Commencing this year, the second phase will involve the development of the site's bibliographical resources, searchable by subject area using the EARS index. For each entry, a short abstract will be offered, further assisting the user in finding and choosing relevant sources. In this way, staying in touch with current, past and evolving scholarship within electroacoustic music studies will become much easier. Those working within the community will be much more able to communicate and stay up to date with relevant developments. The EARS project is co-ordinated by an international consortium and can be found at: http://www.mti.dmu.ac.uk/EARS.

1   Introduction

Despite the fact that electroacoustic music represents a radical departure, perhaps even paradigm shift from vocal/instrumental traditions, as well as being a massive growth area in the arts, there has been a relative lack of scholarly research to support its wide-scale understanding. Historical surveys are relatively numerous, technological publications can be found by the thousand. It is the discussion of the music, its theoretical bases and social impact issues, that have seen too little investigation.

The landscape of electroacoustic music studies is indeed quite broad and scholarship has investigated a number of issues along that horizon. What has been lacking, at least in our view, are two things: the search for cohesion and, perhaps more importantly, attempts to create foundational level theories about the music. There seem to be little villages and small towns with few roads tying these together. Furthermore the inhabitants of these towns and villages all tend to speak in their own specialist dialects, avoiding the use of a common language, a language that might be comprehensible to non-specialists.

Landy complained about this state of affairs in his article, "Reviewing the Musicology of Electroacoustic Music".[1] In this article several areas for further study are presented alongside ideas for the creation of greater cohesion of research. This list has served as a basis for the index of the ElectroAcoustic Resource Site (EARS)[2] described in detail below.

2   EARS: Its Point of Departure

The EARS project is devised to contribute to greater cohesion in electroacoustic music studies, in particular those studies focused on the theoretical understanding of the music and its social impact as opposed to the technological means of the music's production. It will consist, when fully operational, of a glossary, an index (the basis of the EARS search engine) and a large and growing number of links to electroacoustic music studies resources in the form of texts and other relevant media. Abstract information will be made available to users to allow them the opportunity to try to acquire the information independently. This will be particularly useful in cases where the site cannot make a direct link to the data concerned (e.g., due to copyright concerns), The project will strive to conceive of electroacoustic music in its widest possible sense, acknowledge the interdisciplinary nature of the field, and aspire to the greatest possible breadth and inclusiveness.

We have found nothing of its kind during the feasibility study that took place before commencing the first phase, which concentrated on the EARS glossary and index. Sites dealing with specific issues were found, again, in particular on the technology side. (A noteworthy example of this kind of site is from the University of Quebec in Montreal,

---

[1] *Organised Sound,* 4/1, 1999, 61–70

[2] The EARS site can be found at:
http://www.mti.dmu.ac.uk/EARS.

"Dictionnaire des arts médiatiques",[3] This has given us the animus to take on such a broad and ambitious project.

3   EARS: The Glossary and the Index

After preliminary discussions investigating how best to facilitate access to relevant resources, it became clear that some means of structuring relationships between discrete relevant terms would provide an excellent starting point for the basis of the 'vertical portal' approach to the site. To this end, the Glossary and associated Subject Index were created. It was also realised during early stages of work that although various glossaries, encyclopedias and lexicons are in existence, there was not one readily available that offered theoretical, aesthetics and contextual terms in addition to more technical fare. The current glossary represents a first iteration of the authors' intentions, the project taking an ongoing and dynamic approach. This aspect of the project currently comprises of 360 defined, 165 referred terms and 375 keywords, some of which appear more than once. Where appropriate, existing work in the field has been drawn upon, e.g. descriptions of acoustics and acoustic ecology terms have been condensed from *Handbook for Acoustic Ecology*[4] by Barry Truax, Visiting Professor at De Montfort University. Where a term is strongly associated with a particular author, we have endeavored to identify a definition by the person in question (for example, Denis Smalley and Spectromorphology). Landy and Atkinson have provided original definitions in many other instances. A number of terms require only succinct texts as they, for example, might act as a header for several other more precise terms. In some cases we have allowed for the inclusion of multiple definitions, in an attempt to highlight nuances and differences of meaning. It will come as no surprise that terms, such as 'electroacoustic music' must include several definitions, often attributed to one or more authors, to demonstrate how imprecise – or ambiguous – they remain.

There are three main means of navigating the current site. Accessing the Glossary will present users with an alphabetical list of all terms. Clicking on a term leads to a page indicating its orientation within the Subject Index (thus presenting related terms). Clicking again on the term will lead to its definition(s). In the future a final click will also lead the user to the term's bibliographical resources. If desired, use of the site's own navigation buttons in conjunction with "Back" and "Forward" browser buttons will enable users to approach the site in a linear, 'book-like' fashion. Accessing the Subject Index will take the user to a 'nested' structure devised by the authors. The Subject Index uses six highest level headers:

- Disciplines of Study (DoS)

- Genres and Categories (G&C)
- Musicology of Electroacoustic Music (MEM)
- Performance Practice and Presentation (PPP)
- Sound Production and Manipulation (SPM)
- Structure (Str)

To give an example of the next level within this 'nested' approach, the category Musicology of Electroacoustic Music is currently comprised of the following sub-headings:

- Analysis
- Classification of sound
- Digital aesthetics
- Discourse of electroacoustic music
- Dramaturgy of electroacoustic music
- Listening experience
- Schaefferian theory
- Socio-cultural aspects of electroacoustic music

There is inevitable overlap between headers, and terms with a single definition frequently appear in more than one location within the Subject Index. Some entries cite a "see" other term(s), which lead to a relevant page. These entries have not been selected for the index structure. Related or contrasting terms may be accessed through the provision of "see also" suggestions. Pairs of terms based on a single root have been avoided. For example, the entry "harmonising" has been chosen as opposed to "harmoniser". This is based on the project's ethos of basing the system on concepts as opposed to specific items. It is with this in mind that specific items under, for example, Historical Electroacoustic Instruments or Devices have thus far not been added.

Non-English language terms are left in their original language when there is no accepted English term currently in use. Thus, since "Reduced Listening" is frequently used in English it does not also appear in French, while "Musique Concrète" remains in its original language. Translations of non-English terms have been suggested throughout, either in the main body of text or in brackets after the term's heading. When using the site's search facility, users will have to configure their browser to input non-English characters. However, terms in French or German currently can only be searched for with accents omitted. Accents do not appear on the search results page, but do reappear in headers and texts. Technical means of enabling the multi-lingual development of this aspect of the site will be developed in future phases of the project removing this current inconsistency.

A conventional bibliography has not been provided for the site at this stage, since one of the site's eventual purposes is to function precisely as a bibliography for electroacoustic music studies.

4   EARS: Future Developments

The next phase of the project will expand and refine the Subject Index and Glossary and begin the process of adding bibliographical resources associated with particular terms. Abstracts will be provided for resources on our own site,

---

[3] http://www.comm.uqam.ca/~GRAM.

[4] Cambridge Street Records CSR-CDR 9901 and at http://www.sfu.ca/sonic-studio/handbook.

hyperlinked resources to other sites, offline articles from relevant journals and out-of-print material. In this way the site's content and sophistication in serving as a structured vertical portal will increase. The very current simple search engine will be replaced during the project's second phase.

The current under-representation of non-English language terms will be addressed. The site currently only engages with French, and to a lesser extent, German terms, and these in a rather cursory and ad hoc fashion. The project directors are keen to explore nuances in meaning of terms in translation between languages, and for that matter are also fully aware that pertinent concepts may exist which have no equivalent in the English language! Collaborations to develop French and Portuguese content are already under way. More importantly, in the future it is our intention to create an international thesaurus for relevant terms concerning electroacoustic music, whereby the search engine will be able to access relevant resources regardless of language.

As well as providing an efficient means of accessing information and helping to facilitate researchers' awareness of their colleagues' work, it is hoped that the project will also take on a discursive aspect within the electroacoustic community. If demand warrants, this desire will be supported by the addition of a user's group/email list in 2003, with members receiving periodic updates and information concerning the site as well as associated publications by the authors. One of the key aspects to this project is our quest for breadth and inclusivity, and to this end we would greatly value feedback as EARS develops. You can contribute to the enrichment of this resource by suggesting terms you consider to have been overlooked and drawing our attention to relevant bibliographical resources; in particular web-based sources of information that you wish to draw to the attention of the community. An efficient means of electronically submitting comments or URLs to the EARS system has already been implemented.

5   EARS: How It is Co-ordinated

As mentioned above, the EARS voyage commenced with a feasibility study supported by the Arts and Humanities Research Board in the United Kingdom, also the funder of the first phase of the project. During this time, the project director, Landy, made contact with specialists around the globe attempting to delineate the field of concentration and ascertaining in the first instance which nations would have the most to contribute. On the basis of this dialogue, a consortium was formed including one member from those countries who had designated themselves as potentially most active in the field of electroacoustic music studies (electroacoustics in Canada).

At present the consortium consists of this paper's authors, Joel Chadabe (EMF, Albany, New York), Kevin Austin (CEC and Concordia University, Montreal), Marc Battier (Sorbonne, Paris), Bernd Enders (University of Osnabrück) and Simon Waters (University of East Anglia, Norwich). We are delighted to have such an excellent team for the initial years of the EARS project's developments. Each individual has different experiences with Internet-based or other digital forms of publication, which is highly valuable. One might ask: why choose an extra consortium member from the UK? Waters idirects the SARA Internet project, that is, he is hosting the nationally significant Sonic Arts Network's archive.

The consortium is similar to the steering committee of a business, making strategic decisions (often technical) regarding the development of the project. Obviously, they are unable to aid us on a day to day basis in terms of project development, but meet either by email (currently) or periodically as planned in the UK to review progress and make suggestions for the future.

The day-to-day co-ordination of the project is in hands of people at De Montfort University's Faculty of Humanities. The faculty's Systems Manager is the EARS appointed project manager. He reports to a project management board with a membership representative from each of the relevant areas of expertise. Where the consortium is in debate at irregular intervals and is to meet every other year, the project management board meets every three months.

The project has requested funding for a postdoctoral Research Fellow for a period of three years: 2003-2006. The outcome should be known before ICMC2003. Furthermore, an I.T. consultant will provide part-time input into the project in areas including sophisticated web, search and database applications. De Montfort University's current Centre for Technology and the Arts Director, Peter Robinson, will advise the project on TEI-conformant XML data formats for the records and metadata.

In this manner we are ensured of expertise ranging from the purely musicological to up to date XML developments.

6   EARS: Some Shop Talk

To achieve a first phase result within the allocated time, our concentration was on the 'completion' of the Glossary and Subject Index in their initial form. A very unsophisticated search engine that is being used on the site currently will, as suggested, be replaced early in the second phase of development. A MySQL database will be implemented and PHP delivery improved.

The project will utilise the high bandwidth and high reliability Higher Education network, East Midlands Academic Network (EMAN), to ensure availability and performance. Development is taking place on the MTI's Mac OSX server with 72 Gig hard drive and 430 Gig RAID assembly based and maintained within the Centre for Technology and the Arts. The records are stored and backed up on this system (DAT backup drive) and utilise remote backup facilities for additional reliability. Distribution is

through an Apache webserver running the Anastasia XML publishing system.

The project, which is the central focus of the Music, Technology and Innovation Research Group's mission of supporting electroacoustic music studies, is still awaiting the current funding decision. The future of the EARS site may also involve EU funding if the European dimension in terms of national co-ordinators grows according to expectation.

7   EARS: Associated Publications

Obviously, the heart of the tale rests in the development and implementation of the full EARS site. Still, we feel that some interesting 'holes' in electroacoustic music studies scholarship will be identified during this period. Our research proposals have allowed space for associated publications to be prepared. These range from introductions like this to specific papers dealing with a selection of those 'holes' in electroacoustic music theory. Landy is planning to write a large-scale book that focuses on creating the foundation for the study area as a natural consequence of his article mentioned earlier in this paper. Having three researchers at De Montfort working on this project alongside IT specialists, it seems logical to undertake this series of associated publications.

We are also considering an offline version to be published periodically on a CD-ROM. We are using Truax's *Handbook for Acoustic Ecology* as a model. The site would thus be available for local use. As Internet connections become faster for most users, this may become superfluous. The idea is to make these CD-ROMs available on subscription with updates provided at cost.

8   EARS: In an Ideal World – Your Role

We, that is those involved in the day-to-day development of EARS, are by no means the sole key to the site's success. The EARS project can and will only succeed if we are able to identify and collate relevant resources to make EARS more detailed in terms of what it offers. Our goal is equally to make our site more efficient and relevant to our users than the more generic search engines such as Google. To achieve this goal, the involvement of consortium members, future national co-ordinators and interested individuals and groups is necessary. In particular, the participation of users in drawing resources to the site's attention through its electronic submission system is a *sine qua non* in terms of the site's future success. In the next year or two, we sincerely hope that all of you in the community will take the time to make this site useful to yourselves, your colleagues and others who will be looking for means of increasing their knowledge of this fascinating field in which we work,

The Internet has provided us with a new means of communication, as well as a new means for supporting research, scholarship and greater understanding. Similarly, we are aware of its potential in terms of artistic activity. The Internet is not the place of the ambitious careerist. Instead, it seems to be founded on a more idealist basis calling for collective involvement in the sharing of ideas. The EARS site can only represent the sum of the input from everyone involved, from those of us supporting it on a daily basis to the occasional contributor or visitor. We are as passionate about the music the site focuses upon as the ideas behind the music. We sincerely hope therefore that the site will bring into balance music-theoretical, aesthetic and contextual information concerning the quantum leaps this music represents alongside the widespread technical debates. We believe that the availability of this knowledge should parallel the increasing size of its corresponding corpus of electroacoustic music.