

## **The Online Repository for Electroacoustic Analysis project – a community approach to electroacoustic music analysis**

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### **Abstract**

Since March 2011 Online Repository for Electroacoustic Analysis (OREMA) project has been in operation allowing users to upload analyses and post topics for discussion to a wider community of participants. It is an open access initiative that has no limits to the type of analysis one might submit (provided it is within the scope of the project) or any hierarchical structure, which facilitates a dialogue between postgraduate students, professors, lecturers and enthusiasts. What has been determined is that there is now a model for community engagement towards the advancement of analytical ideas and practices within the domain of electroacoustic music analysis.

This paper is not aimed to argue what constitutes electroacoustic music analysis, the problems with this field, or even to answer its critics, rather it will promote the concept of the analytical community. It will discuss the benefits of an open access platform based on Web 2.0 technology that would allow for such a community to exist. The OREMA project will be used as an example of such an initiative.

The OREMA project is part of a three year funded project titled New Multimedia Tools for Electroacoustic Music Analysis (funded by the Arts and Humanities Research Council), which is coordinated by Professor Simon Emmerson and Professor Leigh Landy of De Montfort University, Leicester. The concept of the OREMA project was developed after the funding application and forms part of the original contribution within my PhD research.

### **Introduction**

Unlike Western instrumental music electroacoustic music “presents no score, no system, and no ‘pre-segmented’ discrete units like notes” Delalande (1998: 14). “The analyst, deprived of any score which purports to represent salient features of the musical materials, is forced not only to consider which aspects of these materials are pertinent to an analysis, but must also contemplate the very basis and process of analysis” (Camilleri and Smalley 1998: 3). Consequently there is no precedent for the analysis of electroacoustic music. This is understandable since analysis within Western instrument music was only established as a field within its own right in the 19th century (Bent 1980: 343). However, in the case of Western instrumental music, the musical score provided the object of study. The concept of

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the object of study is much more difficult to define within electroacoustic music, particularly when one uses this term to describe “any music in which electricity has had some involvement in sound registration and/or production other than that of simple microphone recording or amplification” (Landy 1999: 61). Therefore, the term electroacoustic music could be used to encompass not only fixed-media acousmatic works, but also mixed music performances and open-form installations. In these instances there is no fixed form of the work and often is a experiential event, one which might change between experiences. Hence, no precedent has been set as there are too many potential variants in the objects of study between works of electroacoustic music.

There exists number of tools and analyses of electroacoustic music, specifically within acousmatic research; however, there is no central consensus on the correct tools or methodologies for the variety of different categories of electroacoustic music. Many prominent publications on analysis, such as Spectromorphology (Smalley 1986) and Typo-Morphology (Schaeffer 1966), only discuss single sound events and not their relations with other sonic materials to create musical structures. Other publications that do consider musical structures, such as Stéphane Roy’s *Grille Fonctionnelle* (2003), are meant to be used in conjunction with other methodologies that investigate individual sound events. Therefore, there is no one explicit 'tool' that can fully analyse a single work. This lack of a general consensus might be viewed as a negative attribute of electroacoustic music, when in fact it is a positive one. Although it does not provide solid grounding for a singular methodology it does allow for many different perspectives on a particular work. As Nattiez (1990: 168) states “there is never only one valid musical analysis for a given work”. The same concept can be applied to the different methodologies of analysis, which inevitably relate to the varying reasons for undertaking one. The idea that no one analysis can fully explain a work is of particular importance to the concept of the analytical community, as it insinuates that everyone, no matter their knowledge, prestige or education can have an opinion of a particular work. Analysis therefore within this paper is considered a perspective of a work, not the fundamental truth, and by sharing such perspectives with others a greater understanding of a work can be achieved.

## **The concept of the analytical community**

The analytical community is defined as a group of practitioners working together to advance of the field of electroacoustic music analysis by sharing their ideas and analyses freely with one another. This group could be considered a sub-community of the larger electroacoustic community in which composers, musicologist, students and enthusiasts all dwell. There already exists a number of subgroups within the larger electroacoustic community; however, the question is can a community be created for electroacoustic music analysis and what is needed for this community to flourish? Surowieki’s concept of a ‘wisdom of the crowds’ was investigated in order to define if the electroacoustic community, as a whole, could be considered a ‘wise crowd’ and what was missing in order to test the concept of the analytical community. Surowieki (2004: 4) defines four main conditions that are necessary in order for a community to work well together:

[...] Diversity of opinion (person should have some private information, even if it's just an eccentric interpretation of known facts), independence (people's opinions are not determined by the opinions of those around them), decentralisation (people are able to specialise and draw on local knowledge), and aggregation (some mechanism exists for turning private judgments into a collective decision).

It can certainly be argued the electroacoustic community addresses three of the four conditions listed above. The electroacoustic community is internationally diverse, meaning that any collaboration that takes place happens within conferences/symposiums or through the various mailing lists used to share information. However, neither of these mediums provide a platform for true collaboration between community members. What is missing is *aggregation* – a means to collate and share the thoughts, ideas and work of all the different practitioners within the electroacoustic community. The analytical community concept requires is a platform of true collaboration, in which all members have the same rights and privileges as the others. Where joint work is promoted over the individualist research environment where scholars must publish or perish in order to advance their academic career. The OREMA project is such a platform.

## **The OREMA project**

The simplest description of the OREMA project ([www.orema.dmu.ac.uk](http://www.orema.dmu.ac.uk)) is that it is a community based website that functions as a repository for electroacoustic music analyses. All content on the website is user generated (unless referencing external links). It is a non-profit initiative and does not charge users a subscription or submission fee. There is also no peer-reviewed content on the website, instead it permits any user the ability to upload content to the website, provided it is related to the subject of electroacoustic music analysis. All content submitted to the website is maintained under a Creative Commons licence, which allows for adaptations of other content as long as it is not for commercial use and that the original author is attributed.

The website is split into three main areas: analyses, the analytical toolbox and a public forum. The analysis section of the website allows users to upload and share analyses of electroacoustic works. There are no rules regarding the type of analysis that is accepted; only that it is an analysis of an electroacoustic work. Only authors and moderators (for administration purposes) have the power to make amendments to an analysis, whilst other users have the option to comment within a comment section on the page. The analytical toolbox is a collection of short articles documenting methodologies and strategies for analysing electroacoustic music. Unlike the analysis section of OREMA all users have the ability to make amendments to the content, much like Wikipedia articles. The idea is that the entire community will review the information to form a consensus on a shared understanding of each tool. Finally the forum provides a platform for extended discussions beyond the comment section of both analysis and toolbox pages.

The intention of the OREMA project was to gauge if a community could be formed that would concentrate on the advancement of the analysis of electroacoustic music. Although intended to be open and diverse to allow many different perspectives five rules were defined to ensure focus and autonomy. The rules are as follows:

- The OREMA project will analyse electroacoustic music in all its guises (acousmatic, sound art, installations, electronica etc.).
- There is no one "true" analysis. The OREMA project encourages the analyst to post analyses of the same composition to show different perspectives.
- There is no one methodology or strategy for analysis. The analytical toolbox is there for reference and is not a list of the acceptable tools for analysis within the project. Users are allowed to apply their own devised strategies to analyse electroacoustic works.
- There is no hierarchy within the OREMA project. All members, regardless of their occupation and status, are equal and share the same rights.
- All information held on the site is free to access and free for people to reference under the protection of a Creative Commons licence.

The OREMA project is ambitious as it removes the necessity of a peer-review committee and allows any user, who can register for free, the ability to publish their ideas for others to see. The expectation was that the community would act as a peer-review committee by vetting contributions to the site in order to promote excellence. It should be stated that one is not advocating that the current academic method of peer reviews should be abolished, rather that a peer-to-peer model could be developed to compliment what is currently being researched. In fact, to try to encourage more activity on the website (and to offer another avenue of publication) an open access peer reviewed journal was established called the eOREMA journal. eOREMA is intended to be a biannual publication arm of OREMA that will consist of both peer-reviewed analyses of electroacoustic musical works and peer-reviewed articles on electroacoustic music analysis. The first issue of this journal was published online in April 2013 with a second issue currently being finalised. Table 1 provides a description of the differences between the OREMA project and the eOREMA journal.

The OREMA project	The eOREMA journal
Accepts analyses and submissions to the analytical toolbox	Accepts articles that discuss electroacoustic music analysis
Content can be added by users of their own accord	Peer-review process before content is accepted
Content can be added at any time	Articles are released bi-annually
Amendments can be made to content once published	Content cannot be changed once published
Referencing as if webpages	ISSN and DOIs for individual articles
Open access: free to submit and view	Open access: free to submit and view

**Table 1.** Differences between publication through the OREMA project website and the eOREMA journal

## Outcomes

Since March 2011 to the date of this paper there has been a total of 12 analyses of 7 compositions submitted directly to OREMA with several links to analyses on external websites. The analyses currently hosted on the website range from: graphic transcriptions,

typological analyses, spectrogram segmentation using spectromorphological terms (Blackburn 2006) and even a Schenkerian analysis of an acousmatic work (Batchelor 1997). Furthermore, the scope of analysis has not been confined to acousmatic music and has included analyses of electronica (Ramsey 2012) and even an audio-only game (Hugill 2012). What is of particularly interest is that some of the works have been analysed by different users who have applied different methodologies, ultimately offering different perspectives of the same work. In some instances an initial submission has encouraged other members to submit their own analysis when they felt they understood a piece differently to the original contributor.

A total of 19 toolbox articles were submitted and edited by various users covering many differing methodologies beyond the tools mentioned previously. The hope is that these short descriptions will evolve over time as attitudes and understandings change, meaning that the information will always be relevant, that is as long as it is maintained and updated by the community.

The first issue of eOREMA was also diverse in content with articles ranging from analytical tools (Emmerson 2013), the potential ways of analysing sonic installations (Batchelor 2013), to the analysis of electronic dance music (Ratcliffe 2013) and soundscape compositions (McConaghy 2013). The second (soon to be published) issue was themed around Trevor Wishart and will contain analyses of some of his works along with general articles on electroacoustic music analysis.

Contributions to the website were much more prevalent within what was referred to as the beta stage of the project (the first year of its conception). This is perhaps because the initial beta period was closed to only 12 participants (referred to as the core participants), all of whom had the opportunity to present their contributions to the website at the second symposium organised as part of the larger New Multimedia Tools for Electroacoustic Music Analysis project. It was hoped that the core participants would become ambassadors for the website, encouraging contributions from newer members. However, many of the initial participants, due to other work commitments, became less active in the community. What has been learnt from this initial manifestation of the analytical community concept is that an active and committed participation from its members is fundamental to its success. To encourage an active community there needs to be either *normative commitment*, an “obligation to the community to be loyal and act on its behalf”; or *needs-based commitment* dependant on the “net benefits people’s experience from the community” (Ren 2011: 105) from its members. However, beyond the shortcomings of the OREMA project there is arguably a general lack of interest in musicology of electroacoustic music. Landy (1999: 68) wrote “there still seems to be relatively too little musical analysis of note within the electroacoustic field and, in my view, too few discussions concerning which techniques are appropriate for the analysis of sonic works including those of the popular sorts”; an argument that is still relevant even today.

## Conclusion

The OREMA project is an ambitious initiative that provides another means to communicate and publish original content within the field of electroacoustic music analysis. It challenges

the academic norms of individualist advancement by promoting shared knowledge, which most importantly has no barriers of entry to either contribute or view any published information. The OREMA project also sets a precedent for an analytical community, which could potentially be built upon for other initiatives outside of the realm of electroacoustic music analysis. For a project like OREMA to succeed and remain active more interest is needed within the musicology of electroacoustic works and more emphasis should be put towards the benefits of such studies and their impact on the wider electroacoustic community.

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