Improvising Tape Music

Brian Kane, University of California at Berkeley (kanebri@berkeley.edu)

Abstract: The development and refinement of real-time sound processing has important consequences for the aesthetic relevance of improvisation in the creation of "tape music." While Andy Hamilton's essay on improvisation introduces the terms for discussing the aesthetic relevance of improvisation, his dismissal "spontaneity at the level of composition" in fixed electronic works falls behind the perfectionist/imperfectionist dichotomy he seeks to overcome. By redeploying the notions of "instrumental impulse" and an "improvised feel" into the context of tape music, one begins, in a small but significant way, to overcome the acousmatic thesis and the idea of reduced listening.

1 Improvisation at the Level of Composition

The separation and specialization of composition and improvisation is, uncontroversially, the result of an historical construction. As Andy Hamilton writes, "The dichotomy between improvisation and composition is rooted in historical circumstance and lacked its present meaning, or perhaps any meaning at all, before the musical work-concept achieved hegemony—a process of increasing specificity of the score that was completed during the nineteenth and early twentieth centuries." [Hamilton 2000: 169] Hamilton argues that partisans of composition and improvisation often hold aesthetic positions that, although contrary, are mutually dependent.

"The aesthetics of imperfection," defends the virtues of spontaneity and process in musical production, arguing that improvisation is superior to composition in that it involves, "a pure transmission of the musical idea." As an example, Hamilton quotes trumpeter Leo Smith: "improvisation…is not like composition… [where an] idea [is conceived] at one instant, only to be funneled at a later time through a standard system of notation onto paper as a merely related idea, and finally interpreted and performed…as an idea removed at least three times from the original." [Cited in Hamilton 2000: 173] Implicit in Smith's view is the claim that improvisation is a type of instant composition, where the "work" is presented without mediation. The direct presentation of the musical idea in improvisation trumps its opposite, conventionally notated composition, insofar as such immediacy is accepted as a musical virtue.

On the other hand, "the aesthetics of perfection" emphasize the timeless permanence of the musical work, over and against its empirical manifestations as performances of various quality, or in unfortunate acoustic situations. Such a view promotes an *eidetic* notion of the work as the sum of its internal relations. To illustrate, Hamilton cites Glenn Gould: "Music need not be performed any more than book need to be read aloud, for its logic is perfectly represented on the printed page; and the performer…is totally unnecessary except as his interpretations make the music understandable to an audience unfortunate enough not to be able to read it in print." [Quoted in Hamilton 2000: 172] This view shares with the "aesthetics of imperfections" the ideal of an unmediated musical work, except here it exists as an *eidos* despite performance, not as the instantaneous creation of an improviser. From the perfectionist perspective, instant improvised compositions, even if they somehow manage to be free of flaws, would still lack the refinement, richness and subtlety of logical relations that distinguish the Western musical masterwork.

"These positions are, in a way, mutually dependent; the difference is that one eulogizes instant composition while the other declares it hopeless." [Hamilton 2000: 179] As a way of overcoming the mutual dependency of both perfectionists and imperfectionists on the idea that improvisation is instant composition, Hamilton argues that there is "a fluid contrast between a composed work and an improvisation. Their exemplars stand in a continuum, and 'improvisation' and 'composition' denote ideal types or interpenetrating opposites." [Hamilton 2000: 171] On opposite ends of the continuum,

Hamilton places pre-realized electronic music against free improvisation, filling out the middle with a gradated series: compositions with a high degree of notational specificity (Schoenberg), compositions with a lower degree of notational specificity (Bach), jazz with a high degree of pre-performance structure (Duke Ellington), and finally loosely structured jazz (Miles Davis *a la Kind of Blue*).

The "process of increasing specificity" that shaped the rise of the perfectionist aesthetic is seen to culminate in electronic music. The line of thought runs: with the introduction of electronic instruments and recording technology, the symbolic mediation and interpretation of the score by a performer is entirely sublated. Scores become identical or, at the very least, indistinguishable from the fixed organization of the sounds on the tape (CD, DAT, buffer—what have you) Because the playback of these fixed sounds constitutes the work's performance, from the perspective of a perfectionist aesthetic, performance is absorbed into the *eidetic* totality of the work, merging score and performance into the identity of indiscernibility.

Hamilton's continuum is organized according to the degrees of interpretive or improvisational freedom involved in the live performance (calculated as inversely proportional to the specificity of the notation and degree of pre-structuring involved). From this perspective, tape music[1] becomes a place-holder at the far end of the spectrum. While the goal is to disrupt the dichotomy of composition and improvisation, unfortunately Hamilton maintains an aspect of the perfectionist thesis when he writes, "Pre-realized electronic music stands at the far end of the pre-structured spectrum since although possibly possessing spontaneity at the level of composition, at the level of performance—strictly a misnomer—it is fixed." [Hamilton 2000: 171] Despite Hamilton's argument that a proper appreciation of improvised works entails *knowledge about the means of production*, and that such knowledge has *aesthetic relevance* (in opposition to an artifactualist view that the knowledge that improvised works are improvised is somehow

aesthetically irrelevant to the appreciation of the final product) one wonders why improvisation can be so easily dismissed as aesthetically irrelevant when it occurs "at the level of composition."

In what ways does improvisation at the level of composition have aesthetic relevance in electronic pieces of fixed medium? Two ways, both emphasized by Hamilton, stand out: 1) at the level of production, in the impulse to treat the instrument as a source of material for exploration, and 2) at the level of reception, in the presence of an "improvised feel." Both of these aspects contribute to the aesthetic relevance of improvisation at the level of composition and are present in some movements of a large "tape piece" I have been composing, which is still in progress, entitled: *On the Expression of the Emotions in Man and Animals*.[2] The work contains many movements or parts of movements which were improvised in real-time, recorded, and subsequently edited and altered. In this sense, much of the work depends on technology and tools developed for real-time laptop improvisation, but turned back towards the fixed medium of "tape music."

2 Improvising Instruments

Derek Bailey [Bailey 1980] identifies the "instrumental impulse" as a prominent feature of improvisational activity. In the hands of the improviser, the instrument becomes "a source of material, and technique is often an exploitation of the natural resources of that instrument." [Quoted in Hamilton 2000: 173] Can one describe the use of improvisation at the compositional level in fixed electronic works as participating in an instrumental impulse? There are a number of issues to deal with before an answer can be given. How does one define technique in this context, and what constitutes an instrument in the current realm of electronic and computer music?

Schaeffer argues that instruments possess three main phenomenological criteria: timbre, a range of possible variations in sounds

---

[1] By the phrase "tape music" I intend pre-realized electronic works in a fixed medium involving no live performance.

[2] The title is borrowed from Darwin's great book. [Darwin 1872] I will save the discussion about the relation of my work to Darwin's text for another occasion.

produced, and the affordance of a style of playing. [Schaeffer 1966: 55-6] Because the tape recorder (or the computer for that matter) lacks these characteristics, electronic media are not typically conceived in instrumental terms. But this is to construe the idea of electronics or computers too broadly. Within applications and environments that promote real-time interaction and sound processing, it is possible to begin creating instruments that exhibit Schaeffer's phenomenological hallmarks. For example, while working on individual movements of *On the Expression*, I slowly developed in MAX/MSP a real-time, sample-based granular synthesizer, modeled along lines outlined by Curtis Roads in *Microsound*. [Roads 2001: chapter 3]. Obviously, a granular synthesizer of this variety would lack a distinctive timbre, being parasitic on the timbral properties of the sample placed in the buffer—thus being something less than an instrument. But, in practice, i.e. in the context of improvising "takes" and organizing them into a piece, the condition of instrumentality is slowly attained. By limiting my improvisations to the use of only one fairly short and timbrally consistent sample at a time, the improvisations began, phenomenologically, to maintain a consistent timbral identity and virtual source. As for variability, I found myself working with different parameters (grain density, transposition, grain envelope, etc.) in distinct ways *dependent upon* the sample, and the ways it interacted with the patch's pre-structured mechanisms. In other words, I changed my "technique" in order to maintain a certain amount of phenomenological identity within a range of variability. Lastly, by playing with and modifying the patch to work with a variety of different controllers, I found myself forced to improvise within the affordances provided by the program in conjunction with the controller. This helped to forge the material bases of an improvisational style (or styles), supplemented by my own idiosyncratic and personal musical stylistic commitments and aesthetic preferences.

It is important to recall that Schaeffer's criteria are phenomenological in basis—they define a conception of instrumentality that is part of an *intentional, not a material order*. In order to disclose the intentional unity that constitutes the phenomenological notion of instrumentality,

the infinite gamut of sounds that the computer could potentially produce requires the supplementation and constraint provided by a disciplined instrumentalist possessing rich musical intuitions and ideas. In the realm of real-time computer music, it is not as if one must *first* create a well-defined instrument, *then* go make music on it; the instrument is created alongside the "instrumental impulse" of the improviser. The instruments are built in order to exploit the "natural resources" that interest the improviser, as well as those fortuitously discovered along the way.

3 Improvisation and Aesthetic Relevance

Hamilton argues that akin to the intentional fallacy (which maintains that authorial intention is extraneous to the critical evaluation of literary texts) is a formalistic claim that improvisation is not *aesthetically relevant* to the critical evaluation of the musical artifact. To illustrate, Hamilton quotes Eric Hobsbawm: "It is musically irrelevant [whether] what one hears is improvised or written down. If [the listener] did not know he could generally not tell the difference." [Quoted in Hamilton 2000: 177] But, of course improvisation is an aesthetically relevant feature, as evidenced in cases where one discovers that the supposed improviser was, in actuality, playing a solo worked out ahead of time. "The sense of disappointment…belongs to an interesting family of responses to what appears to be extraneous knowledge that some artistic ideal has been transgressed." Yet, Hamilton argues, "there is a genuine phenomenon of an *improvised feel*." [Hamilton 2000: 178] I completely agree with Hamilton on this point, and commend his courage to defend this claim, considering the considerable difficulties of cashing out the notion in philosophical terms. But intuitively the notion makes sense, and corresponds with something in our experience of listening to improvisations, something more than merely knowledge that the musical language game we are listening to involves improvisation in a genetic sense.

Something of this improvised feel—a sense of musical forward energy, of roughness, of a "tensile quality," of an unanticipated continuation, etc.—can be captured in

improvisations "at the level of composition" in electronic works of fixed medium. For example, the opening movement of *On the Expression of the Emotions* consists of an improvisation (performed on the granular synthesizer described above) that was recorded and edited later. The editing was minimal: the deletion of a few segments that seemed to wander, and the addition of panning and mixing to help clarify and articulate the phrases and periods. This movement—a tiny burst of complex percussive rhythmic energy—maintains the feel of an improvisation. (In fact, the use of editing can often help to clarify the affect.) By articulating and describing the improvisational means of production in the program note that accompanies the work, the listener becomes explicitly aware of the *aesthetic relevance* of improvisation. This functions as a way to subvert the manner in which acousmatic "tape music" is typically apprehended via the mode of "reduced listening". [See Schaeffer 1966 and Kane 2005]

Preserving the traces of the process of improvisation in final artifact is important for those who are interested in the feel that improvisation provides, and who find it of musical value. With many of the tools and patches built for *On the Expression of the Emotions*, I discovered aspects and facets of both sampled material and electronically produced sounds that were quite unexpected. By exploiting the affordances of the patches through improvisation, I was also able to control the dramaturgy of the material in ways that subsequently has shaped my compositional practice generally. However, my sense is that the general contours of the work appeal greatly to those with a sensibility attuned to improvised music.

As Wittgenstein once lectured, all aesthetics does is "draw your attention to a thing," to "place things side by side." It is an act of giving "reasons" to make another "see what you see." [Wittgenstein 1930-33: 106] The notion of the *aesthetic relevance* of improvisation simply means that to disregard improvisation, or remain oblivious to it, when acknowledging and evaluating *certain particular* works, is to have one's attention incorrectly drawn. In the case of *On the Expression of the Emotions in Man and Animals*, to hear what I hear, means that improvisation "at the level of composition" matters. If that is not conveyed by the work, then the fault is either mine or yours.

4 Conclusion

Although Andy Hamilton's efforts at upsetting the dichotomy of composition and improvisation are commendable, these terms cannot be satisfactorily defined on the axis of performance of the work alone. The development of real-time sound processing has encouraged the merging of score and performance into an identity of indiscernibles, yet this union does not exhaust the entire realm of performance. Improvisation "at the level of composition" cannot simply be disregarded, especially if the traces of the means of production are to be considered aesthetically relevant. I hope that the continued development and refinement of real-time computer tools for improvisation also help to redefine and invigorate a new practice of "tape music" that looks beyond acousmatics and reduced listening.

References
[Bailey 1980] Bailey, D. (1980) *Musical Improvisation: its nature and practice in music*. Prentice-Hall.

[Darwin 1872] Darwin, C. (1965) *On the Expression of the Emotions in Man and Animals*. University of Chicago Press.

[Hamilton 2000] Hamilton, A. (2000). "Improvisation and the Aesthetics of Imperfection." British Journal of Aesthetics, 40(1).

[Kane 2005] Kane, B. (2005). "*L'object sonore maintenant*: Reflections on the Philosophical Origins of *musique concréte."* Proceedings, Spark 2005, University of Minnesota.

[Roads 2001] Roads, C. (2001). *Microsound*. MIT Press.

[Schaeffer 1966] Schaeffer, P. (1966). *Traité des objets musicaux*. Éditions du seuil.

[Wittgenstein 1930-33] Wittgenstein, L. (1993). *Philosophical Occassions: 1912-1951*. Hackett Publishing Co.