## The Composer and the Listener Gerald Bennett

Clearly what most strongly determines the relationship between the composer of electroacoustic music and those who listen to the music is how the listener listens. I am sure that you all share my opinion that electroacoustic music provokes a different mode of listening than does instrumental music. I shall try to illustrate what seem to me some of the most important aspects of "electroacoustic listening" and, where necessary, try to show how they characterize the relationship between the composer and the listener.

We know that the most important fact of electroacoustic music is its "acoustmatic" character. Pierre Schaeffer, in Book I, Chapter 4 of the *Traité des Objets Musicaux* recalls the original definition of 'acousmatic' (given by the *Larousse*): the name given to disciples of Pythagoras who sat for five years behind a curtain listening to Pythagoras' lessons without being able to see the Master. We of course understand the word in the broader sense as referring to acoustical impressions whose sources we cannot know. We do know that a certain amount of very approximate analysis takes place on the signal mounting the aural nerve from the cochlea to the cortex, and in the absence of knowledge to the contrary, we can assume that this analysis provides essential information about whether the sound means danger or not. Presumably, a great deal of cortical processing is devoted to this question, too, since whether we're about to be eaten is considerably more important than, say, what pitch we're hearing at the moment. Recognizing whether a sound means danger supposes an analysis and a decision about what produced the sound, and human beings are very good at making this decision, judging for instance whether a sound was produced by something's being hit, being scratched or being rubbed, or perhaps by a human voice (we're especially good at recognizing the human voice, for obvious reasons, even if it is disguised or distorted). What happens when one can't decide what made the sound? We have all had the experience of organizing concerts of electroaocustic music for new listeners. Every time I've done so, someone comes afterwards and says: "That was fascinating, but the music frightened me." I think this is a very good reaction, and I'm always delighted to hear it,

because it means the person listened well: the perception often couldn't decide what produced the sounds it perceived, and it reacted properly by inducing fear in the listener (who obviously knew that her life wasn't at stake and so interpreted the fear similarly to the fear of the Haunted House at the *Kirmesse*). This acoustmatic fear, if the professional community will permit me what certainly seems like an oxymoron, is the most essential aspect of our art. I know I carry it within myself, and I am ready to be frightened by each new electroacoustic piece I hear (this is a different fright from that I feel when I know I have to listen to an instrumental piece by Mr. (or Ms.) X, whose banality or crudity or capacity to bore leaves me speechless—and frightened). But I know that no electroacoustic composition actually threatens my life, and so this ur-emotion gets transformed into vulnerability, openness and emotional sensitivity. I believe that this situation is the basic condition of our music, and I think that the obligations to us composers—both professional and ethical—which devolve from this situation are obvious.

I would like to address four aspects of "electroacoustic listening": the continuity of the frequency space, the temporal space of electroacoustic music, musical syntax, and the representation of complex metaphorical relationships. None of this is new to us professionals, but I would like to reflect on these points in connection with our listeners.

The continuity of the frequency space is trivial to us, but it is of capital concern to most listeners. The distinction between "tone" and "noise" seems to be a very primary one: maybe when the harmonic partials of a "musical tone" vibrate in resonance with the harmonic partials generated on the basilar membrane, a special "aesthetic happiness hormone" is secreted, who knows? On the other hand, in these post-modern days, most people who take the trouble to listen to a concert of electroacoustic music are no longer disturbed by the lack of harmonic relationships. Nor are they disturbed by the lack of melody and accompaniment or other archaic musical *topoi*. I believe that most listeners of electroacoustic music revel in the expansion of the frequency space and delight in the aesthetic take-over of acoustical and emotional domains remaining closed to instrumental music. In fact, I believe that the joy of electroacoustic music first expresses itself to most listeners by way of the frequency space, through the sounds themselves.

Electroacoustic music's behavior in the temporal domain is, at first blush, quite the same as that of instrumental music. If I try to remember the way down the hill from my house to the village church about 300 meters away, I can only do so in steps: from the house door to the road, then to the neighbors' garage, then to the next neighbors' bush, etc. This path, which I know to be a continuum, is in fact discontinuous in my imagination, made up of short segments—this is the only way the discontinuous nervous system can deal with the world's duration (in fact, I am not sure that I can really imagine the ten meters from my house door to the street as a continuum). Music provides the continuum lacking in our everyday lives (but only when listened to non-analytically; analytical listening requires a change of mode, namely into discontinuous listening). That is one of the reasons why so many (not just young) people listen to their portable CD players whenever they can (the other is that any music, pop as well as "classical", speaks to the emotions that apparently so many people today feel are missing in their lives). But electroacoustic music, as an acousmatic art, touches our perception of temporal events even more deeply. The dissociation, and often magnification, of micro-temporal events from the mechanisms of their production emphasizes the sense of continuum, and so electroacoustic music should be, if only they knew it, an even greater balm to those who seek redress from the discontinuity their perception imposes upon them.

Musical syntax, the third aspect I shall consider, is far too great a theme for this paper. I shall only mention two points relating to it. The first is that it is obvious that, without definite knowledge about the source of the sounds the listener hears, she is likely to interpret them in an associative way. A timbre, or perhaps the way the energy of a sound evolves, may remind one of something in everyday life, in other music, in literature, etc. In fact, associative reference to human experience is one of the reasons why music works at all (the other is music's abstractive nature, for abstraction is the basic action of poetry, but that is a topic for another essay). Recent research has shown, for example, that the pattern of a runner's coming to a stop is very similar to that of an accomplished musician's *ritardando* at the end of a piece. We all know the importance of associations in electroacoustic music, and it behooves the composer to pay close attention to possible associations in her or his music and to make those associations most important to the piece's poetic idea.

Electroacoustic music can also bring the "real world:" into the concert hall. I am thinking of "environmental" music here. In environmental music the boundaries between the "real" world and music's imaginary world become fluid, and the sounds of the "real" world bear the weight of the piece. Because the sounds are familiar, particular care is necessary to assure that either the associative path of the piece is clear, or that the sounds are understood in a sufficiently abstract manner to carry the piece along on its way.

The fourth aspect of listening to electroacoustic music I wish to address is the representation of complex metaphorical relationships. Much, perhaps all, music can be understood as metaphor, but the music of the 19<sup>th</sup> century often consciously sought this state: think of the many pieces by Beethoven which move from "darkness" to "light". Music's non-verbal quality invites us to think metaphorically, even when the referent of the metaphor remains quite vague. Electroacoustic music can point much more directly to the "real" world than can instrumental music and so can establish clearer referents for a metaphorical discourse while relinquishing none of the emotional value of the sound itself. All of us can give examples of this process from our own compositions. If I think of my own *Rainstick*, a piece most of you have heard, I know that the exploding voice about two thirds of the way through the piece is generally understood by listeners in a metaphorical sense, even if they differ in their interpretation of the metaphor: for some, it means only a particularly dramatic passage from continuous to discontinuous, for others it signifies destruction in some unspecific way, for others again it means the dissolution of an individual (who had been singing).

Not all composers wish to create metaphorical relationships in their music. It seems to me very difficult to avoid metaphorical interpretation of music, but these composers should keep a sharp ear ready to catch any tell-tale references that could be misunderstood. For my part, I cannot imagine writing music without metaphorical intent. Metaphor seems to me to be the quintessential artistic mechanism: only by pointing away from its physical manifestation and towards common experience does our music take on human significance. Otherwise it remains, literally, "sound and fury, signifying

nothing." Metaphor is my vehicle of communication with the listener. My music, and especially my electroacoustic music, leads her into imaginary worlds whose contours are familiar but new. But it is the syntax of the music and the web of metaphor it creates which allow the listener to assign meaning and significance to what happens in these worlds.

Electroacoustic music as an acousmatic art invokes its own mode of listening, in which the listener is unusually attentive but also vulnerable. This attentive vulnerability imposes considerable ethical responsibility upon us composers, but at the same time it gives us a precious opportunity to communicate intimately and successfully with the listener, as can no other art.