While it is certainly simplistic to state that music has not been well understood, it remains true that most discussion which addresses it has been insufficient. Generally music has been relegated to a vague category associated with human intuition where activities are seldom considered capable of a very high level of articulation in language other than that used to generate the specific activity. For music this has resulted not only in musicians not being expected to talk about what they do, but also there has seldom been serious discussion of what music as a phenomenon might actually be. To some extent this has been liberating. More often it has reduced music to an exploitable commodity for either commercial merchandising or as a thoroughly mystifying illustration for philosophic or religious metaphor.

Perhaps intuition is that point at which the things with which we are unfamiliar begin to feed consciousness. The idea of a cultural intuition seems appropriate for describing music as if it had been lurking at the edge of our collective cognition trying to decide how best to regard itself. It seems by sheer persistence that we have needed music while all along not caring what it might actually be.

But music as a discipline has reached a constrained position where its insufficiency is obvious. Too many musicians regard it as a form of addiction and not a significant means for the acquisition of knowledge. Music has suffered such drastic exploitation that its manufacture in overabundance by the popular and commercial industries can hardly be taken seriously as anything other than another form of consumer pollution. "Civilization" continues this rampant obsession with going deaf as if the sheer amplitude of the "music business" can
serve no other meaning than to drown out the other aural byproducts of the industrial age. In the face of this disaster the self-appointed protectors of "culture" offer no other solution than a compulsive fetish of technique, as if another interpretation of Bach were something other than a more efficient mode of transport through the graveyard.

The essential question remains: how do we proceed toward a definition of music and not merely from one? In this sense the primary issue for twentieth century composers has not been structural, it has been philosophical. Discussions such as tonality versus atonality, or serialism versus indeterminacy, are trivial in retrospect. Every significant contribution has addressed this question, attempting to expand upon a body of musical artifacts, the total quanta of which must be invoked as the only available definition for music. But as emphasis has shifted from merely expanding upon this quantitative search for definition, toward a connecting of music to other fundamental human activities, the advancement of music becomes focused upon an advancement of the consciousness about what composers are really doing rather than a mere surface fascination with new aural results. This has had a two-edged function in the sense that music as a discipline has begun to examine both its sufficiency within a larger societal context and the current societal necessity for its unique attributes as a human expression.

The substantial reduction of levels of information redundancy in later twentieth century music has rendered both its making and understanding primarily acts of privacy. While experimental composers are frustrated that their work only inflicts confusion upon an audience which cannot be expected to be educated to each unique language, their comprehension unfolds as a slow and private interaction between the listener and the work put forth. This has become a near impossible task considering
the societal pressure toward instant gratification. It is no wonder that composers and other individuals who struggle to make unique descriptions of the world feel themselves relegated to the same extinction status as the rest of that world's diminishing diversity. But, the act of putting forth private or vernacular systems of thought is not only a response to such loss but also a position stance against it.

Thoughts are biological constructs. There is a food chain of consciousness just as there is a food chain of flesh. Since some ideas require a greater period of decay, the originality of an idea remains inedible for a long time because the tools for its understanding are inadequate.

Beyond the obvious notion that the ways in which we perceive the world are its most potent shapers, is the realization that language controls and directs those perceptions. Erroneous beliefs and assumptions are imbedded deeply into the scheme of our daily behavior, and in spite of this we are able to often make things work. But even though insufficient language can function in the world for quite some time, we must inevitably confront the gap between description and what is described. It is that gap which allows for catastrophic events when we continue to operate with insufficient language as if it were all that were necessary. To bridge such dysfunctions requires the generation of new language through realization that language itself is the essential problematic.

The changing of realities through language begins as a physical transformation within the deep structure of the body. Language is perhaps the most physical thing we do in that it requires all of the organism to generate it. Yet, the screen upon which consciousness projects meaning and purpose is a very narrow field. The complexity of mind as an interactive, cybernetic system is certainly more akin to an environment which recedes beyond the conscious view of the organism possessing it. But there is an
uneasiness between consciousness and its house. As a guest of the whole organism it has a tendency to be too self-absorbed by creating ideologies which subvert the delicately circuitous relationship that the organism has to its environment. At the very worst such ideologies forget that a relationship exists at all. Ultimately consciousness becomes preoccupied with synthetic levels of abstraction (i.e., compounded symbolic representation of symbolic representation) unable to respond appropriately to stimuli except on that abstract level.

Recent neuro-physiological research suggests that this problem may arise from inadequate "hard wiring" between the neo-cortex and the brain's more primitive structures. A pathological imbalance between intellective and emotive processes could derive from this stranding of the neo-cortex from the more instinctive components of the mind. The creation of ideological frameworks which direct consciousness toward a deeper awareness of this larger mental system, and which encourage behavior that reinforces such awareness, must engender physiological changes: resonant interconnection between the multiple levels of mind. This would require conscious revisiting/reminding of various stages of the systemic mind (i.e., inclusive of both internal physiological states and links to external environments) in order to maintain balanced patterns of interaction.

The complex structures of a musical composition as a new language not only represent a compound set of signs generated from an interactive process but also the exterior mapping of physiological transformations within the composer. This must also be a bi-directional phenomenon in that such changes are both a consequence of and an instigator for further transformation through acquisition of language in others. Composers have not only been involved in the imagining of alternative systems of thought but also in their implementation as functional systems: generation of new language and ideology. Such an
expansion of the "musical" context from the dramatic expressivity of concert ritual, towards an active potential for organization of perceptual realities, is analogous to the compression of communication patterns in other biological systems which optimize discrimination between signals and increase the diversity of potential interactions between the organism and its environment.

Many animals exhibit multifarious examples of fantasy-acts performed out of dual necessity. They extract from everyday activity the substance of mime, and play out the skills of survival in order to both practice those skills and generate deeper satisfaction from them. Since I regard such satisfaction as a result of a wider systemic bonding to the environment, perhaps this was the origin and need for human ritual. Certainly this biological necessity for play was a primary impetus for music and art. Not only do we make things to connect ourselves in broader ways to the world but through making we reaffirm our systemic balance in that world.

Much of my work has involved human communication with non-human living systems. To many this seems an inappropriate activity for a musician, or for music as a discipline. Music generally conjures up associations with various human cultural rituals and not learning to decipher patterns in nature, yet alone participate in them. But it hardly seems a coincidence that the idea of music as an appropriate means to open pathways of interaction with the biotic world, begins to be revisited at a time of ecological crisis. This is an idea rarely visited since the Neolithic. It seems to have taken several thousand years for us to remember that talking to animals wasn't such a bad idea.

Many of my compositions are concerned with specific places, or to put it more precisely: the awareness of their context having been composed. An important aspect of this is the idea of context as "found object": interacting
with a physical location generally ignored and extracting knowledge from it. Beyond this is the significance of knowing where you are and how you're connected to it; taking time to expand the mental web of where you stand: interaction is intrinsic language. For music to have any real significance it must address this intrinsic acquisition of new knowledge and not the mere musicality of what is already known. I refer to much of my work as "environmental language" in order to distinguish it from the more general term "environmental music". My objection to most of what has been referred to by this latter term is in its specific lack of intrinsic language. While I am sympathetic toward what much of these activities posit as models for environmental interaction, they unfortunately remain only models which graft traditional musical values inappropriately onto another context. They are invariably decorative but seldom interactive and thus tend to trivialize interaction through mere usage as grist for pre-existent value mills. The result has often been a musical equivalent to forms of environmental exploitation. The issue then is not how can one bring out latent musical qualities in nature but rather, can one generate a musical structure intrinsic to specific interaction with non-human systems?

My use of the term "environmental" refers to the interactive nature of my music as distinct from the construction of an "environment" in which the observer merely maintains a relational stance. The resulting compositions have been not only descriptive of their environmental context but are residual evidence of unique interactive systems. In this sense "interactive" addresses the generation of a linguistic structure intrinsic to the observer/observed contextual relationship such that change is induced in both as a consequence of this interaction. The "music" is thus the tracings and expression of the composite mind immanent in a particular connective instance. In other words, the music results from the implicit needs of said interaction such
that, not only description of an observed phenomenon results but also description of the changes induced in both the observer and the observed. These activities have primarily focused upon exploration of a variety of geophysical phenomena such as: the unusual resonance characteristics of specific geographies; intensification of environmental sensing; interspecies communication; and the compositional analysis of environmental ambience patterning.

Essential to many of these interactive systems has been the use of sophisticated technology, which notwithstanding has caused me a certain amount of trepidation. My distrust of machines is linked to the obvious realization that biological systems are infinitely more complex than any electronic device. Discussions about "artificial intelligence" approaching the complexity of the human mind strike me merely as a statement of our tautological ignorance about the mind and not a statement about the future progress of technology. Not only are our machines a mirror of self-description but we begin to emulate the machines we make. The claims of artificial intelligence are generally trivial because its reductionist view of humanity is trivial. According to permaculturist Bill Mollison, the aboriginal peoples of Australia are perhaps the most sophisticated thinking society on the planet: "Let me give you the aboriginal ethic: the more you understand, the less you need... in terms of changing material objects around, in any way." Such a notion is so foreign to industrial culture that generally our only way of approaching interaction with other living systems is after we have made extraordinary leaps of technological invention. Hopefully it need not be such an either/or situation. We neither exclusively change the world through understanding it, nor understand the world through changing it. Rather, both of these are conditional states dependent upon the engaged presence of the other.
Interactive language is dialogue and argument. It is an acknowledgment that reality is constructed from participation in a changing landscape fundamentally imbedded in an intrinsic field of interplay. While human anthropocentrism seems inescapable, cooperative concepts about maintaining a balance between environment and human may be the more recent product of the evolution of ideas, and not merely a condition once had but now lost. Any radical change in our behavioral interaction with the biotic environment must come from a shift in our ideological argument. Such a shift can only occur from a change in language, a language which includes the voices of other forms of life.