The Intention/Reception Project at De Montfort University Part 1 of a two-part talk given at the workshop: New Protocols in Electroacoustic Music Analysis AHRC ICT Methods Network Workshop Music, Technology and Innovation Research Centre De Montfort University, 22.6.07 Leigh Landy llandy@dmu.ac.uk

In the year 2001 a project was announced in which researchers would investigate to what extent the listening public was receiving electroacoustic music composers' intentions (Landy 2001). Rob Weale, who became a PhD student shortly after the publication, along with the author of this article, designed the project over the following years. The Intention/Reception (I/R) project has two key aims:

- a) to examine to what extent electroacoustic composers' intention are being received by listeners of various levels of experience; and
- b) to examine to what extent listeners with no previous experience of electroacoustic music might be interested in further exposure to similar works.

For the purposes of the presentation at this workshop, this project will be introduced in brief. This will be followed by an introduction to a similar project involving the study of contemporary dance as represented by Kate Stevens from the University of Western Sydney who is with us today (paper submitted separately) and followed by a 'looking forward' conclusion that ends this paper. It is the approach that Dr. Stevens represents that illustrates new applications of ICT methods within the innovative arts.

The I/R project

The I/R project is not specifically an analysis project in the traditional sense. It assists analysis in investigating the stream of information from the intentional aspects of poiesis to the reception aspects of aesthesis. Ideally the acquired reception information can serve to influence a musician's work in the form of a feedback loop similar to those applied in action research models.

Clearly not all composers are comfortable with sharing their views concerning intention. When they do, they can be very general or, indeed fairly specific. (Many concert programmes offers some fairly irrelevant information as well, but that is not our subject here.) Some claim to have none, that is, the musicians believe that their sounds should 'speak for themselves'. One of the underlying thoughts at the foundation of the I/R project is that expecting sounds to speak for themselves has been an often-heard claim of contemporary art music composers in general, something that has led to the large-scale marginalisation of this body of music. Our view is that a good deal of electroacoustic music need not be marginalised. Linking intention to reception is one means of investigating how communicative electroacoustic music can be. Looking into potential appreciation of a genre new to many listeners is another means.

A method was developed as part of Weale's PhD project (Weale 2005; he also published

his results in article form in Weale 2006). This involved inviting composers to submit works along with intention information based on a questionnaire. In his case three compositions were chosen, all including real-world sounds as something to hold on to. (The project can be expanded to works without such sounds in the future, but given the fact that access formed an important foundation of the project, this proved most useful at this early stage.) These three works ranged from a soundscape composition to one that might be considered to be a post-musique concrète work with highly manipulated sounds. The third composition was an 'in between' piece that was not focused on either end of this particular spectrum.¹ Listeners were provided with two different questionnaires, a 'real-time' questionnaire and a 'directed' intention questionnaire. The former was to be filled in whilst listening to a given work. Clearly very short answers were called for to avoid the listener engaging more with answering questions than with listening to the work in question. The composers' and listeners' questionnaires have been included below in this article's appendix.²

Tests were run with listeners with different levels of experience: highly experienced listeners (postgraduate electroacoustic composers and professional musicians), experienced listeners (undergraduate level) and inexperienced listeners that were further subdivided into musicians' and non-musicians' groups. Our first aim concerning the intention/reception loop was investigated with all groups; the latter one with the inexperienced groups only as it was assumed that the others had already chosen to be actively involved with this repertoire.

The tests ran as follows. A work was played during a test session three times. The realtime questionnaire was filled in during each listening. The directed questionnaire which was investigating access information was filled in after the first listening only. Before the first listening, nothing was shared with the participants concerning the given work. This was therefore the basis for filling out the directed questionnaire, that is, without intention information. The title or a single element of information related to the work was shared before the second listening and a significant summary of the composer's intention (his or her dramaturgy) was shared before the third and final listening. After the sessions, the groups of listeners were also allowed to share their experience during an informal discussion. This often led to interesting exchanges that heightened many participants' interest in the work or in further pursuing electroacoustic music in general.

As the I/R project has been extensively documented elsewhere, we can now jump to the results of our trials. This is where things became very interesting. During both Weale's and my own trials, not one single piece received less than a 50% positive reaction in terms of the listeners' wanting to hear a similar work in the future. This is in stark contrast with today's situation of far less than 1% of the population being aware of much

¹ I, too, ran an experiment with Weale's help using two works that I chose at the two ends of the scale resulting in similar results (see Landy 2006).

² Please note that in the directed questionnaire it was discovered that certain questions – namely the last two concerning CD purchase and concert attendance proved problematic as CD purchasing behaviour varies enormously between individual and cannot be assumed to relate directly to music appreciation; The same can be said of concert attendance, something many participants rarely (or never) did. These two questions will be replaced in future trials.

of the music's existence. Over three-quarters of listeners were interested in further exposure to certain types of electroacoustic works. Even if the laboratory situation (including repeated listening) were to be taken into account, these results remain surprising. Such works are indeed much more accessible than is currently the case. These statistics provide a powerful lobbying tool for people interested in our introducing electroacoustic music in children's music curricula or for broadcasters to pay more attention to such works.

In terms of the intention/reception loop, more experienced listeners had varying views concerning their desire to be informed of a composer's communicative intentions. The general opinion was that such information was useful, but quite a few participants wanted to experience the work for themselves. For inexperienced listeners, the vast majority found our drip-feeding of intention information extremely useful as it served as an access tool as did the presence of sounds from their daily lives and other musical aspects of these works. There is no difference here from that of theatre goers who purchase booklets before a performance and can investigate the dramaturgy of a performance beforehand or, alternatively, check whether their experience was indeed the intention of the theatrical team after the viewing. Few theatre visitors, particularly in 'serious' theatre, tend to prefer to ignore or avoid such dramaturgical information totally in my experience.

As stated, the information that we acquired from participants can be used as feedback information for composers or groups of musicians making electroacoustic music to determine whether they are succeeding, not only aesthetically, but also in terms of their communicative goals. We have sent our data to all composers who have participated in the I/R project.

This project has been based on traditional methods associated with the social sciences that seemed quite appropriate for our goals. Kate Stevens' project relied more heavily on methods borrowed from psychological experiments. It was at this point of my presentation that I handed the floor to Kate to introduce her project focusing on intention and reception in terms of two contemporary dance works.

——> Three Techniques for Measuring Audience Reactions<———

Conclusion

Obviously the question is: where from here as far as our I/R project is concerned. Practically speaking, my colleague Simon Emmerson and I have just submitted a large project proposal involving all of this workshop's participants (and Michael Casey who is specialised in computer-based sound segmentation and identification) investigating new and evolving forms of electroacoustic music analysis. Hopefully this exciting consortium will be able to collaborate in the not too distant future. One of the two main partners in this proposal is the MARCS Auditory Laboratory at the University of Western Sydney where Kate Stevens is based. If this project receives support, we would like to merge the two methodologies in terms of the I/R project and use the resulting methodology with a diverse range of electroacoustic works (perhaps including audio-visual works, interactive installations, real-time performance works, etc.). Furthermore, it is our intention at the Music, Technology and Innovation Research Centre at De Montfort University to employ the I/R methodology to a new electroacoustic music curriculum for young people as one

of its three key aspects: *understanding* coming through a hypermedia-based ElectroAcoustic Resource Site (EARS II, the original EARS can be found at www.ears.dmu.ac.uk) for children; *appreciation* and *access* through the I/R methodology; and *creativity* through a sound-based software package for children that is currently in development that is provisionally called Sound Organiser. In this way all three aspects can be holistically combined allowing young people to enjoy the opportunities offered by this new sonic art form called electroacoustic music.

Cited sources:

- Landy, Leigh
 - 2001 "Measuring Intention against Reception in Electroacoustic Music: A New Opportunity for Analysis." *Proceedings of the International Computer Music Conference.* Havana: 26–29.
 - 2006 "The Intention/Reception Project". in Mary Simoni, ed. *Analytical Methods of Electroacoustic Music*. New York: Routledge: 29–53 + appendices on the book's DVD.

Weale, Rob

- 2005 The Intention/Reception Project: Investigating the Relationship between Composer Intention and Listener Response in Electroacoustic Compositions. PhD Dissertation. Leicester, UK: De Montfort University.
- 2006 "Discovering How Accessible Electroacoustic Music Can Be: The Intention/Reception Project". *Organised Sound.* **11**(20): 189–200.

APPENDIX – The three I/R questionnaires

The Intention/Reception Project: Real-Time Listener Response Questionnaire

Please complete the following (BLOCK CAPITALS) Name: Date of birth (dd/mm/yy): Sex (m/f): Ethnic origin: Country of permanent residence: What is (are) your general musical taste(s)?: (You may state specific genres, e.g. metal, orchestral, indie, bangra, rock and roll, jazz etc; and/or specific groups, bands, artists, E.g. Elvis, Stereophonics, Beastie Boys, Miles Davis, Aretha Franklin etc.)

1st Listening

Please list any thoughts, images and/or ideas that come to mind as you listen to the composition:

2nd Listening

Now that you are aware of the *title* of the composition, please list any new or altered thoughts, images, ideas that come to mind, or try to expand on any ideas that you have as you listen:

What might this piece be about?

Did knowing the *title* help you to understand the composition? If yes, why? If no, why not?

3rd Listening

Now that you are aware of the *composer's intentions*, please list any new or altered thoughts, images and/or ideas that come to mind, or try to expand on any ideas that you have as you listen:

Did knowing the *composer's intentions* help you to understand the composition? If yes, why?

If no, why not? How did repeated listening help you in understanding the piece?

The Intention/Reception Project: Directed Questionnaire

(Candidates may refer to their initial listening notes when answering the following questions.)

PRINT YOUR NAME:

1) What might this piece be about?

2) What sounds did you recognise in the composition?

3) If you heard sounds that were strange and/or unnatural, please describe (if you can) one/some/any of them?

4) Did the composition conjure images/pictures in your mind?

If so, please describe them?

5) Did the composition suggest a narrative, be it a story or any other time-based discourse?

If so what might this concern?

6) Did the composition seem to convey any emotion(s)? And/or did you have any emotional responses to the piece?

If so, please describe them?

7) What aspects, musical or otherwise did you find most engaging in the composition?8) What aspects, musical or otherwise did you find least engaging in the composition?9) Did the composition make you want to keep listening or was it uninteresting?Why?

10) Now that you have heard the composition, would you choose to listen to a similar type of composition again in the future?

If yes, why? If no, why not?

11) Now that you have heard the composition, would you choose to purchase a CD containing this type of composition?

If yes, why? If no, why not?

12) Now that you have heard the composition, would you choose to attend a concert featuring these types of compositions?

If yes, why? If no, why not?

NB: Please note that, in the future, questions 11 and 12 will be replaced by more appropriate ones.

COMPOSER INTENTION QUESTIONNAIRE

(Please note that lowercase, bracketed text has been inserted to provide clarity to the questions.)

Please complete the following (BLOCK CAPITALS) Name: Date of birth (dd/mm/yy): Sex (m/f): Ethnicity: Country of permanent residence:

Composition Title:

Sound source(s)/source material

(I.e. The place(s) or object(s) from which the sound(s) were collected/recorded, e.g. rocks, railway station etc; and a list of each sound object that was used, e.g. the sound of rocks being scraped together, the sound of trains etc.) :

Intention Questions

1) WHAT WERE YOUR INTENTIONS CONCERNING THIS PARTICULAR COMPOSITION? (What are you attempting to communicate to a listener? Please be as specific and detailed as possible.)

2) WHAT METHODS ARE YOU USING TO COMMUNICATETHESE INTENTIONS TO THE LISTENER? (Are you relying on the recognisable aspects of the sounds to communicate meaning? Are you using specific sonic manipulations to communicate these meanings?)

3) IS THERE A NARRATIVE DISCOURSE INVOLVED?

(The word narrative is not solely meant to imply a text-based narrative, a story, but includes sound/structure/spatial/temporal-based narrative discourses.)

IF SO, HOW WOULD YOU DESCRIBE THIS NARRATIVE?

4) HOW IMPORTANT IS IT THAT THIS NARRATIVE IS RECEIVED AND WHY?

5) WHERE DID THE INSPIRATION TO CREATE THIS PARTICULAR COMPOSITION COME FROM?

(What influences caused you to initially decide to create this particular composition?)

6) TO WHAT EXTENT AND HOW, DID YOUR INITIAL INTENTION CHANGEAS THE COMPOSITIONAL PROCESS PROGRESSED?

7) WHAT INFLUENCED THESE CHANGES OF INTENTION?

8) IS IT IMPORTANT TO YOU THAT YOUR COMPOSITION IS LISTENED TO WITH YOUR INTENTIONS IN MIND AND WHY?

9) IS/ARE THERE SOMETHING(S) IN THE COMPOSITION THAT YOU WANT THE LISTENER TO HOLD ON TO AND WHY? (E.g. a recognisable sound, structure, narrative etc.)

10) AT WHAT POINT IN THE COMPOSITIONAL PROCESS DID YOU DECIDEON A TITLE FOR THE PIECE?

11) HOW MUCH DO YOU RELY ON THE TITLE ASA TOOL WITH WHICH TO EXPRESS YOUR COMPOSITIONAL INTENTIONS AND WHY?

12) DO YOU RELY ON ANY OTHERACCOMPANYING TEXT, IN THE FORM OF PROGRAMME NOTES, TO OUTLINE YOUR INTENTIONS PRIOR TO THE LISTENER'S ENGAGEMENT WITH THE COMPOSITION AND WHY? (Please list/attach the text that accompanies your composition here.)

13) WHO IS YOUR INTENDED AUDIENCE FOR THIS COMPOSITION? (E.g. All audiences, the electroacoustic community, etc.)

14) HOW IS YOUR COMPOSITIONAL PROCESS INFLUENCED BY THE INTENDED AUDIENCE, IF AT ALL?

15) HOW IMPORTANT IS IT THAT THE TECHNICAL PROCESSES INVOLVED IN THE COMPOSITION ARE RECOGNISED BY THE LISTENER AND WHY?

16) DO YOU THINK THAT DETECTABLE TECHNICALPROCESSES ARE AN INTEGRAL ASPECT OF THE COMPOSITION'S OVERALL AESTHETIC? (Is it important in this composition that the listener is aware of the technical processes?) IF YES, WHY? IF NO, WHY?

17) UNDER WHAT LISTENING CONDITIONS IS YOUR COMPOSITION INTENDED TO BE HEARD AND WHY? (In stereo, multi-channel, through headphones, in a concert hall, diffused etc.)

18) IF YOU INTENDED FOR YOUR COMPOSITION TO BE DIFFUSED OVER A MULTI-CHANNEL SYSTEM, HOW DID THIS INTENTION AFFECT YOUR COMPOSITIONAL TECHNIQUES?

(In what ways did you structure the composition and its contents in order for it to be best heard in a diffused performance?)

19) IF YOU INTENDED FOR YOUR COMPOSITION TO BE DIFFUSED OVER A MULTI-CHANNEL SYSTEM, IN WHAT WAYS DO YOU EXPECT THE LISTENINŒXPERIENCE TO BE CHANGED BY A STEREO PERFORMANCE OF YOUR COMPOSITION?