Measuring Intention against Reception in Electroacoustic Music:
A new opportunity for analysis

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Abstract

A substantial amount of research concerning contemporary music, including a good deal of electroacoustic music, is focused on the composer's product (e.g., the score, a tape) and not on the listening experience or the composer's intention for that matter. Of course, recent years have seen an increase in research focusing on reception. This project acknowledges the fact that for decades many composers have been trained in universities and therefore might be said to be 'thinking musicians'. With this in mind, and taking into account how marginal a good deal of contemporary music is, the project presented in this paper has been designed to construct a dynamic methodology to gain insight into the relationship between the electroacoustic composer’s intention and the listening experience (reception). As a matter of fact, analysis of product only takes place for purposes of confirmation. Its methodology, briefly sketched below, is intended to investigate individuals' listening strategies when introduced to a piece without any contextual information, and how, when provided with relevant material about a work, the work’s dramaturgy, the listening experience is influenced. The research group participants’ desire is to prove that the patterns of behaviour that arise will enhance new, more focused strategies for analysis as well as improvements in the general understanding and classification of this musical corpus.

1 Contextualisation: Analysis and Electroacoustic Music

Let’s get straight to the point and make some claims concerning the relevance of electroacoustic music analysis as well as the study of its appreciation. Its lot exemplifies the relatively uncoordinated and sparse state of today’s electroacoustic music theory. Traditionally analysis has played a role in supporting a greater understanding of a composer’s (or, in the case of folk music, a people’s) means of constructing and performing a given musical work. In the case of electroacoustic music, this is equally of value. It is recognised that this music represents the most radical departure from tradition in music history, one where every aspect of musical architecture from choice, ordering and treatment of material to structure and so on are up for grabs. Analysis can be used to play a constructive role in terms of understanding people’s reactions to this corpus of music as well as to helping to identify why the music appears to be so inaccessible to so many. In short, a better understanding of how this music and the composer’s intention are received might aid in setting up protocols better serving the appreciation and, in consequence, the proper classification of this corpus of music. This in no way needs to limit the diversity of music made involving electroacoustics, which I consider to represent a ‘broad church’, i.e., not simply being limited to acousmatic works such as those made in Paris decades ago. This ranges from electroacoustique to électroacoustique, that is from sound-based experimental forms of ‘popular music’ to those acousmatic works to appropriate forms of algorithmic composition, just to name a few modestly overlapping areas.

Reviewing the literature published thus far in the field, much of which has been written by the composers themselves, one might conclude that virtually every imaginable analytical protocol has been (briefly) investigated and that few are catching on. Although this paper is too short to present a proper survey, a few areas of investigation are worth listing to establish its breadth thus far. These include traditional score-based or descriptive analyses focusing on construction principles. Directly associated with this is the problem of appropriate notations for an accurate visualisation of the music. In some cases notation investigates sound categorisation and manipulation, not to mention representing how sounds are (re)synthesised if relevant. Alternatively, one can use a version of spectral analysis as a form of notation. The notated analysis
score assists in the discovery of new orderings of sound material (micro-level) as well as structuring of larger electroacoustic musical entities (macro-level). Then there is the question of terminology. Scholarly reception analysis, i.e., the interpretation of these postscriptive scores, occasionally leans on the aging terms introduced by Schaeffer, or more recently vocabulary contributed by Smalley. This is, however, an exception, not the rule. More odd, perhaps, is: how many people are using electroacoustic-specific terminology at all?

To continue with this pointillist survey, where it is known which formalisms have gone into the creation of the work, analysis occasionally delves into ‘retrieving’ this information. Given the diversity of these formal approaches as well as less formal ones, analysis also deals with the identification and description of families of approaches and works.

Separate from the above are analytical protocols to deal with sound in space, interactivity and music in a multimedia context, just to name a few. Closer to our own research are analyses that take modes of listening, aspects of perception, cognition, semiotics and psychoacoustics into account. And then there are the thorny questions of aesthetics and appreciation, thus far fairly carefully avoided in electroacoustic analysis. Fortunately, any investigation of reception and of how accessible a work might be can hardly ignore these subjects as will now be discussed.

### 1.1 Why Investigate Intention and Reception?/The Role of Musical Dramaturgy

There is nothing wrong with any of the approaches mentioned above. They all serve the greater goal of better understanding of this still rather young form of music. However, it often seems as if one is starting from a level of sophistication parallel to that of traditional musicology, perhaps avoiding or ignoring a foundation. Therefore, the combination of the relative lack of coherence in electroacoustic music analysis combined with the need for analytical protocols at a more basic level have led to the investigation the Music, Technology and Innovation Research Group (MTI) is currently developing at De Montfort University in the UK.¹

Our view is that analysis of this music need not necessarily be based on detailed formal or grammatical information of an artifact in the first instance. It is perhaps more important to investigate how we listen/what we hear.

It follows that analysis based solely on reception might be worth considering. However, we are not limiting ourselves to this notion as we are equally interested in how accessible this work might be. To achieve this, we must not only investigate the listening experience, we must also take the composer’s ideas into account. The ideas referred to in the previous sentence have less to do with the ‘how’ of the making of the piece than the ‘why’ the piece is what it has become. The ‘why’ aspect involves contextual issues which have led to a work’s creation. It involves discoveries made during the process of the work. It can also involve audience reaction to the work. It particularly focuses on what a composer would like to communicate through the work. All together it reflects the musical dramaturgy of the composition or performance of a dynamic (e.g., interactive or diffused) composition. Why would a musician be concerned with dramaturgy? Our view is that in today’s society a dialogue amongst artists and between artist and those appreciating work is desirable. The ‘why’ of our work is nevertheless too often neglected. As many artists have some form of higher education training the articulation of the dramaturgy of a work seems to be a logical consequence.

Similar to drama, one can choose to ignore a production team’s concept of the staging of a work and simply experience it individually. Our project acknowledges this practice. However, many people enjoy exploring a programme book before a performance. Particularly for those who are new to such productions or interested in the artistic vision, this information allows them access into the work’s universe.

As will become clear below, our analytical methodology commences with listening without any contextual information. As information concerning a work increases, the influence of this information on the listening or audio-visual experience as well as a person’s placement of the music is monitored.² One can discover both how reception without any information may lead listeners far from where a composer wants them to go as well as how being offered dramaturgic detail can open up a work to many.³

### 1.2 The Classification of Electroacoustic Music

One hypothesis we are looking into in this project is that a great deal of sound-based music (read: electroacoustic music, sonic art, sound art and similar) deserves its own separate category beyond the ‘evergreen’ classifications, popular and contemporary art music. If this proves to be the case, the relative lack of appreciation of some of this music as well as of the modest number of people involved in its creation will be challenged. In consequence the results could be found to be extremely useful both in terms of developments in education as well as the recording and the communications media. In fact, our ideal is to prove that this music can represent one form of reaction against the commercial consumption of...
music dictating most musical experience today. This reaction is due, in part, to the enormous departure the music represents and the ease with which it can fit into interdisciplinary, in particular audio-visual and virtual contexts. It could become an art for all.

2 Our Project: Methodology and Goals

The research group members have decided to approach the project dynamically in the sense of not relying on an overly fixed methodology in the first instance. Instead, it has chosen what it considers to be logical paths triangulating intention and reception of relevant electroacoustic works. Until now, the project has primarily involved works that contain real world references. This restriction has been accepted as we are all aware that virtually every listener, having lost musical givens such as metre and tonality in many electroacoustic works, tend to grab on to everyday sounds, either real or imagined, as a starting point. The tests are run in approximately the same manner by all of the group's members, always including one of their own works, on groups with different levels of experience. We have discovered that we are not only acquiring relevant information, triangulation is also taking place as the composer is both researcher and subject of investigation. This provides a useful means of beta-testing our methods and offering suggestions for their improvement.

2.1 A Brief Walk through the Method

A bird’s eye view of the current method follows:

I. Intention: A composer is asked to provide the project with various forms of information. There are two categories.

A. General: i. ‘Cookbook’ information: i.e., how the work was made if this is found to be relevant.

ii. General intention: This ranges from the work’s inspiration to the formal application of a structure and anything in between. Ideally the composer’s dramaturgy of the work will form the heart of this response.

iii. Does the composer want the work to fit specifically within a category such as experimental popular or contemporary art music? If not, is there a more specific or alternative place for the work?

iv. In the view of the composer, how important is it that his or her general intention, including inferences taken from the title, be heard? Why or why not?

B. Specific: i. Is there an expected listening strategy (or something similar) or not? Specify. How does this follow from the dramaturgy?

ii. Are there some things (singular or plural) for the listener to hold on to?

iii. Is there any other specific information of note concerning intention relevant to the listener (i.e., the elaboration of the dramaturgy)?

Composers uninterested in both general and specific intention being received are treated as special cases in this research.

II. Reception: Each work is to be listened to by at least two groups of listeners of different ‘levels’ of experience. They are asked to investigate the elements of intention introduced above under at least two circumstances: without the information provided by the composer, and then with title, general and specific intention information. The changes from phase to phase are then analysed.

A list of elements that the listener holds on to whilst listening to electroacoustic music, compiled by the author in the 90s, is being updated. Some of the current areas follow. These have evolved from the combination of reception feedback and information provided by composers.

i. Some parameters

   a. Dynamics
   b. Space
   c. Pitch
   d. Rhythm

ii. Homogeneity of sounds and the search for new sounds

   a. Pieces based on one or a few pitches
   b. Homogeneous textures
   c. New sounds

iii. Textures not exceeding four sound types at once

iv. Programmes/narratives, some are real but many are imaginary

   a. One programme – nature (e.g., soundscape composition)
   b. Two special cases with recycles known sounds – those musical and ‘anecdotal’
   c. Acousmatic tales

v. The interaction between audio and visual information

This list will continue to be expanded and refined as will the method as the project proceeds. It is our intention that by 2003 a publication of importance will become available describing the relevance of the procedure and sharing its results. It goes without saying that traditional analysis is applied to verify details that arise during the investigation of intention and response. Furthermore, results of at least equivalent importance will be published focusing upon listeners’ views concerning the current categorisation of this music.

2.2 A Brief Example

The following words should not be read by anyone planning to attend this paper in Havana. An
exceptionally short excerpt from a work has been chosen to illustrate the methodology. The selected composition is by a member of the research group, Simon Atkinson. His “Nocturne” was realised in 1999, a work of 8’33 duration. It contains several aspects that one can hold on to from the list above, in particular within categories ii, iii and iv.

Perhaps the ‘narrative’ content might appear to be a bit abstract to the audience upon first listening. After gaining feedback from listeners concerning what the piece might be reflecting, its title will then be divulged. The fragment will be listened to a second time and very brief remarks, given the length of this presentation, will be requested. In the third and final phase, the following abridged information, acquired from the composer will be presented. The work is intended to adhere to the tradition of the nocturne (e.g., Chopin). It explores a “fictional landscape … kaleidoscoping detail and texture” which supports Cage’s notion of the “coming to life of small sounds”. This piece of minimal means allows one “to listen to musical sounds as if listening to the sounds of nature”. Following the theme of nocturne, Atkinson states, “The eye is the perceptual king of the daytime, the ear the queen of the night”. Leaving interpretation open to his listeners, the piece provides them with something(s) to hold on to. He believes that the ‘how’ of this work to be irrelevant in this context. At this point the piece will be listened to for the final time and comparisons will be made between the three phases of listening. Introducing Chion’s notion of cinéma pour l’oreille at this point, the participants will then be asked whether this work solely belongs to the art music category.

Normally, this experience would take place with more than one piece discussed, with appropriate questionnaires, with considerably longer sound or a/v fragments and much greater time to discuss things and share views. Still those present at ICMC2001 will see a relatively simple methodology in its early stages being applied, one which can continue to go through iterations reaching an increasingly high level of sophistication of response and understanding.

As our further research is combined with others’ discoveries in areas such as modes of listening, semiotics, cognition and similar, the project’s future will become more interdisciplinary and, in consequence, more generally applicable.

2.3 Some Closing Words

One of the remarkable opportunities that this project raises is the feedback offered to the musicians involved in an electroacoustic work. This protocol can perhaps develop into a parallel strand to traditional analysis leading towards a greater understanding of how the music is valued and which type of opportunities it offers diverse users groups. Obviously input from colleagues in the field as well as their joining us in this investigation are most welcome.

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1 In fact, a rigorous survey would be most difficult at the moment given the amount of inaccessible or unpublished material, much of which is slowly but surely finding its way on to the internet. Another project hosted by the MTI Research Group is the ElectroAcoustic Resource Site (EARS), currently in preparation, which is intended to make research in a wide spectrum of areas of electroacoustic music studies searchable and available to today’s internet-connected electroacoustic music community.

2 MTI members currently involved in the early stages of development of this research project include: Simon Atkinson, Andrew Hugill, the author, John Richards, Rob Weale and John Young.

3 If the ‘how’ of the work contributes to the ‘why’, then it is included in the intention data offered to listeners.

4 We accept and take into account a good number of composers who are totally disinterested in whether their intention is received. They support postmodernist theory which is generally dismissing of an author’s views.


6 This final category forms a bit of an exception in terms of the access discussion, as it has often been discovered that a very wide public is open to challenging (electroacoustic) music when presented in a compatible audio-visual context.

7 This excerpt, 5’40 – 6’25, can be found at: www.cta.dmu.ac.uk/mtirg/SAtkinson (a 9.8Mb download).