The ElectroAcoustic Resource Site (EARS): philosophy, foundation and aspirations

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This paper introduces the ElectroAcoustic Resource Site project (EARS), taking a tripartite approach: first outlining the project's philosophy, then reporting on work-to-date and finishing with a discussion of the project's ambitions and aims.

The project's aim is the development of a dynamic, multi-lingual, international, publicly available Internet-based bibliographical resource designed to enhance the scholarly infrastructure of electroacoustic music studies, in particular, the musicology of electroacoustic music. Through the use of hypertext structures and linking systems the site will help to contextualise specific research within the broad field of electroacoustic music studies, as well as making helpful links between related areas/items of scholarship. The project aspires to assist access to current, past and evolving areas of scholarship and will attempt to redress certain imbalances in the ease of access to areas of research within the field. 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. The EARS project is coordinated by an international consortium, is directed by the authors and can be found at http://www.mti.dmu.ac.uk/EARS

1. PHILOSOPHY AND AIMS OF THE PROJECT

The title of this 'Electroacoustic Musics' conference includes the following: 'A century of innovation involving sound and technology – resources, discourse and analytical tools'. Despite the overwhelming expansion in creative and artistic practice that the period in question has witnessed, it would seem fairly uncontentious to argue that resources in the field have expanded largely in terms of the development of those technological tools that have enabled this creative and artistic expansion. The same period has produced many fewer resources in terms of the musicological or wide-scale understanding of these artistic practices and their cultural implications. Of course, many technological innovations in the developments of these resources are homologous or symbiotic with new or increased understanding of areas such as synthesis techniques, audio signal processing techniques, acoustics, psychoacoustics, and so on. However, the discursive flavour in the field can often seem dominated by the model of an ever-onwards march of technological innovation and refinement in which discussion of the 'hows?' overshadows the 'whys?'. A quick glance through paper session listings at a conference such as the International Computer Music Conference serves as a reminder of this. If our century of innovation involving sound and technology has enabled and engendered new ways of making and consuming music, the study of new ways of listening to and new ways of understanding music is of prime importance for intellectual study. Technology is, of course, a human activity, and as such is enabled and informed by human ideas. The ambition of the ElectroAcoustic Resource Site project is to provide greater ease of access to research resources concerned with the ideas behind and about the artistic innovations that our use of technology has enabled.

Traditional musicology has, of course, tended to be somewhat shy of the development of electroacoustic music, and much research conducted has been based on the praxis model. Developers of compositional tools, analysts, theorists, and those concerned with aesthetics are often also practitioners of some form or another, resulting in a situation that is, in anthropological terms, frequently emic rather than etic. Theoretical work can be based upon highly personal practice-related interests rather than operating along more foundational and general lines. One might speak metaphorically of the research within electroacoustic music studies as being represented by a multi-storey building in which some upper-floor suites have been designed, but one which seems to have few stairways or lifts connecting the floors and, more importantly, one for which no complete foundation has yet been built. The EARS project is intended to propose a potential structure for this foundation alongside means to create cohesion within the field beyond the obvious goal of making scholarship accessible.

Although both authors are believers in praxis-led research, the core of the next phase of work on the EARS project will focus primarily on the Musicology of Electroacoustic Music, one of the site's six 'high' level subject headers. Music, we argue, has always been an interdiscipline. The understanding of electroacoustic music requires consideration of a proliferation and widening of disciplines, and through the site's hyperlink cross-referencing system we hope to make

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fruitful links between, for example, contents of the subject header of Musicology of Electroacoustic Music and those of Disciplines of Study. In short, EARS will concern itself in particular with those areas of study focused on the theoretical understanding of the music and its social impact as opposed to the technological means of the music's production. Not to locate this within the broader picture would be foolhardy and unhelpful, and so the site as a whole could be taken as an attempt to understand better what the interdiscipline of Electroacoustic Music Studies might be (the 'building' mentioned above) and as an attempt to assist in its continued development. The keyword structure aspires to be as inclusive as possible and therefore in itself offers an overview of the field. Additionally, it is hoped that the key-wording system will prove of benefit to journal editors, conference organisers and authors.

2. WORK-TO-DATE

2.1. Thumbnail history

The EARS project commenced with a feasibility study supported by the Arts and Humanities Research Board in the United Kingdom (also the organisation which provided funding for the first phase of the project). During this time, contact was made with specialists around the globe in an attempt to delineate the field of concentration, and decide which nations, in the first instance, 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, Kevin Austin (CEC and Concordia University, Montreal), Marc Battier (Sorbonne, Paris), Joel Chadabe (EMF, Albany, New York), 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 development. Each individual has different experiences with Internet-based or other digital forms of publication, which is highly valuable. The consortium is similar to the steering committee of a business, making strategic decisions (often technical) regarding the development of the project. 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, David Houghton, is the project manager. He reports to a project management board with a membership representative from each of the relevant areas of expertise. Whilst the consortium is in debate at irregular intervals and is to meet every other year in the future, the project management board meets every three months.

The project is requesting funding for postdoctoral Research Assistants for a period of three years (2004–2007). 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.

In addition to the search for collaborators and general search of existing resources conducted during the feasibility study, much importance was attached to the development of a groundwork architectural model, a structure in which bibliographical information could be accessed by the most helpful means and with the required desired degree of hyperlink cross-referencing and contextual orientation. 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. Thus, it was decided that the development of Glossary and associated Subject Index for keywords and searches should be the goal of an initial period of work (what we call Phase 1 of the project). This decision was also based on the fact that although various glossaries (for example, the '*Dictionnaire des arts médiatiques*'[1]), encyclopedias and lexicons were 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 *ca*. 360 defined, 165 referred terms, and 375 keywords, some of which appear more than once, according to context. Where appropriate, existing work in the field has been drawn upon. For example, descriptions of acoustic communication and acoustic ecology terms have been condensed from *Handbook for Acoustic Ecology*[2] by Barry Truax, Visiting Professor at De Montfort University. Where a term is strongly associated with a particular author, we have endeavoured to identify a definition by the person in question (for example, Denis Smalley and Spectromorphology). Atkinson and Landy have provided original definitions in many other instances. A number of terms require only succinct texts, but in some cases we have allowed for the inclusion of multiple definitions, in an attempt to highlight nuances and differences of

[1]http://www.comm.uqam.ca/~GRAM/
[2]Cambridge Street Records CSR-CDR 9901 and http://www.sfu.ca/sonic-studio/handbook

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meaning. This dynamic glossary is not the *raison d'être* of the project, the items being the pegs on which to hang bibliographical information; however, international discussion lists in the field (such as CEC-discuss) would suggest that any attempt to provide comparisons of nuances of meaning of terms might be welcome in some quarters. The EARS site is already much visited even though the second, key phase has yet to commence.

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, Musical (Str)

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

- Analysis
- Classification of sound
- Digital aesthetics
- Discourse within 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 leads 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 'Sampling' has been chosen as opposed to 'Sampler'. This is based on the project's ethos of basing the system on concepts and ideas as opposed to specific items.

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 appears in French as a 'see also' term, 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.

2.2. Compilation of the Glossary and Keyword Index in greater depth

2.2.1. Glossary

At this point it might be of interest to offer a little more detail regarding the decision-making processes involved in the first phase of the project. Bearing in mind that the first phase was funded for only a six-month period, it was obviously necessary to make some key strategic decisions in terms of the development of the dynamic glossary's content and possible ways of structuring this information.

The glossary compilation began with a process of literature searches and Web searches, the latter in particular for currently available and relevant glossaries of terms. Readily available resources pointing to relevant materials were born in mind when compiling this work (for example, Audio Engineering Society,[3] Acoustical Society of America[4]), affecting the relative levels of detail provided in sections and subsections, both in diversity of terms included and degree of detail gone into in definitions. This is particularly evident in areas such as Sound Production and Manipulation (SPM) and with particular Disciplines of Study (DoS) (for example, Acoustics). This is also relevant, for example, to highly technical, mathematical and computing information concerning the specifics of the development and refinement of particular synthesis and resynthesis techniques. In such cases, material offering this very high level of detail is generally treated as being of a low level within the index structure of the site, and where relevant will appear (with abstracts as necessary) as bibliographical or URL citations as the resources pointed to from the site develop. Furthermore, as literature and Web searches proved during the early phase of work, there already exist numerous Web-based glossaries of terms in areas such as Audio Engineering and Computing. Where relevant, additional and complimentary items will be made accessible through the citation of selected existing work during the bibliographical phase of work on the EARS project. Links to resources such as those of AES and ASA will be of priority during the addition of these resources, and the project will continue to keep up-to-date with the development of such related Web-based resources and link to them where appropriate. Given the vast number of possible terms

[3]http://www.aes.org
[4]http://asa.aip.org

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in the compilation of the first iteration of the glossary, it was born in mind that since the site was always intended to be of a dynamic nature, where terms become of increased significance to electroacoustic music studies and musicology they may become keywords.

Another strategy quickly arrived at during initial work was to avoid encyclopedia-like extensive lists of examples comprising proper nouns and naming specific individuals under individual glossary terms and within the definitions of terms. However, where a term is clearly associated with an individual's practice (for example, Luc Ferrari and Anecdotal Composition) or a specific concept arises from an individual author's research and writings (for example, Albert Bregman and Auditory Scene Analysis), it is only proper to fully acknowledge these individuals by naming them in definitions.

Let us now turn to a specific example of an item within the glossary, the term 'Sensor'. This appears as a 'glossary-only' term, appearing under 'Data Tracking' (which is part of the keyword index, forming part of the section 'Electroacoustic Devices' within 'Sound Production and Manipulation') along with the terms 'Gesture Capture', 'Movement Detection' and 'Pitch-tracking'. Through the site's hyperlink 'See also' system, users investigating the term also have their attention drawn to the terms 'Gestural Interface', 'Interface', 'Interactive Instruments', 'Interactivity' and 'Mapping'. The key point to be made is that ideas concerning themes such as performance practice, or philosophical, perceptual, aesthetic, social and pedagogical issues relating to notions of interactivity, rather than highly specialist technical explanations of sensing technology *per se*, are the aim of the further development of the site. It is hoped that the variety of related terms outlined above will allow for the effective placing of bibliographical materials in the most effective, accurate and useful ways. Highly specialist technical items may be included if providing 'pegs' upon which to place relevant bibliographical links; however, the final determinant is the assessment of musicological focus.

Still on the theme of the glossary, it is important to remember that the primary goal of the first phase of work on the project was to establish a form for the development of the site: the compilation of the glossary provided material with which, through an empirical process, this form could be arrived at. Thus, the glossary was not strictly-speaking an end-in-itself but rather the basis of a method by which to develop a structure forming the hierarchical and nested hypertext skeleton on which to add the flesh of future bibliographical resources. The authors are only too well aware of the significant additions in terms that could be made to the lists of glossary terms appearing under such headings as Acoustics, Psychoacoustics, Sound Production and Manipulation, amongst many others. However, it is the aim of the dynamic approach of the project to provide additional material in all aspects of the site during future periodic updates. Indeed, feedback received to date and the evidence of Web traffic statistics have convinced the project team beyond doubt that the glossary aspect of the eventual planned site is worthy of substantial and continued expansion and development.

As the first phase of the project developed, the selection of terms for the glossary became increasingly intertwined with the development of the keyword structure (as exemplified by the case of Schaefferian terminology discussed below). Terms were drawn from literature searches in books, journal articles, PhD theses, etc., or from 'brainstorming' sessions conducted by the authors, after which we attempted to gauge the frequency of use of terms through literature searches. Many terms were considered that were eventually not included in the glossary. For the most part this was simply determined by usefulness in terms of addition of future bibliographical resources, relative obscurity or infrequent usage. This said, it was still felt that though many areas would inevitably require subsequent development and refinement, the glossary should strive for the greatest possible breadth and inclusiveness from the outset.

As a final important example, a particularly interesting and challenging aspect of the project's selection of terms is how to approach terms and genres from the field of popular music. The authors are committed to the inclusive aspirations of the site but also mindful of the avoidance of making preposterous claims for electroacoustic music and electroacoustic music studies. The high-level subject header Genres and Categories will be developed to include items of relevance and will endeavour, bearing in mind the site's philosophy of ideas rather than items, that this is done with intellectual rigour rather than unquestioning acceptance of how music is categorised in commercial or journalistic contexts. Popular music terms may not necessarily appear exclusively under the Genres and Categories umbrella, and indeed terms deemed relevant to the project may appear in sections such as Sound Production and Manipulation or Performance Practice and Presentation, even though the genre from which they hail does not necessarily appear as a discrete term within Genres and Categories. A case in point is the inclusion of the term Turntablism as a most relevant area of practice even though Hip Hop does not appear under Genres and Categories on the basis that to label it Electroacoustic Music might rightly be considered a wild and unhelpful claim. At the conference talk associated with this paper, the authors were asked about the delineation of the field in terms of forms of popular music, with the music of The Beatles cited by the questioner. This provides a useful example of the

project's strategy. It would seem fairly uncontentious to consider the song 'She Loves You' not to be Electroacoustic Music, however 'Revolution 9' from 'The White Album' makes thoroughgoing use of highly relevant sound manipulation techniques. Although such specific songs do not appear on the site as discrete items, these studio techniques appear within the section Sound Production and Manipulation. As the site develops, bibliographical resources relating to the study of relevant aspects of popular music (for example, musicological, semiotic, sociological) will be added with the same rigour as for other areas of the site, if they are within the ambit of the site's ethos and philosophy. The authors are convinced that as the site develops in the shadow of the development of musical practice itself, much content will be thrown up through new developments, hybridising processes, emergence of genres and blurring of rigid distinctions between, for example, so-called 'art' music and 'popular' music.

We will now turn to the selection and subsequent ordering of glossary terms into the keyword index structure.

2.2.2. Keyword index

As previously mentioned, the process undertaken on work on the site thus far was based on the empirical selection and placement of glossary material into the developing form of the keyword structure. It is worth mentioning at the outset that what is now referred to as the keyword index in the project started out in life being referred to as the project 'thesaurus'. It very quickly became clear, however, that the 'horizontal' nature of relationships of glossary terms within such a potential system did not suit the needs of the site in terms of the hierarchical relations between terms, very quickly perceived during initial work, or desired sophistication of eventual user navigation. Thus, the current 'nested' interlocking 'tree-like' hierarchical structures of the site were developed, and the intended thesaurus became a keyword index. It is worth bearing in mind, however, that a more thesaurus-like approach will be taken to the development of multi-lingual aspects of the site's resources, through 'horizontal' hyperlinks, as further foreign language terms are added, and comprehensive translations and comparisons provided. Within the development of the hierarchical keyword system, hyperlinks were envisaged both through the various levels of nested sets of related terms, and also the hyperlinks 'across' terms with suggested 'See Alsos'.

Obviously, a key decision to be made with each glossary term was whether breadth of usage within the research literature warranted its designation as a keyword within the keyword index structure. Along these lines, for example, terms such as 'Interiority' (from Rodolfo Caesar), 'Zenochrony' (from Frank Zappa) and 'Synthtrumentation' (from Clarenz Barlow) which are of conceptual interest, not to mention considerable charm, were deemed to be 'glossary-only' terms and not keywords. Once, however, a term was established as a keyword, it was placed at an appropriate level within the vertical hypertext structure. Needless to say, some terms prove rather resistant to being easily pigeon-holed; consideration of common musical terms such as 'structure' and 'texture' bears testament to this. However, there is no reason why a discrete term should not appear in multiple contexts, and it is therefore only correct that the presentation of a term such as 'Noise' should be oriented within acoustics and acoustic communication or soundscape studies, and arguably in the future also cultural studies and aesthetics, amongst others. 'Timbre' is a complex phenomenon, pertinent to psychoacoustics, the perceptual musical experience of the listener, musical discourse, compositional strategies, technical methods, and so on. Thus, the term 'Source Recognition' sits happily within both Psychoacoustics (Disciplines of Study) and Listening Experience (Musicology of Electroacoustic Music). Some terms can be viewed as being rather general, and may permeate the structure of the keyword index from very high to very low levels. The example of the concept of sound transformation illustrates this, being pertinent both to foundational theories of musical discourse and panoplies of highly specific sound manipulation techniques. Also included are terms which have very general rather than specific definitions and are intended as pegs upon which to hang current and future bibliographical references, for example 'Listening Experience' or 'Listening Strategy'. Where appropriate and helpful, glossary terms have been linked together in the way they are presented within the keyword index structure. Such is the case with the pairing of Simon Emmerson's terms, 'Abstract' Syntax and 'Abstracted Syntax'.[5] The authors have allowed themselves the luxury of adding terms, in some cases at fairly high levels, which, although there may be relatively little written to date, they perceive areas to be of current and future significance. These include, for example, 'Narrative' and its higher-level term 'Discourse within Electroacoustic Music' (itself raised to the status of a sub-theme within this conference's remit).

Clearly, in many instances where significant contributions have been made to our understanding of electroacoustic music, authors have created and suggested new terminology. A prominent example of one such author is Denis Smalley who is noted for his creation of a great deal of highly detailed new language with which

[5]These terms first appear in Emmerson, S. 1986. The relation of language to materials. In S. Emmerson (ed.) *The Language of Electroacoustic Music.* Basingstoke: Macmillan Press.

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to describe and explain aspects of electroacoustic music. In the development of the keyword index, an approach was taken to cluster subsets of related such terminology under a higher-level specific keyword. Thus, Smalley's discussion of source–cause texture and source–cause levels, with his suggestion of four related types (imminent/cumulative/extended/dispersed) is not (as yet) reflected in their addition as discrete terms within the keyword index. However, their source[6] will be referred to through the site's bibliographical resources and specifically detailed in abstracts produced by the EARS team. Since all terms appearing within these future abstracts will be searchable through the site's fully developed search engine, users typing in such specific and detailed terms will be referred immediately to the place within the literature where these terms appear. Similarly, Smalley's discussion of six interactive types of electroacoustic discourse (source–cause, transformational, typological, behavioural, motion, tensile) appearing in the same article[7] do not appear as keywords but are represented by their next highest umbrella term, Discourse within Electroacoustic Music. Again, this detailed terminology will appear in future abstract content rather than current keyword index material.

A case study of particular possible interest in the decision-making process is the site's current treatment of the large and complex area of Pierre Schaeffer's terminology, in particular as encountered in his *Traité des objets musicaux*.[8] The issues here were sheer volume of terms, frequency of usage (determining their selection as keywords or glossary-only terms), frequency of use in English translation, and retaining some relationship to Schaeffer's own, often highly elaborate, structuring of his terms. Pairings of terms and relationships presented in table form are retained wherever possible within the nested structure of the site. To give some examples, the terms *Comprendre*, *Écouter*, *Entendre* and *Ouïr* appear together under the keyword of *Quatre Écoutes*. Schaeffer's perceptually led listening approach, *Solfège*, acts as an umbrella-term for its constituent *Charactèrologie*, *Analyse*, and *Synthèse*. *Typologie* and *Morphologie* appear in their own right as keywords. Schaeffer's thirty or so different types of sound object, as described in the *Traité*, can be represented under *Typologie*, and so are not listed separately. In Schaeffer's system, once classed by type, the sound object can be classed by *Morphologie*, the second stage of his PROGREMU. For the purposes of EARS, the terms Mass, Harmonic Timbre, Dynamic, Grain, Allure, Melodic Profile, Profile of Mass are not listed as discrete items, but appear in Schaeffer's 'next level up', in their home of *Morphologie*.

3. FUTURE DEVELOPMENTS AND GOALS

To achieve a Phase 1 result within the allocated time, our concentration was on the 'completion' of the Glossary and Subject Index in their initial form. The very unsophisticated search engine currently used on the site will be replaced early in the second phase of development.

As stated, this 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, hyperlinked resources to other sites, offline articles from relevant journals and out-of-print material. In this way the EARS site's content and sophistication in serving as a structured vertical portal will increase.

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 Subject Index-based search engine will be able to access relevant resources regardless of language. We are delighted that UNESCO has adopted the EARS project as part of their Digi-arts initiative.[9] EARS will represent the audio section of their planned virtual library. Furthermore, and pertinent to this paragraph, they are extremely interested in supporting a multilingual presence of the site.

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, 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 inclusiveness, and to this end we would greatly value feedback as EARS develops. You can contribute to

[6]Smalley, D. 1994. Defining timbre – refining timbre. In *Contemporary Music Review* **10**(2). Chur: Harwood Academic Press Publications.

[7]*ibid.*

[8]Schaeffer, P. 1966. *Traité des objets musicaux.* Paris: Éditions du Seuil.

[9]http://portal.unesco.org/culture/ev.php?URL_ID=1391&URL_DO=DO_TOPIC&URL_SECTION=201

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the enrichment of this resource by suggesting terms you consider that we have 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.

We have also suggested that individuals or groups may like the opportunity to participate more actively in the EARS project by taking responsibility for one specific aspect of the site's content. For example, consortium member Marc Battier's former postgraduate student, Aline Huffschmitt has put together contents information from a number of relevant music technology journals, both current and those that no longer publish. (We have a link sending the user to our sister site at the MINT/Sorbonne.) Battier is currently contemplating leading a project that would contribute an in-depth survey of resources concerning Historical Electroacoustic Instruments and Devices. John Dack has been extremely generous with translation materials of Michel Chion's *Guide des Objets Sonores*,[10] a reference investigating all of Schaeffer's major terms. Barry Truax has provided enormous bibliographic support within the area of Acoustic Communication. We sincerely hope and expect others will follow suit in areas of their expertise.

As suggested above, although we are currently in the interim period between the two major phases of the EARS site's development, the site has gained rather substantial popularity. We realise that usage statistics need to be treated with some caution. Nevertheless, in our initial year of operation, Web traffic statistics demonstrate that the site currently receives over 50 daily visits, although that number was substantially higher during the April/May exam period, for example, during April 2003 EARS received 20,046 'hits'.

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 not only more detailed in terms of what it offers, but also more efficient than search engines such as Google and publication search engines such as Ingenta. 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. 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, in the first instance, 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 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, support greater understanding of the music and the innovations it represents, thus enabling greater access to that music, not to mention increasing the size of its musical corpus.

[10]Chion, M. 1983, 1995. *Guide des Objets Sonores.* Paris: Éditions Buchel/Chastel.

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