3
The Intention/Reception Project[1]

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3.1. Introduction

The Intention/Reception Project involves introducing electroacoustic works to listening subjects and evaluating their listening experiences. Listening responses are monitored by means of repeated listening and the introduction of the composers' articulation of intent (by way of a composition's title, inspiration, elements that the composer intends to be communicated, and, eventually, elements of the compositional process). The intention/reception project not only opens up individual works to a number of listeners, it exposes entire repertoires of works to new audiences; the project is intended to help people find means to listen to, appreciate, and find meaning in electroacoustic works. In addition, the purpose of this research is to investigate the extent to which familiarity contributes to *access* and *appreciation* and the extent to which *intention and reception* meet in the very particular corpus of electroacoustic music (see Landy 2001; Landy and Weale 2003).

3.2. Project Background and Context

The project is rooted in the author's prior research concerning access and appreciation issues in contemporary art music and, in particular, electroacoustic music in the widest sense of the term. This investigation is based on the premise that certain forms of music deserve a larger audience than they currently have. In the case of much electroacoustic art music, that audience consists largely of electroacoustic music composers.

The author's research has given rise to a number of relevant observations, including the following (see Landy 1991, 1994):

1. There is a lack of support for new music in education particularly at elementary and secondary levels—as well as by the communications media. Without this support, finding a means of increasing access is challenging to say the least. Consequently, the music is relatively unavailable to the general public.

2. A significant number of composers have composed works of great complexity, particularly during the latter half of the twentieth century. The process by which a larger audience might acquire a taste for such works is normally a slow one. Because there are so few opportunities to learn to appreciate such works, the gap is perhaps a logical one.

3. The vast majority of published studies in contemporary music, especially electroacoustic music, involve high-level discussion. Furthermore, there appear to be very few basic publications of potential interest to or involving nonspecialists.

4. In electroacoustic music, as in vocal/instrumental music, inexperienced listeners enjoy being offered "something to hold onto" to help them cross the threshold of access and appreciation. Items such as homogeneity of sounds or textures, layering of sounds, or spatialization parameters have been found to make works accessible. In fact, it is fair to say that many types of music become more accessible after repeated listening, especially when listeners are offered something(s) to hold onto. Thus, there is no reason why the methodology of the intention/reception project shouldn't extend to other genres so long as intention data can be gained and play a central role in aiding appreciation.

The intention/reception project represents a step beyond the author's reception analysis based project, which led to the coining of the term *something to hold onto factor*. This assumes that both composers and listeners are interested in discovering meaning in electroacoustic compositions, at least those that include real-world sound references. Jean-Jacques Nattiez defines meaning: "An object of any kind takes on meaning for an individual apprehending that object, as soon as the individual places the object in relation to areas of his [or her] lived experience—that is, in relation to a collection of other objects that belong to his or her experience of the world" (Nattiez 1990, 9). Meaning need not be related to narrative but may include images or emotions that arise from moments in an electroacoustic work. The limitation of choosing works involving real-world sound references implies that shared experience may be linked to meaning, something that cannot be assumed of works that limit themselves to abstract sound references. Source recognition forms only part of the understanding of a work, and, in fact, may impede

understanding. Nevertheless, real-world sound references also form part of the communality of experience, a necessity when looking for some things to hold onto. This notion is in distinct opposition to the Schaefferian concept of reduced listening (*écoute réduite*), which asks the listener or analyst to listen to sounds without regard to source or cause. Although reduced listening might seem to be emancipatory in nature, it is hardly useful in terms of supporting either access to or the communication of meaning.

Although a listener's acquired meaning from a work need not be static nor the same as any other listener's, including the composer's, the intention/reception project investigates whether elements of meaning are communicated from composer to listener and whether the composer's intention offers the listener another means of accessing a given composition.

The project is based on an ideal articulated by Lelio Camilleri and Denis Smalley: "We need to achieve an awareness of the strategies which listeners adopt and how they construct their meaning" (Camilleri and Smalley 1998, 5). They continue: "An important goal of analytical exploration is…to attempt to reconcile and relate the internal world of the work with the outside world of sonic and non-sonic experience" (Camilleri and Smalley 1998, 7). Clearly it is useful to identify the extent to which intention information from the composer can aid the listeners' experience.

3.3. The Analysis

This experiment is the second phase of a long-term multiphase dynamic project. The project is "dynamic," in that changes have occurred; for example, in permissible compositions and refinement of methodology.

3.3. 1. *The Chosen Works*

Two contrasting compositions were selected for this test. Each of the three composers—one work involved two composers—was offered a "composer intention questionnaire" (DVD reference 1) to complete. This questionnaire,[2] containing nineteen questions, was designed to solicit pertinent information concerning the compositional procedure, to trace the development of the work in terms of intention from the moment of inspiration through to its completion. The information acquired on these composer intention questionnaires was used during listening tests.

The chosen works are extremely dissimilar. *Prochaine Station* is a very short work that was realized quickly using material in its found state, so far as one can tell. It is a soundscape composition with very brief interlocking scenes. *Valley Flow*, a much longer, highly refined work is on the margin of compositions that the project has investigated thus far, as its source material

is rarely overtly exposed. The composer, Denis Smalley, is very well known for the creation of morphologies of sounds and the development of these sound morphologies into structures, as well as for the design of analytical tools complementary to his work.

One hears immediately that the first piece involves underground train (metro/subway) travel. The research will determine whether the listener is able to identify the "subject area" of the Smalley piece without help. Still, both deal with the real world: Calon and Schryer offer their "narrative" quite directly, Smalley much more evocatively. This vast difference in approach serves as the criterion of choice.

Only "tape pieces" have been chosen here. Thus far the project has restricted itself to works on fixed media due to the manner in which tests have been administered. However, there is nothing standing in the way of, for example, interactive works being investigated, but this would best take place where live performance is possible. The choice was made due to circumstance, not limitation of method.

3.3.2. Listener Testing

The listener test volunteers were divided into two "user groups." (a) Inexperienced listeners: listeners who declared beforehand that they had no knowledge of electroacoustic music—in other words, the general public; and (b) experienced listeners who had a basic knowledge of electroacoustic music and who had heard and composed some electroacoustic music—in this case, undergraduate contemporary music students. Participants' lack of experience was assessed in the following manner: (a) they were asked if they had heard of or had ever knowingly listened to any electroacoustic music; (b) they were asked what types of music they listened to; (c) during the first listening session, they were asked whether they had previously listened to anything like what they had just heard; and (d) their questionnaire responses offered further pertinent information; for example, whether they used any relevant terminology that had not been introduced during testing. Ideally each level's user group consisted of approximately fifteen listening subjects. All volunteers signed a participants' ethics form stating that their information will remain anonymous. The ethics committees at De Montfort University, Leicester monitor all ethical procedures in the intention/reception project.

In addition, highly experienced listeners with a developed, in-depth knowledge of electroacoustic music, for example, postgraduate students and beyond, provided control data. This smaller group of highly experienced listeners demonstrated the degree to which "specialist" knowledge of electroacoustic music affects access and listening strategies.

Two types of questionnaires were created to record responses during the listening process. They offer a series of questions designed to solicit freely expressed thoughts, by not leading the listener in any interpretative direction. The "directed questionnaire" (DVD reference 2) was completed after the first listening. The "real-time questionnaire" (DVD reference 3) was completed during the three separate tests that occurred in a single listening session, involving playing a single composition three times in total.

> Listening 1. The composition was played without providing the listeners with its title or program notes.
> Listening 2. The same composition was played again, this time providing the listeners with its title or, if this was not helpful, one pertinent aspect of the composer's intention.
> Listening 3. The composition was played again, this time providing the listeners with the composer's program notes and questionnaire responses.

These three rounds of listening are useful because they provide qualitative data concerning: (a) the extent to which the listener's access to the composition was possible without receiving any contextual data prior to listening to the piece; (b) what listening strategies were employed to make sense of the composition's content alone; (c) the extent to which the title and information concerning the composition's dramaturgy assisted the listener, and how these contextual elements informed the listening experience. *Dramaturgy*, a theatrical term, is the contextualization of a work or the interpretation of a performance. One important question here is: to what extent do the title and each composition's dramaturgy give listeners "something to hold on to" when engaging with a new electroacoustic work?

The real-time questionnaire allowed listeners to make notes as they experienced a composition, in order to capture their immediate responses without forcing them to dwell on a particular question; this would interrupt concentration and prevent continuous listening. The directed questionnaire (DVD reference 3) asked more focused questions and allowed the listeners to expand on their initial notes. These questions were intentionally left as open as possible. The listeners completed the questionnaire after the first listening—providing only important information about the initial experience—before any sort of context for the composition was offered. Both questionnaires are included on the accompanying DVD.

At the conclusion of all sessions, the group informally exchanged views. Notes were taken after every session and these informal discussions have proven invaluable. Particularly in inexperienced groups, new experiences were shared during such discussions and some views were altered, this, in turn, added to the intention/reception data acquired.

3.3.3. The Data Collected

Tests were carried out on two types of groups with no experience (N-E) in electroacoustic music: those of nonmusicians (N-E/N-M) and those involving music and music technology students in further education.[3] The music technology students were learning a more nuts and bolts approach to music technology tools than one focused on repertoire development. None of the students had ever heard a work like the two included in the tests. All were involved in popular music and ideally hoping to find careers in the music industry.

Twelve nonmusicians ranging in age from twenty to fifty-nine, the only group in which female members were in the majority (eight),[4] filled out forms for both compositions. Ten male students at Leicester College (N-E/1), mostly aged sixteen to twenty-two, although one student was fifty-eight years old, also participated in tests covering both compositions. In this category, five additional male students from the same institution of higher education, aged nineteen to twenty-three, sat in on the test for the Calon/Schreyer composition and three other male students, all aged sixteen, listened to the Smalley work (N-E/2). This is an exceptional case, so their results are listed separately in the tables below.

A group of nine students were also tested at another college in Hinckley. After a successful *Valley Flow* test, the group chatted together informally before the test was over, doing away with the atmosphere that had been sustained during the Smalley test. The access sections of the Calon/Schreyer questionnaires were filled in similarly, using the same expressions. Unfortunately, the return was not comparable with any other data and had to be disregarded.

The experienced group (Exp) consisted of thirteen final-year undergraduates at De Montfort University, Leicester. Twelve of these students were male; they were aged twenty-one to twenty-three, with one student twenty-seven, and one thirty-one-years-old. These students were studying music technology and most came from a background in popular music, although, by the final year many students' tastes have become more eclectic. The difference between the N-E and Exp students lies in the fact that electroacoustic music, both within art and popular music categories, forms an integral part of the Exp's course of study.

Finally, a control group of highly experienced (HExp) participants consisted of four postgraduate composers of electroacoustic music at Birmingham University. One student was twenty-nine and the others did not provide their ages. Only one member of this group was female; she was able to identify the composer while listening to *Valley Flow* for the first time, so her results form a small exception to the data acquired. No patterns were observed

between the genders or based on age, except in the group of nonmusicians where older participants demonstrated less open-mindedness to adventure than younger ones. That said, no large-scale conclusions should be drawn here due to the modest sample sizes.

3.3.4. *Prochaine Station—Christian Calon, Claude Schryer*

Prochaine Station (Next Station) was commissioned to last about three minutes; it forms one of twenty-five, three-minute electroclips on the CD for which it was made. It is clearly a work made in the land where the word "soundscape" is best known, Canada.

3.3.4.1. The Work   One normally associates long time spans with sound-scape composition, but this is an urban piece and logically reflects its city atmosphere through the high density of events, all clearly identifiable. As can be noted by the composers' remarks below, that next station is always the same one in the piece. As Christian Calon also describes below, the scenes are woven together, turning soundscape recordings into a soundscape composition. Claude Schryer makes it perfectly clear in his questionnaire that the work is intended to be accessible to the widest potential audience.

3.3.4.2. The Composers' Intentions   The easiest way to present the composers' intentions is to let them speak for themselves. The CD liner notes describe the composition in just three lines, simply mentioning that it is a Montreal piece and that it was realized in Schryer's home studio. The two composers answered their questionnaires independently. As some of the nineteen questions included in the questionnaire are not relevant to this piece, the following summary is restricted to the most relevant responses.

Sound Source(s)/Source Material
   Calon: Montreal subway, subway doors, voices, old Montreal horse carriage, steps, construction site, traffic, Chinatown voices and street music, radio, music, humor, hotdog stand with Claude Schryer's voice.
   Schryer: Soundscapes of Montreal over a three-day period.

What were your intentions concerning this particular composition?
   Calon: They consist mostly of impressions of the city, above and underground and glimpses of human experience on a normal day punctuated by unremarkable events. There is a sense of movement but always without movement. (The same station is always called.)

What methods are you using to communicate these intentions to the listener?
   Calon: Repetition and the use of short sequences (evocations) that open windows on the various "visions" weaving.
   Schryer: There are no [sound] manipulations, just field recording and editing. The soundscapes are musically rich and evocative on their own.

Is there a narrative discourse involved?

Calon: The piece is narrative in a nonlinear way.

Schryer:…in the sense of a story of Montreal being told by sound-scapes.

Where did the inspiration to create this particular composition come from?

Calon: It came from a walk through Montreal with friend and cocomposer Claude Schryer. It concerns a look at the sounds and spirit of the place we live in. It was not to become an acoustical document, but instead a poetic "ride" through the city. Another factor was the commission (electroclip) itself.

Is/are there something(s) in the composition that you want the listener to hold onto and why?

Calon: Yes, the alternation between subway doors/voices and the outside.

Schryer: [We would like listeners] to get a sense of what Montreal is like and our passion for the city.

At what point in the compositional process did you decide on a title for the piece?

Schryer: We decided near the end when we heard "prochaine station" being repeated in the piece.

How much do you rely on the title as a tool with which to express your compositional intentions and why?

Schryer: Not much in this piece—the title evokes the idea of traveling and of a multiple stop journey.

Do you rely on any other accompanying text in the form of program notes to outline your intentions prior to the listener's engagement with the composition and why?

Calon: No, but it is always a pleasure (as a listener) for an aftertaste to enrich and evaluate one's pleasure in the composer's textual propositions. They may bring in various unnoticed aspects of a work and unveil some of its hidden mysteries, unlock some chambers.

How important is it that the technical processes involved in the composition are recognized by the listener and why?

Calon: It is of no importance.

Under what listening conditions is your composition intended to be heard and why?

Calon: It probably works in most situations or places except the concert hall (or concert situation).

Schryer: Any, although the radio works well.

3.3.4.3. The Listeners' Experience   *Prochaine Station* was accessible to most listeners because all sounds in the work are recorded, untreated sounds. The use of recorded sounds, however, does not necessarily lead to greater appreciation of a composition; the risk of listeners rejecting a soundscape approach to composition as not being "music" must be taken into account. These assumptions were borne out by the acquired data. Most listeners quickly determined what the piece was about to a greater or lesser extent. One N-E/N-M listener, who clearly had not often been on an underground train, experienced a moon landing during the first listening; whereas, others experienced a cruise ship and a carnival setting. However, the same listener who perceived the moon landing also concluded that "a person can relate to everyday sounds." Another N-E/N-M listener felt that the piece was "not musical at all." In this case, access to sound organization did not translate easily into musical access. Nevertheless, in this group, the general view was of a piece that took the listener on a journey from point A to point B by way of a narrative discourse. Its short duration was also appreciated. With one exception, all of these listeners found the source material to be engaging. One listener stated that she enjoyed "hearing life from someone else's perspective." A predictable error concerning location was made (this happened at all levels), when a listener assumed the recordings took place in Paris, a city where many had traveled on the metro. In addition, one listener misunderstood "prochaine station" and thought "Panama City" was being called; this led him to think that the piece took place in Central America. Being provided with a title only confirmed first opinions in most cases; being provided with the composers' information aided in locating the piece, but not much more. Listeners found that repeated listening helped them to focus, to become more acquainted with sounds and how they were organized, and so to understand the work better. Unfortunately, many of the N-E/N-M tests took place either individually or in small groups. Therefore, no group discussion data were generated. As can be seen in Table 3.1, a sizeable majority found the work accessible.

The N-E groups demonstrated a fairly similar pattern. Perhaps because this group was generally younger, there was slightly less accuracy concerning what the piece might be about after the first listening. This might have been due to less travel experience. Still, the vast majority agreed with the journey notion, the sense of a narrative discourse, and the emotional content of the piece; although, those who "personalized" the experience sometimes added imaginative aspects to their scenarios. Perhaps because this group was overtly committed to popular music, much criticism of the composition came from its content and structure being different from familiar compositions. For example, complaints were made concerning the composition's lack of climax,

melody, and rhythm. That said, a few listeners also complained about the presence of an accordion, something that they possibly associated with older people. One overtly confessed his distaste for music that the listener has to concentrate on. Yet, for every such remark several listeners stated that they were open to new listening experiences.

The French language played a role for both this group and the Exp group; some listeners were alienated by a language they could not understand; others were enticed by it. Oddly, one listener of African origin perceived an African language in the piece and another listener of South Asian origin perceived an Asian language. Most text material is in French, although some English from a radio can be heard from time to time, and is a clue to the work's location. During the first two listening rounds, few listeners noticed that the word *Montreal* is included within an English-language radio fragment. Most listeners attempted to imagine an audiovisual version of the piece, though few suggested that they would have preferred the work in audiovisual form.

Accuracy and sophistication of response were generally a bit higher within the group. One listener wrote that he kept arriving at the same train station. Another spoke of a work of "organized sound." Errors were also made. For example, one student discussed the prominence of synthesizer special effects. The following individuals' remarks represent a common ground among several listeners at this level: the piece was "quite gripping through individual association," it allowed one to focus on "emotions based on memories," and one was provided a "chance to pay attention to daily life [via] sounds which are beautiful."

During the postlistening session conversations, the participants seemed to like the idea of a movement without movement, in other words, the idea of the piece remaining in or near a single station. Many had a sense of the train's only arriving at a single point but did not trust their judgment. A few were interested in the gender of the person walking, assumed to be female, which led to discussions of a scenario similar to those they were acquainted with from film. During the discussion, a majority found that the composition became more engaging than they had originally thought. This engagement was partially due to the diverse experiences of their peers. Yet, they felt that the work did not involve much compositional virtuosity, that is, that it could have been made by anyone.

The Exp group reflected their greater knowledge of electroacoustic music by using significantly more appropriate terminology. For example, many identified the composition as a soundscape[5] composition, a cityscape, a soundwalk, or even ambient.[6] One listener associated the work with the soundscape movement in Canada. Moreover, these students also identified more technical aspects of the piece that interested them, such as engaging use of the stereo field. A few even echoed the composers' view that this work

was not ideal for a concert situation; one listener called it a "hi-fi piece"—a piece meant to be heard on a CD player at home or during one's daily routine rather than in a concert performance.

Listening to soundscape recordings in no way stopped the Exp group from using their imaginations. Individuals claimed that this "immersive" work was based on the theme of "a day in the life." One found that the movement of the underground trains' doors led "to closed in and open sounds." Their complaints included the often present background noise. These remarks were an interesting commentary about real-world noise not being perceived as musical. The title was, again, of little help, and was more a tool in terms of confirming original impressions. However, the sharing of more information about the composers' intentions led one listener to state that the "radio [segments] made more sense" and another to confess his desire to know more about the city.

The Exp group conversation suggested that the simplicity of the work was effective; it provided for clear images; the lack of processing meant that "clutter" was avoided. Many had been more comfortable with the known, Paris, than they were with the unknown, Montreal. The group was quite split as to whether knowledge of French enhanced their appreciation, although the general consensus was that comprehension of the texts helped listeners to grasp the work's meaning. This view is rather salient given most students' general lack of desire to deal with meaning as fundamental to the music they are making themselves.

The resulting appreciation statistics from the Exp group were quite positive, although one provided contradictory answers to the access questions and another said he did not want to have any more to do with the work unless it was visualized.

The HExp small group played the role of determining how much a listener can perceive during these listening tests. One listener did take the trouble to create a scenario for the piece beyond the obvious one of moving about a city. Other listeners' responses were very technical and very accurate. They were not aided by the title because they had already determined what the piece was about. Surprisingly, there were no complaints about being provided with information about the composers' intentions, as was the case with a few *Valley Flow* listeners, for at this level many simply wanted to decipher a work on their own.

Their data included one graphic diffusion score of part of the work in response to the real-time questionnaire form; one listener queried whether a comb filter had been employed to separate a particular conversation. This group found repeated listening helped them to unpick the work's structure and to deal with formalization issues, aiding a more accurate interpretation. One listener knew the work of Yves Daoust, another Montreal-based

composer of electroacoustic music, and so, was able to contextualize the piece. Another listener suggested that John Cage had inspired the composition, since it clearly avoided both a climax and a conclusion. Yet another complained that in a composition "collage isn't enough," stating that he would have preferred more acousmatic,[7] or less-identifiable, sounds. Expected remarks about the high quality of the recordings and studio-based mix were also included, one supporting the composers' subtlety—a nice compliment given how quickly this work was realized. The group's appreciation statistics are predictably positive.

3.3.4.4. Interpretation of Statistics and Closing Words   Directed questionnaires were completed after the first listening. Therefore, the statistics reflect participants' views without repeated listening. In all cases, discussions that took place after the three rounds of listening indicated that appreciation increased. The following are the four questions posed at the end of the listeners' directed questionnaire:

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 composition? (If yes, why? If no, why not?)

Some questions have turned out to be less useful than others. In particular, CD purchasing behavior varied from individual to individual. Some did not buy many CDs at all. Many only bought music they wanted to play in the background. Therefore, responses to question 11 had less to do with the compositions than with the individual's purchasing behavior. Therefore, this question was not considered in determining access. Similarly, concert attendance (question 12) varied by individual preference. Many young people go to clubs with live disk jockeys and video jockeys. Therefore, these responses provided a pattern that was not consistently useful to the goals of the project. Even so, a positive answer to this question was a clear indication of appreciation. In future trials these two questions will be revisited.

It was decided to set up a scheme as follows: A "no" answer to questions 9, 10, and 12 appears as a "no" in the statistics. One "yes" answer or any

Table 3.1 Access Statistics: *Prochaine Station*

	Yes	**±**	**No**	**Yes%**	**± %**	**No%**
N-E/N-M	9	1	2	75	8	17
N-E/1	5	1	4	50	10	40
N-E/2	4	0	1	80	0	20
N-E (1 + 2)	9	1	5	60	7	33
N-E (all)	18	2	7	67	7	26
Exp	11	1	1	84	8	8
Exp + N-E	29	3	8	73	7	20
HExp	4	0	0	100	0	0
HExp + Exp	15	1	1	88	6	6
HExp + Exp + N-E	33	3	8	75	7	18

Key: A "yes" answer signifies that the listener answered "yes" to two or three of the access questions (9, 10, and 12) listed above; a "±" answer signifies that the listener answered "yes" to only one of these questions or "possibly" to a combination of them; a "no" answer means that no question was answered in the affirmative.

combination of "possibly" answers—as this was an option—ended up in the "±" category. Finally, participants answering "yes" to at least two questions appear as a "yes."

The data demonstrate that two-thirds of all N-E participants replied "yes" in terms of access and just over a quarter replied "no." This contrasts with cultural attitudes toward electroacoustic music in general and soundscape composition specifically. Taking the experienced group into account, that "yes" total rises to over 70 percent and all groups to 75 percent. These might appear to be surprisingly high statistics when one considers that far less than 1 percent of CD sales and airtime are spent on this type of music. Before arriving at any conclusions, the investigation turns to a more sophisticated composition, *Valley Flow,* which will aid in determining whether these statistics are only relevant to this compositional approach to real-world sound organization.

3.3.5. *Valley Flow—Denis Smalley*

Where the Schryer/Calon work, *Prochaine Station,* is suggestive of soundscape recordings through its woven structure, Denis Smalley's seventeen-minute work is more evocative in virtually all of its aspects.

3.3.5.1. The Work   As stated above, it is an unusual choice within the intention/reception project because Smalley's sound sources often remain unidentifiable, although, during an interview he let a few slip here and there, and a number of sources were, indeed, identified by listeners. *Valley Flow* consists of materials recorded and further manipulated at IRCAM in Paris; at Simon Fraser University in Burnaby, British Columbia; and at the Banff Centre for the Arts, Alberta. It was completed at Smalley's own studio in Norwich, UK. The notion of a narrative discourse is by no means foreign to this composer. His program note to the CD recording of this work states:

> The formal shaping and sounding content of *Valley Flow* were influenced by the dramatic vistas of the Bow Valley in the Canadian Rockies. The motion is stretched to create airy, floating and flying contours or broad panoramic sweeps, and contracted to create stronger physical motions, for example the flinging out of textural materials.
>
> Spatial perspectives are important in an environmentally inspired work. The listener, gazing through the stereo window, can adopt changing vantage points: at one moment looking out to the distant horizon, at another looking down from a height, at another dwarfed by the bulk of land masses, and at yet another swamped by the magnified details of organic activity. Landscape qualities are pervasive: water, fire and wood; the gritty, granular fracturing of stony noise-textures; and the wintry, glacial thinness of sustained lines. The force and volatility of nature are reflected in abrupt changes and turbulent textures.

On the basis of these program notes, one could conclude that this work is intended to be open to interpretation. Smalley is forthcoming concerning what he would like to evoke and how, stressing the salient characteristics of the piece as opposed to the specific sounds and their sources.

Due to the length of *Valley Flow* it was necessary to restrict the first two tests to listening to approximately the first third of the work. The composer accepted this proposal on the basis that the piece's material and its structuring principles are all exposed during that section of the piece and that the entire work would be listened to during the third test.

3.3.5.2. The Composer's Intentions   Denis Smalley was interviewed on the basis of the composer's intention questionnaire. Relevant points from the interview summary follow below:

Sound Source(s)/Source Material
Smalley is not interested in the identification of source materials in general. There are few sound sources in this piece. They consist of recordings of fire, rain, a Cameroon bean necklace that was exhibited on his office wall and wind chimes, which were sometimes lightly processed to gain a sustained

effect. They were also modified through the use of IRCAM's phase vocoder. Smalley noted his interest in fire's fragmented behavior and used a recording from Lucasfilm. Smalley's key areas of interest in this piece were morphologies, ranging from fragmented to sustained types, as well as pitches.

What were your intentions concerning this particular composition and what methods are you using to communicate these intentions to the listener?

First and foremost, the work reflects my own aesthetic, whether consciously or unconsciously. Therefore, for the frequent visitor, there is the identification of a signature, for the new one, an introduction. There is a broader semiotic imperative, but semiotics here is used in the more metaphorical sense as opposed to specific signifiers and signifieds. The morphology of the work is based on a spectromorphological[8] approach.

Is there a narrative discourse involved?

Yes, but not a specific one. The piece is teleological like all of my works. Its potential discourse is implied through my comments on the CD's program notes.

Where did the inspiration to create this particular composition come from?

As always, I start with my sounds, my source material. Still circumstances did contribute, for example, to the choice of the title, *Valley Flow*, which came to me during the early phases of my stay in Banff. The title, in turn, partially influenced the structuring and discourse of the work.

To what extent and how did your initial intention change as the compositional process progressed?

As the title arrived after commencing the piece, there was a certain influence in terms of structure and sonic contrasts, although some material was already prepared beforehand.

Is it important to you that your composition is listened to with your intentions in mind and why?

No, but I have no qualms about contributing this information after the fact. That said, the title does give quite a bit of a lead. The listener should be offered the choice whether to follow this information or not.

Is/are there something(s) in the composition that you want the listener to hold onto and why?

The work's title, the layering of sonic material, pitch, the work's sonic language.

Do you rely on any other accompanying text, in the form of program notes, to outline your intentions prior to the listener's engagement with the composition and why?

No, not necessarily. The CD text is identical to the concert program notes.

Who is your intended audience for this composition?
As wide as is feasible.

How is your compositional process influenced by the intended audience, if at all?
Only to the extent that I attempt to prejudge how other people may listen to the work.

How important is it that the technical processes involved in the composition are recognized by the listener and why?
It is not at all important. On the contrary, I am against technological listening. Technical processes do not advance the listening experience. The music should speak for itself.

Under what listening conditions is your composition intended to be heard and why?
Multiple: (a) Stereo (home) intimate surroundings although I am against headphone use—the space is wrong—or (b) a larger public environment with diffusion. My diffusion will be different from anyone else's with or without a diffusion score.[9]

If you intended for your composition to be diffused over a multichannel system, how did this intention affect your compositional techniques?
Techniques are not influenced as such, but this does form part of the aesthetic. The key here is the specific ability to represent musical gesture within a diffusion space. Intimacy may be lost (i.e., detail), but dramatic content is important here. I am interested in investigating the ambient [multichannel setup in a performance space] vs. focused [stereo] space. This choice leads to two different experiences of the same sound organization.

3.3.5.3. The Listeners' Experience This work is one in which the composer is not chiefly interested in source recognition, so one might expect a much less consistent set of responses than proved to be the case. For example, in the N-E/N-M group one listener specifically stated that the new sounds used were engaging, while another found them "nonmusical" (without further explanation) and, thus, not engaging. Sources perceived ranged from those somewhat close to those used, such as water and wind sounds, to jet and train sounds, as well as those from a bathroom. Understandably, many believed most sounds to be unnatural in origin after their first listening experience. In addition, scenarios were quite varied, although many felt they were hearing a science fiction sound score. Others simply became slightly confused. The clearly programmatic title was found very useful by only half

of the participants; some remained confused or obstinate at this point. All participants found repeated listening helpful. Two-thirds were aided by the intention information, whereas others were more pleased with their own original ideas about the work. For example, one listener wrote of "sounds not normally heard, like using a microscope or spying on the creatures without them knowing you are there." Many admitted, unsurprisingly, to having greater difficulty with this composition than with *Prochaine Station*.

Although the N-M groups from Leicester College demonstrated slightly greater accuracy in terms of sound sources, their mistaken choices took them equally far afield. Animal sounds, the scratching of glass, keyboard presets, special effects, and a theremin were perceived, as were the sound of a kettle, a gas oven being lit, and a recording of a stomach. However, wind chimes, bells, and "water stretching with patterns" were also heard. Participants imagined sounds of a jungle in space, the twinkling of stars, and cyber sounds. Therefore, the science fiction image held for many of these participants as well. Words like *paranoia*, *cold*, *eerie,* and *dark* were used regularly. Some linked the piece to the drug culture, the *Matrix* film series, or consumer computer game players. Their reactions ranged from one listener who did not consider the work to be music to two listeners who individually admitted to being "on the edge of my seat." Several listeners with basic backgrounds in music appreciated the composer's use of tension and release. Some were less attracted to the composition because of a perceived randomness or repetition; one found the work too long, even in this truncated form. The most intriguing response was from a listener who "enjoyed creating a story in my head" and felt that the piece might be better without a title.

Offering the title to these groups provided a slightly different pattern than that from the N-E/N-M group. Here, more participants claimed that they wanted to be guided by the title. However, a number of their descriptions of what the piece communicated continued to contain some of their original, mainly science-fiction associated ideas. Regardless, in some cases the title helped listeners to discover an enormous amount of detail during the second listening. One listener stated that the title offered clarity but allowed him the freedom to think of whatever sounds he pleased, in his case this included spiders. Another listener created a diagram of a flowing stream after learning the title. One listener who continued his sci-fi interpretation decided that the valley in question was on another planet.

After considering Smalley's remarks about the piece, most higher education participants felt more at ease with the work. Although there were comments about his "academic" language, interest in the work increased most for those who decided to hold onto the composer's ideas. A small group stayed with their sci-fi scenarios, as was their right. Two listeners felt that they had been provided with the intention information too late to change their minds.

One listener confessed that his "imagination must have been killed by the TV." While one listener complained that the intention information left no room for individual thought, others were able to make sense of the piece as more "physical" and felt that this information allowed for greater visualization. Repeated listening allowed participants to become more accustomed to the sounds and to appreciate the composer's use of different textures. Many stated that they hoped to hear the composition again but this time in an audiovisual version, something the composer would most likely never accept.

The group conversations proved very interesting. Listeners shared their thoughts about the surreal atmosphere of the work and its hallucinogenic aspects. Many wanted to hear the work in a dark room. A few, unaware of the composer's use of real-world sounds, wondered whether he was trying to artificially represent a natural environment. They were full of praise for the intention information. As the participants' ideas about their images and the narrative discourse of the piece led to so many new thoughts during the discussions, parts of *Valley Flow* were played a fourth time upon the students' request.

The Exp group demonstrated no less diversity, but involved greater accuracy than the first two groups. One participant spoke of "muddy granular sounds smelting" and others of underground caves and barren deserts. Another commented on the composition's lack of flow and implied structure; yet another complimented the flow of the composition. The balance in the movement from natural to unnatural sounds was cited as a strength of the composition by one member of this group. Another listener wondered whether the piece might be considered minimalist. Unlike the previous group, these listeners found the notion of randomness in *Valley Flow* to be a strong point. One listener spoke of the composer's focus on the morphology of his sounds—as accurate a remark as could be expected at this level.

The title was helpful in terms of focus for many in this group, for some to a very substantial extent. It led one listener to state that the title made the sounds become relevant, but then to one listener there were suddenly sounds that no longer fit. Similarly, intention information was enormously helpful to many of the group's members. One student admitted that his focusing on a dark location was a misinterpretation and should perhaps be replaced by a cold climate. Another felt much more focused but wondered why he had not heard any fire sounds. A third participant felt very comfortable with Smalley's notion of changing vantage points; a fourth listener claimed that everything had been put into perspective. One participant, who had been to the Canadian Rockies, said that he could now rely on his visual memories. All felt greater appreciation of the piece through repeated listening.

This group's conversation focused on the strong imagery gained from the piece, suggesting that it would make an excellent soundtrack. They were curi-

ous about when within the compositional process this intention information had evolved and decided that it was largely conceived beforehand, which was actually not the case. Many spoke of the virtuosity of the composition. The group decided that the intention information was highly informative, certainly able to influence the listening experience, and, therefore, that the piece had become not only clearer, but also more easily appreciated as a result of this information.

Finally the HExp group looked at the work from a professional's point of view. Here, more than elsewhere, there was a reticence to know more about the composer's point of view; one participant stated that intention information only represented one dimension of a composition's potential interpretation. One might conclude that this group, more than others, was open to more evocative or even abstract forms of composition. Hence, one listener wrote of the "shimmering behavior" of the sounds within a work that neither possessed many recognizable sources nor a specific narrative. He spoke of a "beautiful work" (a term not used elsewhere), one achieving "a good balance of sounds, masterfully controlled." Another participant referred to a fantasy landscape, but one that was more concerned with extramusical associations and structure than narrative. He spoke of the composition as dramatic, "built on many scenarios or shifts along a single one." The participant who realized she was listening to a Smalley work spoke of its sensitivity and enjoyed the spectromorphological evolution of each sound.

The title proved to be less important to this group than to others and the intention information was found important to the extent that it provided the listeners with the composer's perspective more than with something for them to hold on to. One found that possessing this information helped him to move from a fantasy to a more natural world, another emphasized a greater appreciation of the composition's spatial perspectives.

Valley Flow offered a greater challenge to the less experienced listener than *Prochaine Station*. The more advanced, in contrast, were intrigued by the greater sophistication of *Valley Flow*. What is most important to this project, however, is how the work fared in comparison with the soundscape composition and, more importantly, how accessible it was to the various listening groups.

3.3.5.4. Interpretation of Statistics and Closing Words   There is increasing scholarship concerning Smalley's theories and his electroacoustic output, particularly in recent years (e.g., Emmerson 1998; Hirst 2003; Lotis 2003). A clear focus is his spectromorphology theory, especially his articulate notions concerning gesture and texture, as well as those involving spatial behavior. When Smalley's clear intention information was introduced, many found access to this work heightened.

Table 3.2 Access statistics: *Valley Flow*

	Yes	±	No	Yes%	± %	No%
N-E/N-M	7	1	4	58	8	33**
N-E/1	7	2	1	70	20	10
N-E/2	3	0	0	100	0	0
N-E (1 + 2)	10	2	1	77	15	8
N-E (all)	17	3	5	68	12	20
Exp	10	2	1	77	15	8
Exp + N-E	27	5	6	71	13	16
HExp	4	0	0	100	0	0
HExp + Exp	14	2	1	82	12	6
HExp + Exp + N-E	31	5	6	74	12	14

Key: A "yes" answer signifies that the listener answered "yes" to two or three of the access questions (9, 10, and 12) listed above; a "±" answer signifies that the listener answered "yes" to only one of these questions or "possibly" to a combination of them; a "no" answer means that no question was answered in the affirmative. ** This line adds up to 99 percent due to all three entries rounding off downwards.

So how did these listeners react to the piece and how do these results compare with *Prochaine Station* in which all sound sources were identifiable? Table 3.2 summarizes the results. Please note that the N-E/2 group consisted of three participants this time.

The N-E/N-M group clearly found *Valley Flow* to be relatively more challenging. Still, a result of almost three-fifths is higher than many readers might expect. More significantly, the total N-E group result hovers just below the 70 percent mark, demonstrating a fairly significant interest from the musicians in the N-E category. This result is actually 1 percent higher than the "yes" result from *Prochaine Station*.

The Exp group saw a slight drop from 84 to 77 percent in the "yes" category; predictably, the HExp group demonstrated no change. As expected with the experienced group results, the totals throughout rise to just over 74 percent, less than 1 percent below *Prochaine Station*'s 75 percent.

It was quite interesting to discover how high the final *Valley Flow* access results registered given the difficulties encountered concerning source identification. Consequently, a broader area of electroacoustic music should now be investigated, perhaps even including works for which composers have little to no intention information to share. It might also be interesting to have contemporary instrumental and vocal works undergo the same treatment.

Table 3.3 Access statistics: *Prochaine Station and Valley Flow*

	Yes	±	No	Yes%	± %	No%
N-E/N-M	16	2	6	67	8	25
N-E/1	12	3	5	60	15	25
N-E/2	7	0	1	88	0	12
N-E (1 + 2)	19	3	6	68	11	21
N–E (all)	35	5	12	67	10	23
Exp	21	3	2	81	11	8
Exp + N-E	56	8	14	72	10	18
HExp	8	0	0	100	0	0
HExp + Exp	29	3	2	85	9	6
HExp + Exp + N-E	64	8	14	74	9	16**

Key: A "yes" answer signifies that the listener answered "yes" to two or three of the access questions (9, 10, and 12) listed above; a "±" answer signifies that the listener answered "yes" to only one of these questions or "possibly" to a combination of them; a "no" answer means that no question was answered in the affirmative; ** this line adds up to 99 percent due to all three entries rounding off downwards.

The statistics in these two cases might not always end up as high as those from electroacoustic works with real-world sounds, but could suggest greater accessibility than is generally assumed.

For completeness, Table 3.3 presents the combined statistics from both works.

Of the fifty-two valid sets of questionnaires in the N-E group, two-thirds found the works accessible (as did the N-E/N-M group on its own). Of the twenty-six sets of questionnaires in the Exp group, 81 percent were positive and, of course, 100 percent of the eight results from the HExp group were as well. Of the total eighty-six valid sets of questionnaires, over 74 percent found the music accessible.

Many people, regardless of whether they make music or not, would place themselves in the N-E/N-M category. Our N-E/N-M group represents only three-eighths of our sample. Still, each line above represents a certain pattern of behavior, albeit with a reasonable margin of error. The pattern is nevertheless clear: the music this project covers is much more accessible than is usually assumed. Even if two-thirds of the evaluated positive responses can be related to curiosity only, the remaining percentage would still be quite substantial.

3.4. Conclusion and Where Does the Project Go from Here?

The research leading to the "something to hold onto factor" was, indeed, only a first step. That project assumed only that the music was available to the listener (Landy 1994). Certainly this postmodern society has supported the primacy of the ear and eye, but daily life demonstrates that there is more to art than the work itself—there are the means of presentation, the ideas the creator(s) wants to communicate, and what is communicated. Therefore, the first significant conclusion is that dramaturgy, that is, intention information, must be considered.

A second important conclusion is that music analysis can take both the composer and the listener (and, when relevant, the performer) into account, whether the listener be a highly seasoned professional musician or a non-musician. The ramifications of this treatment of electroacoustic music could be quite significant for tomorrow's pedagogy and community arts development. Furthermore, data acquired from this type of analysis potentially could influence composers, not to change their style, but instead to reflect those aspects of electroacoustic composition that are received by the listener. This is a twenty-first-century means of criticism and art development.

The third, and most important, conclusion from this project is that potential levels of access for a significant part of electroacoustic music are much higher than one might imagine. For those who believe that art is about life, what is more appropriate than involving sounds from the world in sound organization?

It is noteworthy that, whether independent of this research or not, the idea of gauging intention and reception is growing in popularity. For example, in March 2004, Bruno Bossis and colleagues hosted a day at the Observatoire Musical Français, University of Paris IV-Sorbonne titled, "Intention and Creation in Today's Art." They collected artists' intention data to assess the degree to which these artists are interested in the relationship between intention and reception.

The following are expected areas for future development of this research:

1. Expand the current project: Researchers will expand the quantity of data collected and broaden the demographics, and widen the repertoire to investigate how far accessibility may be broadened. Parallel to this, work with other composers will be undertaken to examine the potential influence of these results on their future work. Broadening the scope of the project to the web is also being considered.[10]

2. As an extension to the current project, one or more software development projects are being considered in order to offer affordable digital sound organization tools to new and less experienced users internation-

ally. The research group to which the project belongs is already affiliated with UNESCO's exciting Digi-arts project,[11] which investigates the pooling of resources in new digital media for developing cultures around the globe. Ideally the more analytical part of the project can be easily packaged with these creative tools to offer software that is adaptable to specific cultural contexts and, thus, support access.

3. Finally, there is a more philosophical task to be investigated: Where does this body of art fit? This is not a pedantic question concerning whether electroacoustic music is music or not. Instead, it is a question of whether sonic art, in its most inclusive sense, deserves to be seen as something that not only crosses existent boundaries of popular and art music but is, in fact, a diverse body of work of its own. If so, one might consider whether our normally accepted classification systems are really all that useful for this repertoire. François Delalande has contributed the term *paradigm of electroacoustic music* (Delalande 2001), which makes one wonder whether such a thing might exist. He focuses on works on fixed media, using the term *technological music* for what is known in the United States as computer music. There may be a paradigm of electroacoustic music that holds this repertoire together—a corpus ranging from the early works of musique concrète, *elektronische Musik,* and pop experiments including the Beatles' "Revolution Nine" to the wide world of electroacoustic musics made today that includes relevant areas of live electronics and interactivity. If this proves to be the case, yet more data will have been collected to combat the marginalization of much of this music.

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DVD References

Number	Name	Description	Media Type
1	Composer-Intention.pdf	Composer intention questionnaire	PDF (DVD ROM partition)
2	Directed.pdf	Directed questionnaire	PDF (DVD ROM partition)
3	Real-TimeListener.pdf	Listener questionnaire	PDF (DVD ROM partition)

Notes

1. The author would particularly like to thank Rob Weale, a current PhD student, not only for his important contributions to the Intention/Reception Project, a significant part of the methodology, as well as the questionnaires, but also for running the participant listening sessions, including the use of his questionnaires. His contributions form an important basis for this article. Rob Weale intends to publish his dissertation before this book appears. It is for this reason that the research presented here restricts itself to the two investigated works. The author would also like to thank Denis Smalley of City University, in London for allowing him an interview in lieu of filling out the composers' questionnaire. Thanks, too, to both Christian Calon and Claude Schryer in Montréal for their written responses.
2. The questionnaire can be found on the accompanying DVD.
3. In North American terms, these colleges cover the end of secondary/high school training as well as community college level. Higher education follows directly from either secondary or further education in Britain.
4. All N-E/N-M participants were acquaintances of Rob Weale (see note 1). Finding people eager to participate in the project at this level without remuneration is very difficult. Support could be found to offer some remuneration for participation, but it is unclear whether data gained in this way might be biased, as participation would then be more based on the completion of the form than interest in the project itself.
5. Soundscape composition is one in which the context, that is, the place where (most) sounds are drawn from, forms an integral part of the work. For an introduction to soundscape composition, see Schafer (1977/1994) and Truax (1984/2001).
6. Soundwalk—A walk when the participant plays greater attention than usual to the sonic environment. Soundwalks are sometimes educational, aiding more acute awareness of the environment; they sometimes are made to collect soundscape recordings. Cityscape—a soundscape that takes place in a (noisy) city; ambient music—associated with today's chill-out rooms, ambient music covers a diverse range of aesthetic approaches ranging from Satie's "Furniture Music" to muzak to new age music, and so on. Ambient music possesses a minimal character in general, one that allows for heightened awareness of detail.

7. A Pythagorian term, often used in conjunction with those adhering to a musique concrète approach, namely not being able to see the source of the sounds in an electroacoustic work.
8. Spectromorphology concerns the shaping of sonic spectra in time. This theoretical approach devised by Smalley goes hand in hand with spatiomorphology, a form of study of the spatial behavior of sound. (see Smalley, 1986, 1992, 1997)
9. Diffusion—sending sounds throughout a space by way of a multiple loudspeaker setup. A diffusion score is a form of graphic notation to help the person mixing a piece that is to be diffused during performance.
10. The web could prove to be useful as a bulletin board tool. It could eventually also be used for testing. The hesitation to do so currently has to do with maintaining control of the listener testing procedure and loss of the group discussions following the listening tests.
11. Digi-arts' home page at of the time of writing this chapter is: http://portal.unesco.org/culture/ev.php?URL_ID=1391&URL_DO=DO_TOPIC&URL_SECTION=201.