

The ‘Scambi Project’

Open Forms and Electroacoustic Music

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The ‘Scambi Project’

The team members of the ‘Scambi Project’ are Dr Craig Ayrey of Goldsmiths College, London; Dr Pascal Decroupet of the University of Liège and the project director Dr John Dack of the Lansdown Centre for Electronic Arts, Middlesex University. The team members are investigating the use of ‘open’ forms in electroacoustic music with particular reference to music composed between 1950 and 1980. Broadly speaking, ‘open’ forms permit the re-ordering of sections within a musical composition at either local or global structural levels. The analogue tape work *Scambi*, created in 1957 by the Belgian composer Henri Pousseur at the Studio di Fonologia in Milan, has been chosen as an example of an electroacoustic composition in ‘open’ form. Naturally, in addition to the work itself, the team will examine and comment on various texts related to *Scambi*. The project will also investigate broader issues such as the potential for such forms in contemporary, digital electroacoustic music. It is hoped that further works by Pousseur will be included as part of a more extended, continuing project. Thus, our intention is also to examine compositions such as his *8 Études Paraboliques* (composed at the Westdeutscher Rundfunk studios, Cologne, in 1972) and the new ‘parabolic mixes’ by Pousseur himself and contemporary artists such as Robert Hampson, Philip Jeck and Oval.

Henri Pousseur (born 1929) is a particularly significant composer in any investigation of 'open forms'. 'Open' forms have been used consistently by Pousseur since the nineteen-fifties and reflect not only his musical thinking but also his view of society. His extensive writings have not received the critical commentary they deserve in Great Britain which contrasts with researches undertaken by European musicologists and analysts. This is partly due to the lack of English translations of Pousseur's writings; without an adequate understanding of French and German many important texts remain inaccessible. Therefore, the provision of key texts in English will also be addressed by this project. In addition to the traditional concerns of analysis of music and text-based investigations our strategy will include two additional methods of enquiry. Firstly, we have interviewed Henri Pousseur on June 14th 2004 at his home in Waterloo, Belgium ('le vrai Waterloo' in Pousseur's own words). These interviews will be documented and appropriate sections will appear on the web site in due course. In addition, Dr Decroupet gave a seminar on the analysis of *Scambi* at the Lansdown Centre for Electronic Arts, Middlesex University on December 3rd, 2004. This will also be summarized and placed on the web site. Secondly, one of the most important aspects of the project (in fact, the original point of departure for the entire enterprise) will be to encourage the creation of new versions of *Scambi*. This will be described in more detail below.

The research questions and problems identified by the 'Scambi Project'

The 'Scambi Project' will address three principal musicological/analytical research questions. The central question is: what is the status of the 'open' form in electroacoustic music? Particular emphasis will be given to the genre of *acousmatic* music; 'live' and 'mixed' electroacoustic genres will, therefore, not be considered at this stage. Despite the 'advanced' nature of much musical thought in electroacoustic music (and we accept that the notion of 'advanced' is itself a contentious issue), the use of 'open' forms in *acousmatic* music is rare. In the years between 1950 and 1980 this can be explained by the technical difficulties intrinsic to the medium which was, of course, based on analogue rather than digital technology. Technology allows composers of *acousmatic* works to make use of any recorded sound. Thus, sounds

can originate from the 'real-world' or they might be created by various techniques of synthesis. In addition to this vocabulary new formal arrangements are possible. However, by contrast with many developments in instrumental music, *acousmatic* works are isolated from any kind of performance participation other than in the process of sound diffusion. Aspects such as expressive timing (other than that included by the composer in the studio at the point of realization) and re-arrangement of sections are excluded. *Acousmatic* works thus remain fixed in the formal arrangement and durations of sections. In this sense the genre conforms (perhaps surprisingly) to many of the conditions of traditional musical 'works'. Fidelity to the composer's view of his/her music is an inevitable outcome as only one recorded version exists. The only variation that can occur is during the aforementioned 'performance' practice of diffusion and these variations will result from the acoustic characteristics of the venue and the type and amount of equipment available. Expressive timing, regarded by many as constitutive of musical performance, remains unaffected. Few academic studies have addressed these issues. The composition *Scambi* has been chosen as a rare example of an analogue tape work in 'open' form. An analysis of its realization methods and the creation of new versions provide the focal point for the initial stages of the project. *Scambi* occupies a particularly important position in the context of post-war music. Pousseur made use of one type of 'open' or 'variable' form. The thirty-two sections of the composition can be re-ordered and even superimposed according to a basic rule formulated by Pousseur. By studying Pousseur's realisation processes the relationship between 'open' form and tape composition will be clarified.

The second question relates to the equipment, physical materials and resulting work practices of the analogue studio. To what extent did these materials and techniques inhibit an exploration of 'open forms'? Thus, can a form of 'technological determinism' be identified as a decisive factor in these compositions. Compiling individual sections of an 'open' analogue tape work would retain a reassuring sense of physicality. But each new version would entail cutting and splicing the tape and mixing the superimposed sections via other outboard devices such as mixing desks. Furthermore, several tape recorders would be required. By contrast, in the digital

domain many of these operations can be transferred from the 'actual' to the 'virtual'. This fundamental shift in the relationship between musician, equipment and material remains central to many practitioners and theorists in electroacoustic music. Thus the project will extend beyond *Scambi* to current technology.

The third, more general question is: why do many electroacoustic musicians continue to produce compositions with fixed, rather than 'open' forms? Could it be that electroacoustic composers tend to locate their practice within a traditional paradigm (referred to earlier) of a uniquely realised and fixed musical work? While the first part of the investigation will concentrate on historical practices, this final issue addresses the apparent resistance of some contemporary electroacoustic musicians to the use of 'open' forms. The aforementioned difficulties of the analogue medium are doubtless mainly responsible in the pre-digital period. However, the majority of contemporary electroacoustic composers continue to disregard 'open' forms despite the ease with which sound files can now be stored and retrieved from a computer's hard drive. Consequently, with the possible exception of algorithmic and generative compositions, there is little practice and often less debate regarding 'open' forms in electroacoustic music. This imbalance between the use of technology and the resulting formal structures should not go unchallenged.

The aims and objectives of the 'Scambi Project'

The broad aim of this project is, therefore, to investigate how technology facilitates the exploration of new formal structures in electroacoustic music. This will be achieved by a combination of practical and traditional musicological research methods. An important objective will be the production of recordings of new realisations of *Scambi* by many composers. The composition uses pre-recorded material and new versions can be created according to Pousseur's scheme though the composer has acknowledged that other versions may extend beyond his original plan. The processes used by composers will be documented and will be the starting point for subsequent stages of the project. These recordings will not be released commercially (unless interest in the project indicates that they could be marketed as a form of publication). Nevertheless, it is hoped that they will be accessible to

interested musicians by means of a server based at Middlesex University from which they can be downloaded as MP3 files. The second objective is the publication of either a monograph or a series of scholarly articles on the project. Separate written documentation will be published by each team member according to their specific role in the project (though joint chapters/articles are possible). Dr John Dack has already presented a paper in August 2004 entitled 'The "open form" in the arts: music, literature, visual art' at the symposium: 'Systems Research in the Arts' which was organised by 'The International Institute for Advanced Studies in Systems Research and Cybernetics' in Baden-Baden, Germany. This paper focussed on the music of Pousseur with particular reference to *Scambi*. Thirdly, a seminar and symposium have been organised. The first took place in the Lansdown Centre for Electronic Arts at the Cat Hill campus of Middlesex University. Dr Decroupet explained *Scambi*'s realization and its context within Pousseur's output such as the work for piano 'Caractères Ib' (1961). The second symposium will form part of a larger event at Goldsmiths College, University of London in February 2005 at which the initial research findings gained in the stages of realisation and related historical/musicological issues will be presented. Henri Pousseur will attend and give a presentation at this second, larger event. It is envisaged that selected versions of *Scambi* will also be played. Conclusions regarding these new versions of *Scambi* will be presented and the research will be extended by addressing the more general issue of the 'open' form and its application in electroacoustic music. For example, related themes for this second symposium could include the relationship between serial thought and 'open' forms or the real-time creation of 'open' works by programming environments such as SuperCollider and MAX/MSP.

The project's research context

The use of 'open' forms was widespread in the immediate post-war years. However, almost without exception, 'open' form compositions are instrumental or vocal works. *Scambi* remains an extremely rare example and is a testament to Pousseur's remarkable prescience. The 'Scambi Project' will, therefore, contribute to a long overdue reassessment of Pousseur's position as an avant-garde composer and writer on music during the post-war period. Little information on Pousseur exists in

English and it is hoped this investigation into *Scambi* and its contribution to electroacoustic thought will initiate a wider assessment of the composer and his works. In addition, the more general debate on the “open” form has particular relevance within contemporary electroacoustic musicology. There are few studies in English on ‘open’ forms in music. Eco’s ‘The Open Work’, for example, mentions *Scambi* briefly but concentrates principally on literature. Consequently, topics such as the balance between ‘openness’ and ‘constraint’ and the ontological status of ‘open’ musical works have not been thoroughly investigated. Nonetheless, discussions on ‘open’ forms are increasingly relevant. It is common for electroacoustic composers to create sound installations which can be interactive and often share aspects both technically and aesthetically with non-linear structures in music. Consequently, the issues addressed in the ‘Scambi Project’ will help to provide a critical framework applicable not only to electroacoustic music but also sound art and multimedia in general.

The project’s methodology

Each participant has a clearly defined role within the project. Dr John Dack (Middlesex University) acts as the project co-ordinator and will be involved with the organization of the web site, seminar and symposium. He will concentrate on analysing the relationship between analogue and digital media, their practices, technical differences and the musical consequences and is also mainly responsible for facilitating the realisation of new versions of *Scambi*. In addition, as well as inviting versions from ‘established’ composers, it is envisaged that opportunities will exist for student composers at the team members’ institutions to contribute to this stage of the project. The versions will be created using digital rather than analogue technology. Henri Pousseur has already kindly given permission for the thirty-two sound files to be made available. Problems and decisions encountered by composers during the production of new versions will be evaluated and documented in the light of Pousseur’s original instructions. Dr Craig Ayrey will be responsible for the analytical and critical investigation of ‘open’ forms in *Scambi* and related works. As the project progresses various types of ‘open’ form in music will be analysed and evaluated. By applying these findings to both electroacoustic and instrumental

musics Dr Ayrey will clarify the relationship between these genres and their use of 'open' forms. Dr Pascal Decroupet has already conducted extensive research on aspects of Pousseur's musical language and is an expert on the development of serial thought in the post-war years in Europe. The connection between electroacoustic music and serialism is well-established and Dr Decroupet will contextualise *Scambi* within Pousseur's oeuvre and the music of the 1950s. In addition, he will present the results of investigations he has made of any available sketches and the genesis of the composition's early materials. While each team member has a particular role stemming from his particular research area, it is inevitable and desirable that these individual investigations will be mutually supportive and provide corroborative evidence.

Output and dissemination of research resulting from the 'Scambi Project'

The symposium and web site will be the principal means by which information is disseminated to the academic community. The web site, for example, will contain translations of key texts as well as texts written by the team members. In addition, it could provide a resource with audio examples on the 'open' form in instrumental as well as electroacoustic music. Due to the increasing interest in 'open' forms and related areas such as generative and algorithmic compositions it is likely that the results of the project and the evaluation/critique of the 'open' form will be of great interest not only to musicologists and composers but practitioners in other art forms. In addition to the aforementioned applications in installation art there are also many potential lines of enquiry in common with research into narrative which would be of benefit to artists working in web-based media and CD-ROMS.

Dr John Dack